ANNUAL REPORT

2020

RHEINMETALL

KEY FIGURES 2020 I RHEINMETALL GROUP

		2020	2019	2018	2017[1]	2016	2015	2014
RHEINMETALL GROUP								
Sales	€ million	**5,875**	6,255	6,148	5,896	5,602	5,183	4,688
Operating result	€ million	**426**	505	491	400	353	287	160
Operating result margin	%	**7.3**	8.1	8.0	6.8	6.3	5.5	3.4
EBIT	€ million	**89**	512	518	385	353	287	102
EBIT margin	%	**1.5**	8.2	8.4	6.5	6.3	5.5	2.2
EBT	€ million	**57**	477	485	346	299	221	22
Net income	€ million	**1**	354	354	252	215	160	21
Return on capital employed (ROCE)[2]	%	**2.7**	15.4	17.1	13.8	12.3	10.6	3.9
CASH FLOW								
Cash flow from operating activities	€ million	**453**	602	242	546	444	339	102
Cash flow from investments	€ million	**(237)**	(288)	(277)	(270)	(283)	(310)	(284)
Operating free cash flow	€ million	**217**	314	(35)	276	161	29	(182)
BALANCE SHEET								
Total equity	€ million	**2,053**	2,272	2,173	1,870	1,781	1,562	1,197
Total assets	€ million	**7,267**	7,415	6,759	6,101	6,150	5,730	5,271
Equity ratio	%	**28.2**	30.6	32.1	30.7	29.0	27.3	22.7
Cash and cash equivalents	€ million	**1,027**	920	724	757	616	691	486
Total assets less cash and cash equivalents	€ million	**6,240**	6,496	6,035	5,344	5,534	5,039	4,785
Net financial debt (-)/Net liquidity(+)[3]	€ million	**4**	(52)	(30)	230	19	(81)	(330)
Leverage ratio[4]	%	**(0.1)**	0.8	0.5	(4.3)	(0.3)	1.6	6.9
Net gearing[5]	%	**(0.2)**	2.3	1.4	(12.3)	(1.1)	5.2	27.6
HUMAN RESOURCES								
Employees (Dec. 31), according to capacity		**23,268**	23,780	22,899	21,610	20,993	20,676	20,166
Domestic		**11,592**	11,587	11,077	10,394	10,181	10,070	9,827
Foreign		**11,675**	12,193	11,822	11,216	10,812	10,606	10,339
RHEINMETALL AUTOMOTIVE								
Sales	€ million	**2,151**	2,736	2,930	2,861	2,656	2,592	2,448
Operating result	€ million	**33**	184	262	249	223	216	184
Operating result margin	%	**1.5**	6.7	8.9	8.7	8.4	8.3	7.5
Research & Development	€ million	**192**	210	193	186	142	126	112
Capital expenditure (Net investments)	€ million	**95**	143	161	154	149	167	158
RHEINMETALL DEFENCE								
Order Income	€ million	**6,387**	5,186	5,565	2,963	3,050	2,693	2,812
Order Backlog (Dec. 31)	€ million	**12,942**	10,399	8,577	6,416	6,656	6,422	6,516
Sales	€ million	**3,723**	3,522	3,221	3,036	2,946	2,591	2,240
Operating result	€ million	**414**	343	254	174	147	90	(9)
Operating result margin	%	**11.1**	9.8	7.9	5.7	5.0	3.5	(0.4)
Research & Development	€ million	**180**	145	143	109	74	73	65
Capital expenditure	€ million	**201**	166	101	89	95	96	76
SHARE								
Stock price (Dec. 31)	€	**86.58**	102.40	77.16	105.85	63.90	61.48	36.27
Earnings per share	€	**(0.62)**	7.77	7.10	5.24	4.69	3.88	0.47
Dividend per share	€	**2.00**	2.40	2.10	1.70	1.45	1.10	0.30

[1] Carrying amounts adjusted due to the change in measurement of operating land.
[2] EBIT/average capital employed
[3] Financial liabilities less cash and cash equivalents
[4] Net financial liabilities / total assets adjusted for cash and cash equivalents
[5] Net financial liabilities / equity

RHEINMETALL **2020**

1 RHEINMETALL
2 CORPORATE SECTORS **6** DIVISIONS
5.9 SALES € BIL
137 CUSTOMER COUNTRIES
129 LOCATIONS WORLDWIDE
25,329 EMPLOYEES

OUR LOCATIONS
ARE ALL OVER
THE WORLD

40

GERMANY

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

44

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 Turrzi · Sibiu · **RUSSIAN FEDERATION** · Moscow · **SWEDEN** · Stockholm · **SWITZERLAND** · Altdorf Bern · Lohn-Ammannsegg · Studen Wimmis · Zurich · **SPAIN** · Abadiano · Amorebieta · **CZECH REPUBLIC** · Trmice · Ústí nad Labem · Chabařovice · **HUNGARY** Budapest · **UNITED KINGDOM** Bovington · Bristol · Isle of Wight Kirtlington · London · Swindon Telford · Washington

05

AFRICA

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

14
AMERICAS

18
ASIA

08
AUSTRALIA

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 · Wilmington/DE

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

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CONTENTS

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 » 2021	Audit committee Personnel committee • Strategy committee • Nomination committee • Mediation committee •	E.ON SE Grillo Zinkoxid GmbH** Zinacor S.A.**
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-Universität in Munich ▪ Executive Advisor	June 10, 2002 » 2022	Audit committee • Personnel committee	ABB AG (until March 2020) Felix Schoeller Holding GmbH & Co. KG
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
Detlef Moog Mülheim an der Ruhr Year of birth 1948 Nationality | German	▪ Consulting Engineer	July 8,2010 » 2021	Strategy committee	No mandates in other supervisory boards
Klaus-Günter Vennemann Waidring, Austria Year of birth 1954 Nationality | German	▪ Consulting Engineer	May 10,2016 » 2021	Nomination committee	Nanogate SE Chairman of the Supervisory Board
Univ.-Prof. Dr. Marion A. Weissenberger-Eibl Karlsruhe Year of birth 1966 Nationality | German	▪ Head of the Fraunhofer System and Innovation Research Institute ISI ▪ Chairholder „Innovation and TechnologyManagement" at Karlsruhe Institute of Technology (KIT)	May 10, 2016 » 2021	Mediation committee	HeidelbergCement AG MTU Aero Engines AG acatech-National Academy of Science and Engineering
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	September 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 Kolbenschmidt 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	No mandates in other supervisory boards

*The term of office ends with the conclusion of the respective Annual General Meeting

**Internal mandates of Grillo-Werke AG on facultative supervisory boards

As of December 31, 2020

Letter to shareholders
Report of the Supervisory Board

Activities of the Supervisory Board

With this report, the Supervisory Board provides details of its activities in fiscal 2020 in accordance with section 171(2) of the German Stock Corporation Act. Before I go into any detail about the work of the Supervisory Board, I would briefly like to look back on this unusual and altogether challenging year of 2020. With unexpected momentum, the COVID-19 pandemic triggered and accelerated changes to the general economic conditions in the company's key markets, presenting Rheinmetall's management with unprecedented challenges. The Executive Board acted decisively and prudently, systematically taking the steps required to protect the health of employees, secure supply chains and protect liquidity. Rheinmetall showed an impressive resilience and operational strength, which enabled it to absorb the impact of the coronavirus pandemic on the company to a significant extent.

In the past year, we performed the control and advisory tasks assigned to us in accordance with the law, Articles of Association and Rules of Procedure with commitment, responsibility and conscientiousness. We were consulted on decisions of material importance to the company. We advised the Executive Board on the management of the company and continuously monitored its management activities. Cooperation between the Supervisory Board and Executive Board is characterized by trust, openness and constructive dialogue.

The Supervisory Board was involved directly and at an early stage in all decisions of key importance to the Rheinmetall Group. We addressed the operational, economic and organizational performance of the company and its strategic further development. The content, scope and depth of the Executive Board's reporting met the requirements of good corporate governance and the expectations of the Supervisory Board members. We received detailed and transparent written documentation from the Executive Board to help us to prepare for our meetings, which meant that we always had sufficient time and opportunity to look critically at the reports, presentations and proposed resolutions in the plenary assembly and in the committees and contribute the findings of our own analyses and our own suggestions before, following thorough examination and detailed 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.

Members of the Executive Board attended the meetings of the Supervisory Board and committees in order to discuss the matters in hand and answer our questions. We critically appraised, questioned and assessed the plausibility of all the information disclosed to us during these sessions. The Executive Board explained in detail all deviations from the projected figures and the reasons for this, and discussed the steps taken with the Supervisory Board.

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.

Between meetings, we were appropriately informed of the course of business and the current situation of the Rheinmetall Group and its two sectors, Defence and Automotive, in writing on a quarterly basis.

On the basis of extensive reports and in-depth presentations and the detailed information provided by the Executive Board and the other managers, we performed a critical examination of the company's management. 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.

Letter to shareholders
Report of the Supervisory Board

In the past fiscal year, I engaged in intensive dialogue with the CEO. At numerous face-to-face meetings and during telephone conversations, subjects including planned business policy, the background to pending decisions and significant transactions of importance to the assessment of the situation and the company's development were discussed. I was also in contact with the members of the Supervisory Board outside the Supervisory Board meetings. In the past fiscal year, these discussions 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.

Principal topics discussed by the Supervisory Board

During the period under review, the plenary assembly of the Supervisory Board held four scheduled and four extraordinary Supervisory Board meetings in which it examined the company's political and economic environment, the performance of the business areas and the company's position in detail. We addressed in detail matters including the award of upcoming projects and major orders, ongoing business development, the current earnings and financial position, general political, economic, business and regulatory conditions, the company's prospects and challenges when faced with international competition, and trends, opportunities and risks in regional growth markets. Strategic, operational and technological priorities and targets were discussed, along with their economic significance for Rheinmetall and their expected impact on the company's financial situation. Aside from the Group's corporate orientation and the structural development of the Automotive and Defence sectors, our discussions focused on opportunities and measures to ensure the competitiveness and future viability of the company, especially with a view to the impact and repercussions of the global COVID-19 pandemic. We also dealt with potential acquisition projects and risks to the company, as required.

In the year under review, the committees again supported the Supervisory Board with its work reliably and effectively. 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:

With respect to the processes of transformation in the automotive industry, the dramatically changing market and competitive environment in this industry, and the future strategic and operational alignment of the Automotive sector, at the Supervisory Board meeting on December 5, 2019, it was decided to revise the planning for the Automotive sector presented at this time and to discuss this in an extraordinary Supervisory Board meeting together with the overall planning for the Rheinmetall Group to be submitted at this time. At the extraordinary Supervisory Board meeting on February 19, 2020, the Executive Board explained and substantiated the adjustments that had since been made. Following in-depth discussion taking into account the updated planning for the Automotive sector, we acknowledged the corporate planning from 2020 to 2022 for Rheinmetall AG and the Rheinmetall Group, and approved the investment master budget submitted for fiscal 2020. Later in the meeting, strategic projects and opportunities for acquisition projects were discussed.

The Executive Board also gave an initial assessment on the situation in China in light of the spread of the previously unknown coronavirus. The extensive exclusion zones instituted by the government and other safety measures decreed meant that all production, including at Rheinmetall Automotive plants, ground to a halt, with the first cautious forecasts already anticipating a significant improvement in the situation within just a few weeks. The actual economic consequences of this tense situation were not yet clear at the time.

One agenda item at the annual accounts meeting that took place on March 17, 2020, and was held as a conference call was discussion of the single-entity and consolidated financial statements of Rheinmetall AG as of December 31, 2019, issued with an unqualified auditor's opinion by PricewaterhouseCoopers Wirtschaftsprüfungsgesellschaft, Frankfurt am Main, 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 2019 in detail and also looked more closely at important individual issues in the Automotive and Defence sectors 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 the Supervisory Board's 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 2019 of €2.40 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 submitted to the 2020 Annual General Meeting, which we approved.

Later in the meeting, the Executive Board presented its report on business performance as of February 2020 and gave its outlook on results to be expected in the first quarter of 2020.

We also addressed the degree of target achievement for the individual members of the Executive Board for fiscal 2019. Given the uncertain developments with regard to the coronavirus pandemic, we postponed the passing of resolutions on the Executive Board targets for fiscal 2020 to a later date.

In a tour d'horizon, the Executive Board presented the development of Rheinmetall Automotive in China since it entered this market at the end of the 1990s and classified the significance of the operating business for the Automotive sector in consideration of strategic and economic aspects.

Corporate Social Responsibility provided an overview of the CSR topics the Rheinmetall Group is pursuing and informed the Supervisory Board as a whole about the areas of work and measures planned for the current fiscal year.

The Supervisory Board decided to delegate responsibility for the approvals on related party transactions required in accordance with section 111b of the German Stock Corporation Act to the Audit Committee, and approved the amendment to the Rules of Procedure for the Audit Committee that this entailed.

Letter to shareholders
Report of the Supervisory Board

At the extraordinary meeting of the Supervisory Board held as a conference call on April 3, 2020, the Executive Board discussed the option of holding a virtual Annual General Meeting in 2020 that legislators introduced in the COVID-19 Mitigation Act dated March 27, 2020. It gave the reasons behind its proposal to switch from an attended event on May 5, 2020, in Berlin that was originally resolved at the Supervisory Board meeting on March 17, 2020, to a virtual shareholder meeting on May 19, 2020, retaining the agenda and recommended resolutions. The Supervisory Board approved the Executive Board's request to make use of the facilitation arrangements provided under section 1 of the Act.

The second Supervisory Board meeting of the year was held on May 4, 2020, as a conference call. The Executive Board outlined the business performance of the Rheinmetall Group and the Automotive and Defence sectors as of March 31, 2020, which were already being impacted by the beginnings of the coronavirus pandemic. Not only did it address the significant decline in automotive production volumes in individual European, American and Asian markets, but it also outlined the negative economic effects on the business activities of the Automotive sector in connection with shortfalls in call-offs from automotive customers. However, the crisis-related reduced performance in the mobility segment was offset by sales growth in the Defence sector.

In addition, we were informed about the current status of the preventive measures introduced to cope with the COVID-19 pandemic and – where required – the response measures taken to minimize the risk of infection for employees. Coronavirus action teams formed at all the locations are providing consistent and up-to-date information to the relevant management levels within the Group. The Crisis Committee regularly reappraises the situation and informs the workforce via internal communication channels about the decisions that are being taken. In the context of the virus-related serious threat situation, Rheinmetall also made substantial contributions towards resolving the lack of protective equipment for medical and nursing personnel.

Later in the meeting, the Executive Board discussed the status of preparations for the virtual Annual General Meeting to be held on May 19, 2020.

The third extraordinary meeting of the Supervisory Board that was held on May 25, 2020, in conference call format commenced with a detailed review of the company's virtual Annual General Meeting on May 19, 2020. We also adopted the target agreements for Armin Papperger, Helmut P. Merch and Peter Sebastian Krause for fiscal 2020.

As a result of the departure of two members of the Supervisory Board effective June 30, 2020, we were required to discuss successor planning. Barbara Resch succeeded Dr. Rudolf Luz as a representative of IG Metall, and Ralf Bolm, who was elected as a substitute member on March 31, 2017, succeeded Roswitha Armbruster. The Supervisory Board mandate of the two new members will end at the close of the 2022 Annual General Meeting. At a further extraordinary meeting of the Supervisory Board on July 13, 2020, in a requested conference call the Supervisory Board resolved to elect employee representative Dr. Daniel Hay as the new Deputy Chairman of the Supervisory Board and to appoint Ralf Bolm to the Audit Committee, Reinhard Müller to the Personnel Committee and Dr. Daniel Hay to the Strategy Committee. In accordance with the applicable Rules of Procedure, Dr. Daniel Hay assumed the responsibility of deputy on the Strategy, Audit, Personnel and Mediation Committees.

On August 18, 2020, at the face-to-face Supervisory Board meeting held in Düsseldorf, the Executive Board explained the development of the business as of July 2020 and the business performance expected for 2020 as a whole, and, in this context, also addressed specific issues in the Rheinmetall Group and the status of major projects in the Defence sector.

The transformation in the automotive industry that is being accelerated by the impact of the COVID-19 pandemic, the accompanying pressure to respond, and the major strategic challenges and consequences for existing business activities, research and development projects and growing plant structures were discussed in detail. A lot of attention was given to the strategic considerations and future options for the Hardparts division proposed by the Executive Board. The strategy on expanding the market positions in China and the measures planned were also discussed in this regard. The strategic initiatives and goals that aim to promote the further development and growth of the Rheinmetall Group are being supported by the Supervisory Board.

In accordance with the recommendation under item C.1 of the German Corporate Governance Code (GCGC) in the version of December 16, 2019, which came into force on March 20, 2020, we set targets for the composition of the Supervisory Board and adopted the skills profile for the entire Supervisory Board.

Furthermore, we discussed details regarding the implementation of the GCGC and, together with the Executive Board, issued a declaration of conformity in accordance with section 161 of the German Stock Corporation Act, the content of which remained unchanged with respect to the previous year.

The Executive Board also presented the results of the annual statutory audit relating to the European Market Infrastructure Regulation (EMIR). According to the certificate issued by the independent auditor on March 27, 2020, the company's system for ensuring compliance with the requirements under section 32(1) of the German Securities Trading Act was appropriate and effective overall and in all material respects during the period for which the audit was required from January 1 to December 31, 2019.

A detailed explanation was provided in relation to individual aspects and interpretation issues relating to the Executive Board remuneration system. We approved the parameters for the target agreement of Jörg Grotendorst for fiscal 2020.

At the last meeting of the year, which was held as a video conference on December 8, 2020, the Executive Board presented its report for the third quarter of 2020. It informed the plenary assembly about the current business situation of the Rheinmetall Group and provided an outlook on expected performance to the end of the fiscal year. Medium-term corporate planning from 2021 to 2023 – including financial, investment and human resources planning – was then presented to the Supervisory Board in detail and the assumptions made by the Executive Board for the corporate planning were discussed in depth. This also included the plausibility of the assumptions and expectations presented as well as the opportunities and risks. We acknowledged the corporate planning from 2021 to 2023 and approved the investment master budget submitted for fiscal 2021.

Following extensive discussion, we approved the content and terms and conditions of the proposed revised Executive Board remuneration system. The remuneration system outlined therein is based on the conclusion of new and the renewal of existing Executive Board contracts. In addition, the Executive Board provided an initial overview of the Annual General Meeting to be held on May 11, 2021, for the consideration of agenda items to be submitted.

Letter to shareholders
Report of the Supervisory Board

The last adjustment of remuneration for members of the Supervisory Board took place by resolution of the Annual General Meeting in May 2018 and took effect from January 1, 2019. We discussed the facts and findings of the evaluation undertaken by an independent remuneration expert on the appropriateness of the existing Supervisory Board remuneration and the recommendations it made. After careful consideration, we resolved increases and supplements for the remuneration of Supervisory Board activities, which are expected to take effect from January 1, 2022. The relevant proposed resolution for the required amendment to the Articles of Association is expected to be submitted to the Annual General Meeting on May 11, 2021.

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 on page 2. 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 members of the committees, like the members of the whole Supervisory Board, are all familiar with the sectors in which Rheinmetall AG operates.

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 on page 149 et seq. 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 February and October 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 entrepreneurial ambitions, relevant market-related and technological trends, 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 for the individual divisions. The strategic and business alignment of the Hardparts division and the pros and cons of the derived courses of action were presented in detail. In addition, in the context of the strategy for the Chinese economic region, business expansion opportunities were addressed and the Executive Board conducted an initial assessment of the options. Furthermore, the Executive Board gave a status update on the business areas of electromobility, hydrogen, cyber security and personal protective equipment, and provided an insight into their potential. The Executive Board also outlined the ongoing objective to transform the Rheinmetall Group into an integrated technology group and the realignment of the Group that this entails, which may also involve changes to the investment portfolio. Possibilities were also discussed on how to more strongly diversify the business models of the divisions attributable to the Automotive sector.

In the past fiscal year, the **Audit Committee** met in March, April, 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 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 meetings in March 2020 and December 2020.

In addition to the discussion of specific individual issues in the Automotive and Defence sectors, 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. 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. This included specific impacts of the coronavirus pandemic, such as implementation scheduling. Furthermore, the members of the Audit Committee discussed the status of preparations for the virtual Annual General Meeting to be held on May 19, 2020.

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 allowed to exceed 70% of the end-of-year auditing services.

With the method and results for the non-cash impairment in the Automotive sector as of June 30, 2020, the members of the Audit Committee also discussed the working capital, liquidity and financing situation of the Rheinmetall Group, also taking account of the implications of the coronavirus pandemic. In addition to receivables management and the hedging strategy, other items on the agenda included the current Group rating, which remains unchanged at investment grade with a stable outlook.

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.

Two 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 and Professor Andreas Georgi are independent and are not former members of the Executive Board of the company.

Letter to shareholders
Report of the Supervisory Board

The **Personnel Committee** met five times in March, May, August and November 2020 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 2019, and the setting of targets, ranges and the calculation basis for Executive Board variable remuneration in 2020 and 2021. Preparations were also made to renew Executive Board member contracts.

The members of the Personnel Committee discussed the new Executive Board remuneration system and its components in detail multiple times during the year. Following the remuneration vote at the Annual General Meeting on May 19, 2020, the Personnel Committee commissioned a review of the remuneration system proposed to shareholders by a renowned consulting firm specializing in remuneration issues. The report revealed areas for action and gave recommendations on how to enhance the Executive Board remuneration system, taking into consideration requirements of various groups such as investors. In this context, the structuring of non-financial targets within the scope of Executive Board remuneration was also discussed at various meetings. The individual elements of the remuneration system for members of the Executive Board are presented in the remuneration report on pages 162 to 174.

The **Nomination Committee** did not meet in the year under review.

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

Composition of the Supervisory Board

In the past fiscal year, there were two personnel changes on the Supervisory Board on the employee side: Dr. Rudolf Luz resigned his seat on the Supervisory Board in March 2020 effective June 30, 2020. At the request of IG Metall and with the company's consent, on June 22, 2020, the registry court at the District Court of Düsseldorf appointed Barbara Resch as his successor with effect from July 1, 2020. Her term of office will end at the close of the 2022 Annual General Meeting. In the case of Roswitha Armbruster, who retired on July 1, 2020, Ralf Bolm, who was elected as a substitute member for employee representatives on March 31, 2017, joined the ranks of the Supervisory Board and commenced his mandate on the same day. His term of office will run until the close of the Annual General Meeting that approves the actions of the Supervisory Board for fiscal 2021. On behalf of the Supervisory Board, I wish to thank Dr. Rudolf Luz and Roswitha Armbruster for their many years of hard work on our Supervisory Board and the professionalism, dedication and solution-focused approaches they demonstrated when performing their duties on behalf of the company.

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.

An overview on page 2 provides information on the present composition of the Supervisory Board and its committees.

Composition of the Executive Board

The decision to appoint Jörg Grotendorst as an additional member of the Executive Board of the company following the departure of Horst Binnig on December 31, 2019, was made at the Supervisory Board meeting on December 5, 2019. Due to existing contractual obligations, he joined the company on October 1, 2020. The mandate and employment contract have an initial term of three years.

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 2020, the Executive Board and Supervisory Board issued 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 (regulatory limit on membership of the Supervisory Board). The complete wording of the current and previous declarations of conformity with the code can be viewed in the archive on the company's homepage 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. At the request of Helmut P. Merch, in accordance with recommendation E.3 of the GCGC, we approved his taking a seat on the Supervisory Board of ElringKlinger.

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 August meeting, a separate evaluation was not undertaken in fiscal 2020.

The corporate governance statement in accordance with section 315d of the German Commercial Code in conjunction with section 289f of the German Commercial Code contains, from page 143 onwards, 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.

Letter to shareholders
Report of the Supervisory Board

Individual attendance of the members of the Supervisory Board at meetings in fiscal 2020

	Chair | Member		Participation | Meetings	Attendance in %
Plenary assembly	Ulrich Grillo		8 | 8	100%
	Dr.-Ing. Dr.-Ing. E. h. Klaus Draeger		8 | 8	100%
	Professor Dr. Andreas Georgi		8 | 8	100%
	Professor Dr. Susanne Hannemann		8 | 8	100%
	Dr. Franz Josef Jung		8 | 8	100%
	Detlef Moog		8 | 8	100%
	Klaus-Günter Vennemann		8 | 8	100%
	Univ.-Prof. Dr. Marion A. Weissenberger-Eibl		6 | 8	75%
	Dr. Rudolf Luz	(up to June 30, 2020)	5 | 5	100%
	Roswitha Armbruster	(up to June 30, 2020)	5 | 5	100%
	Ralf Bolm	(from July 1, 2020)	3 | 3	100%
	Dr. Daniel Hay		8 | 8	100%
	Dr. Michael Mielke		8 | 8	100%
	Reinhard Muller		8 | 8	100%
	Dagmar Muth		8 | 8	100%
	Barbara Resch	(from July 1, 2020)	3 | 3	100%
	Markus Schaubel		8 | 8	100%
	Sven Schmidt		8 | 8	100%
Strategy Committee	Ulrich Grillo		2 | 2	100%
	Dr.-Ing. Dr.-Ing. E. h. Klaus Draeger		2 | 2	100%
	Detlef Moog		2 | 2	100%
	Dr. Rudolf Luz	(up to June 30, 2020)	1 | 1	100%
	Dr. Daniel Hay	(from July 13, 2020)	1 | 1	100%
	Dagmar Muth		1 | 2	50%
	Markus Schaubel		2 | 2	100%
Audit Committee	Professor Dr. Andreas Georgi		5 | 5	100%
	Ulrich Grillo		5 | 5	100%
	Professor Dr. Susanne Hannemann		5 | 5	100%
	Dr. Rudolf Luz	(up to June 30, 2020)	2 | 2	100%
	Roswitha Armbruster	(up to June 30, 2020)	2 | 2	100%
	Ralf Bolm	(from July 13, 2020)	2 | 3	67%
	Dr. Daniel Hay	(from July 13, 2020)	3 | 3	100%
	Sven Schmidt		5 | 5	100%
Personnel Committee	Ulrich Grillo		5 | 5	100%
	Professor Dr. Andreas Georgi		5 | 5	100%
	Dr. Rudolf Luz	(up to June 30, 2020)	2 | 2	100%
	Dr. Daniel Hay		5 | 5	100%
	Reinhard Müller	(from July 13, 2020)	3 | 3	100%
Nomination Committee	Ulrich Grillo		0 | 0	
	Dr. Franz Josef Jung		0 | 0	
	Klaus-Günter Vennemann		0 | 0	
Mediation Committee	Ulrich Grillo		0 | 0	
	Univ.-Prof. Dr. Marion A. Weissenberger-Eibl		0 | 0	
	Dr. Rudolf Luz	(up to June 30, 2020)	0 | 0	
	Dr. Daniel Hay	(from July 1, 2020)	0 | 0	
	Reinhard Muller		0 | 0	

Audit of the annual financial statements

Following our proposal, on May 19, 2020, the Annual General Meeting elected Deloitte GmbH Wirtschaftsprüfungsgesellschaft, Munich, Düsseldorf branch, (Deloitte) as the auditor of the financial statements for fiscal 2020.

The single-entity financial statements prepared by the Executive Board in accordance with German GAAP as of December 31, 2020, 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 16, 2021, and at the annual accounts meeting of the Supervisory Board on March 17, 2021, 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 2020 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 €2.00 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.

The year under review saw economic and social changes on an unprecedented scale, which presented everyone with significant challenges. Tackling these challenges 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 2020, 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 17, 2021

On behalf of the Supervisory Board
Ulrich Grillo
Chairman

ARMIN PAPPERGER *Chairman of the Executive Board*

Dear Shareholders,

The year 2020 eclipsed everything that my colleagues and I had previously experienced. Within a very short space of time, the force of the global coronavirus crisis evolved into a real challenge, with many countries imposing the toughest social and economic restrictions seen since the days of the Second World War. While at the start of the year, in Automotive we were still focusing on how to respond to the slowdown in the industry with technical innovation and cost discipline, our supplier business was hit hard by the economic repercussions of the coronavirus pandemic – particularly in the second quarter. Automotive manufacturers drastically scaled down their call-off figures, while entire factories and numerous production lines were temporarily brought to a standstill. With stringent cost management, we managed to limit and control the impact of the crisis.

Similar to during the financial crisis of 2008/2009, our Defence sector proved once again to be an anchor of stability. In a world that is shaped by increasing complexity, conflict and uncertainty, the security of nations is not geared toward short-term economic swings – even if they are significant. To ensure they are equipped to counter current and future threats, an increasing number of NATO countries are aiming to increase their defence spending to the target of 2% of gross domestic product by 2024. Many armed forces are still in need of substantial modernization. In the years to come, this will result in additional opportunities for Rheinmetall. Major orders – like the 2020 order for the Lynx infantry fighting vehicle in Hungary – underscore Rheinmetall's technology leadership in core areas of the defence sector.

And even during one of the biggest crises since the birth of the Federal Republic of Germany, we performed exceptionally well with an operating result of € 426 million in 2020. As anticipated, the Defence sector made the bigger contribution of € 414 million. Despite the new lockdown toward the end of the year, Rheinmetall Automotive also stayed on track and still achieved an operating result of € 33 million. The fact that we adapted early to technological change in the automotive industry and became a great deal less dependent on the combustion engine is once again benefiting the company.

We also demonstrated our innovative abilities and competitiveness, not least in the way we responded to the pandemic, for example with the federal government awarding Rheinmetall a major order to supply personal protective equipment for medical and nursing personnel in 2020. Crises are times when companies need to prove themselves more than ever. We will do our utmost to ensure that we successfully rise to meet whatever the coming years have in store as well on a business level with our balanced product portfolio.

Sincerely,

Photo abave from left to right : Helmut P. Merch, Peter Sebastian Krause, Armin Papperger, Jörg Grotendorst

> ***Within a very short space of time, the force of the global coronavirus crisis evolved into a real challenge. Even during one of the biggest crises since the birth of the Federal Republic of Germany, we performed exceptionally well with an operating result of €426 million in 2020.***

HELMUT P. MERCH *Finances*

Fiscal 2020 demanded an enormous amount from both our operational and administrative business areas. Despite the negative effects of the coronavirus crisis and the continuing tense situation on the automotive market, our consolidated sales were only slightly lower than the strong figure from the previous year. Particularly pleasing factors included the increase in the operating margin to 11.1% in Defence and the fact that – despite a decline in sales of 21% – Automotive managed to achieve a positive operating result of €33 million. On the whole, we ended the coronavirus crisis year of 2020 with the third-best result in Rheinmetall's history. What is more, we secured our liquidity throughout and also achieved our target corridor for cash flow. The considerable recovery of the Rheinmetall share over the course of the year was impressive confirmation of the confidence that our shareholders have in our abilities to steer Rheinmetall successfully through times of crisis.

PETER SEBASTIAN KRAUSE *Human Resources*

For many companies, 2020 was distinguished by a torrent of bad news. We, too, had to grapple with the effects of the coronavirus pandemic. But we quickly arrived at a „new normal." Within a short period, a large proportion of our workforce started working from home. We responded to the progression of the pandemic with a location-specific approach involving decentralized coronavirus action teams. We maintained an up-to-date overall picture of the incidence of disease, capacity utilization and the situation with our suppliers. There was one piece of news that we were particularly pleased about in 2020: in a survey conducted by CAPITAL magazine, Rheinmetall was named one of the best training companies in Germany with five stars. This accolade is a splendid affirmation of the daily efforts of the many trainers at our company. But the figures alone speak for themselves: in 2020 we invested around €14 million in vocational training in Germany alone and trained 746 young people at the Rheinmetall Group. All this shows that our company offers junior employees ideal conditions for their professional development.

JÖRG GROTENDORST *Automotive*

The circumstances and challenges related to the coronavirus crisis meant that I got to know and learned to appreciate the company within a very short time. Our workforce poured a huge amount of commitment into tackling both the general automotive crisis and the pandemic-related setbacks. With our stringent cost management policy, we managed to limit the impact of the pandemic. Despite all the restrictions, we continued to supply our customers reliably – even during the crisis – and we succeeded in acquiring some attractive new orders. We are working with great intensity on aligning our products for environmentally friendly mobility even more consistently towards automotive manufacturers' changing requirements. At the same time, as drivers of innovation we also want to set our own trends in our market segments – not only in battery-powered electromobility, but also in the future field of hydrogen drives.

Letter to shareholders
Rheinmetall on the capital markets

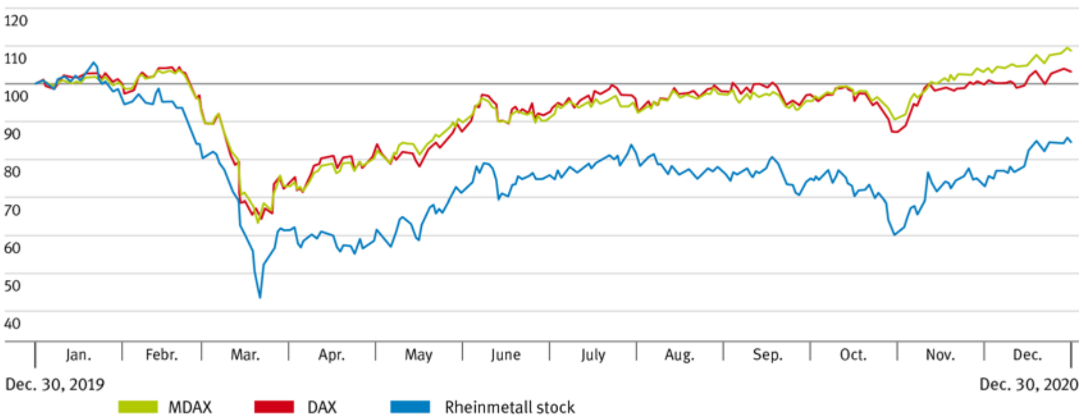
Coronavirus results in volatile stock markets in 2020

The COVID-19 pandemic and its many implications was the determining factor for activity on the stock markets last year. The spread of coronavirus in 2020 resulted in restrictions in many areas of life. Extensive quarantine measures and restrictions, which also affected global economic and trading relations, caused the global economy to nosedive over the past months. On the stock markets, which had reached new highs at the beginning of the year, this initially resulted in considerable price losses. Governments and central banks braced themselves greatly against the emerging global recession in the second quarter of 2020 with support measures and extensive aid packages. These and the gradual easing of the restrictions put in place to fight the pandemic led to a significant recovery on the global stock markets over the further course of the year, where the upward trajectory was not impeded by negative economic data, the drop in the oil price or rising unemployment. But after the share price lows, from mid-March 2020 a rapid market recovery set in, driven by optimism for a mild course of the pandemic and hope of rapid vaccine development and rollout. The approval of vaccines and the start of vaccination campaigns in various countries boosted the positive stock market trend toward the end of the year.

The DAX therefore exhibited significantly increased volatility during the year. After a new record of 13,790 points was set at the end of February 2020, the leading index plummeted to a low of 8,441 points in March. However, from that point on the index recovered significantly and closed 2020 at a year-end high of 13,719 points, up 3.5% on the end of 2019. The MDAX exceeded even this trend, with an increase of 8.8% to 30,796 points.

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

December 30, 2019 (100%) through December 30, 2020



Over the year, listed companies in the automotive and armaments industry suffered sharper share price declines than the stock market as a whole. In the wake of the negative development of the global automotive industry, the Rheinmetall share too temporarily fell to a low of €44.46 during the year. Automotive managed to achieve a positive operating result of 57%. The market environment for the Defence sector generally remained very positive throughout 2020 too. However, from the middle of the year, uncertainty over a reduction in defence spending due to budgets being strained by the COVID-19 pandemic resulted in insecurity over future sector development. This had a negative impact on Rheinmetall's share price performance, which did not follow the trend of stock market recovery that started in the summer months. However, the hope of a vaccine and a foreseeable return to normality in public and private life meant that the share recovered again significantly and ended the year at €86.58. Compared with the closing price of 2019, this is a decrease of 15%.

According to Deutsche Börse AG's ranking, at the end of December 2020 Rheinmetall AG was in 58th place in terms of market capitalization and 63rd place out of all listed companies in Germany in terms of stock exchange turnover.

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 19, 2020, for the first time as a purely virtual event without the shareholders being present. Despite the new and unfamiliar format, 51.5% of the share capital was represented. Unlike in previous years, our shareholders could not direct their questions personally to the company's Executive Board. But to ensure that a dialogue was still possible, shareholders who were interested had the opportunity to submit their questions online up to two days before the Annual General Meeting. This right was utilized extensively. A total of 92 questions were answered by the CEO and the Chairman of the Supervisory Board over the course of the Annual General Meeting.

The shareholders approved the proposal by the Executive Board and Supervisory Board to pay a dividend of €2.40 per share for 2019. This put the payout ratio at 31%, compared with 30% in the previous year. Based on the closing price on the day of the Annual General Meeting, the dividend yield was 3.4%.

Dividend proposal for fiscal 2020

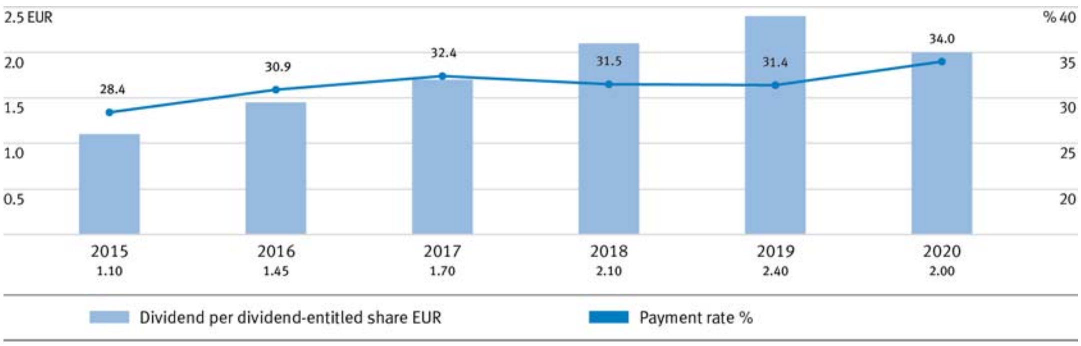
Our dividend policy is earnings-oriented and designed to ensure that our shareholders receive an adequate share in the Group's profit on an ongoing basis. The dividend amount is based on business performance and a payout ratio geared towards Rheinmetall AG's business results. We take care to ensure that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

At the Annual General Meeting on May 11, 2021, the Executive Board and Supervisory Board will propose a dividend payment of €2.00 per dividend-entitled share. The total amount paid out will therefore be €86 million.

Letter to shareholders
Rheinmetall on the capital markets

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, 2020. This analysis was based on, among other things, publications from investment companies and other institutional shareholders. Our shareholder structure is dominated by investors from the Anglo-American region.

Shareholder structure as of December 31, 2020 %

	2020	2019
1 Institutional investors	66	79
Europe	29	30
North America	36	48
Rest of world	1	1
2 Private shareholders	17	17
3 Rheinmetall Treasury Stocks	1	1
4 Other	3	0
5 Not identified	13	3

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, 2020, 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
The Capital Group Companies Inc., Los Angeles, CA, USA	7.92	Nov. 17, 2020
BlackRock, Inc., Wilmington, DE, USA	3.04	Aug. 20, 2020
FMR LLC, Wilmington, DE, USA	3.00	Sept. 15, 2020

December 31, 2020

Research coverage

The Rheinmetall share is continuing to be analyzed by a number of analysts. The equity research market is currently undergoing a phase of consolidation. Since 2017, research institutes have been under greater pressure to merge, and this trend is set to continue. Analysts' coverage of the Rheinmetall share remains at a high level and confirms the high level of interest shown by the capital market in our company. At the end of 2020, 22 equity research analysts published their analyses of the current development at the Rheinmetall Group and their assessments and recommendations regarding its shares. Twenty analysts gave Rheinmetall shares a "Buy" rating, and only two analysts recommended holding the shares. The median price target was €102. The highest price was €110 and the lowest estimate was €87. An up-to-date 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		Independent Research	Frankfurt am Main
Alpha-Value	Paris		KeplerCheuvreux	Frankfurt am Main
Bank of America	London		LBBW	Stuttgart
Berenberg Bank	London		MainFirst	Frankfurt am Main
Commerzbank	Frankfurt am Main	Buy	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		Pareto	Frankfurt am Main
Goldman Sachs	London		UBS	Frankfurt am Main
HSBC	Düsseldorf		Warburg	Hamburg
		Hold	CFRA Research	London
			Nord LB	Hannover

December 31, 2020

Regular dialogue with the capital market

Communication is essential, including in times of crisis. We maintain close contact with the capital market. 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 further strengthens investor confidence and ensures a fair valuation of our shares on the capital market over the long term.

Letter to shareholders
Rheinmetall on the capital markets

Last year in particular, direct contact with capital market participants was extremely important. The Executive Board and Investor Relations team were engaged in continuous dialogue with investors and analysts. The capital market communication by the Executive Board and the Investor Relations department was continued at a high level, despite the constraints of the global travel warnings. From March 2020, investor conferences and roadshows were no longer held in person, but exclusively in digital format. During the period under review, we had around 850 investor contacts. A large proportion of these took place at a total of 30 investor conferences and roadshows, most of which were virtual. 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 this year. Detailed and up-to-date information about the Group and our shares can be found at https://ir.rheinmetall.com under "Investor Relations."

In this fiscal year, 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

	2020
Share class	Bearer shares
ISIN | 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

		2020	2019	2018	2017	2016
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	0.8	1.1	1.3	1.6	2.0
Shares						
Share price at end of fiscal year (Xetra)	€	86.58	102.40	77.16	105.85	63.90
Performance over the year	Percent	-15	+33	-27	+66	+4
Market capitalization at year-end	€ billion	3.8	4.5	3.4	4.6	2.8
Average sales per trading day (Xetra)	Thousands of units	198	146	179	156	179

Money and capital market financing

The commercial paper program, which was launched in 2002 and currently has a volume of €500 million, was used regularly – especially from the second quarter of 2020 – to cover working capital financing peaks. Consistently highly attractive conditions with some negative yields were achieved through this program. The program had not been utilized to the full by the end of 2020.

21

COMBINED MANAGEMENT REPORT 2020

Basic information on the Rheinmetall Group
Business model

The combined management report relates to both the Rheinmetall Group and Rheinmetall AG. Unless stated otherwise, the presentation of business development and the situation and 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 non-financial statement.

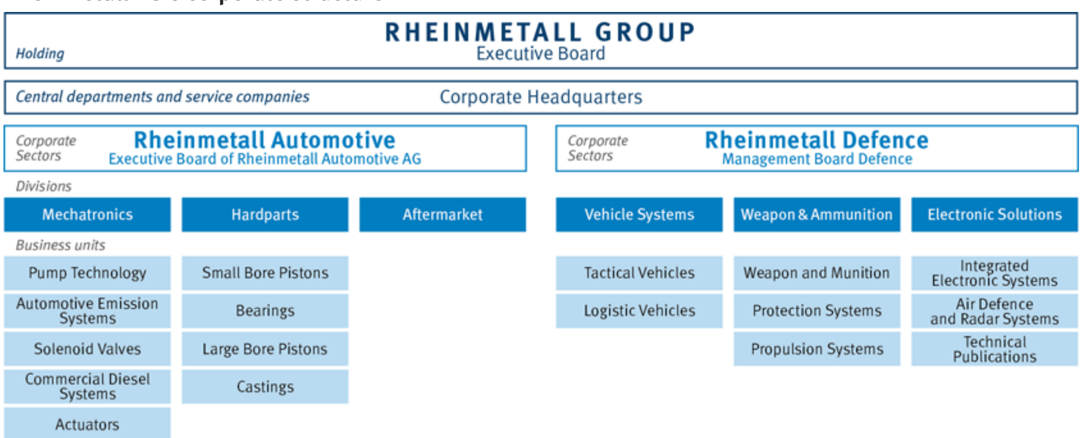
Structure of the Rheinmetall Group

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.

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.

The Articles of Association of the company were last amended on May 8, 2018. The purpose of the company is to establish companies; acquire and sell equity investments and rights similar to equity investments in companies concerned with mechanical engineering; process metals and other materials, industrial electronics and related industries; manage such companies and, where appropriate, aggregate them under common management; and acquire, sell, develop, use and manage land and buildings, including where this is not connected to the aforementioned companies.

Rheinmetall AG's corporate structure



December 31, 2020

Our market and customer-oriented approach is an important factor in our success. Lasting relationships with our customers have formed the basis of our business activities in the Automotive and Defence sectors for over a century. Our activities in the business areas of environmentally friendly mobility and threat-appropriate security are consistently aligned towards the economic regions of Europe, America, Asia and Australia. In the year under review, we concluded sales with customers in 137 countries.

The business activities of the companies in the Rheinmetall Group have a strong international focus. In 2020, the international share of sales was 66% (previous year: 69%).

We now employ 12,454 staff abroad (previous year: 12,932 employees), which represents 49% of our total workforce (previous year: 50%).

Rheinmetall AG has direct or indirect holdings in 198 companies in Germany and abroad (previous year: 193) that are part of the Rheinmetall Group. The scope of consolidation includes 160 subsidiaries (previous year: 156). A total of 35 companies are carried at equity (previous year: 37). The Group also holds three joint operations (previous year: none). The consolidated group is presented in the notes to the consolidated financial statements on pages 238 to 243.

We are represented at 40 locations in Germany, a further 44 in Europe (excluding Germany), 14 on the American continent, 18 in Asia, 5 in Africa and 8 in Australia.

Corporate management and control

The Executive Board of Rheinmetall Aktiengesellschaft, which consisted of four members at the end of 2020, is the governing body of the Rheinmetall Group. The Executive Board is responsible for the Group's strategic orientation and development and for setting and monitoring corporate targets. Moreover, it 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 core business areas of Automotive and Defence are equipped with all the necessary functions as independent sectors that operate in line with the strategies, targets and guidelines determined by the Executive Board of the Group, each with responsibility for their global business operations and their own management. The division heads report to the members of the sectors' executive boards on current business performance in regular target-setting, review and strategy meetings and, with them, discuss operational and economic measures in addition to strategies and targets. 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. Further details on corporate governance can be found in the corporate governance statement on pages 143 et seq.

Basic information on the Rheinmetall Group
Business model

As derived from the strategic objectives, in the Rheinmetall Group, the Automotive and Defence sectors are managed and the economic success of the operational entities is assessed using five key performance indicators.

Key financial management indicators for the Rheinmetall Group

		2020	2019
Sales	€ million	5,875	6,255
Operating result	€ million	426	505
EBT	€ million	57	477
Return on capital employed (ROCE)	in %	2,7	15,4
Operating free cash flow (OFCF)	€ million	217	314

Sales and operating result are the most important of these management indicators. The operating result represents earnings before interest and taxes (EBIT) adjusted for special items resulting from corporate transactions, restructuring, and other unanticipated and extraordinary events.

Other key figures are earnings before taxes (EBT), return on capital employed (ROCE) and operating free cash flow (OFCF). 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 total of equity, pension provisions and financial 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 relevant financial indicators include earnings before interest and taxes (EBIT), the order backlog, the volume of capital expenditure, and research and development expenditure.

Non-financial indicators for the Rheinmetall Group include the headcount by full-time equivalent (FTE), the accident frequency rate, water usage, energy efficiency and energy intensity. Further details are provided in the non-financial statement on pages 120 et seq.

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.

Business activities of the Rheinmetall Group

Rheinmetall is an international group for leading technologies in the mobility and security segments. Globalization, protectionism, digitalization as well as disruption and transformation in various sectors and industries – especially in the field of mobility – as well as the increasing frequency and intensity of conflicts and military disputes mean that efforts to improve mobility and security are constantly increasing. With its two sectors, Automotive and Defence, Rheinmetall fulfills these basic key needs of modern society.

Operating activities of Rheinmetall Automotive

The activities of the Automotive sector encompass development, production and replacement parts supply in the Mechatronics, Hardparts and Aftermarket divisions. The core areas of expertise of companies in the Automotive sector lie in the reduction of emissions, pollutants and consumption, cooling and thermal management, and reduction of weight and friction in relation to combustion engines. This applies to not only passenger cars, but also light- and heavy-duty commercial vehicles, off-road vehicles and large engines.

Rheinmetall Automotive also works intensively on drives for the electric, fuel-cell and hybrid vehicles of the future. This includes electric drive units comprising a motor and power electronics as well as complete and efficient thermal management modules.

Corporate sector	Division	Areas of activity
Automotive	Mechatronics	Emissions reduction Actuators Solenoid valves Water, oil and vacuum pumps
	Hardparts	Pistons Engine blocks, structural components and cylinder heads Plain bearings and bushes
	Aftermarket	Global replacement parts business

Markets of Rheinmetall Automotive

Rheinmetall Automotive's business performance is largely determined by the production development of our international customers. This applies to not only existing customer contracts, but also future projects relating to our 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 Mechatronics and Hardparts 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. 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.

Basic information on the Rheinmetall Group
Business model

The Aftermarket division also 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 our customers and, in turn, strengthening customer loyalty and the cross-selling of its own products.

The debate surrounding the future of diesel technology for use in passenger cars that has been ongoing in previous years is not yet over, but was overshadowed in 2020 by the coronavirus crisis as a result of which overall international automotive production suffered a significant decline. In the second half of 2020, electrified vehicles gained market shares worldwide as the automotive industry gradually recovered. The shift away from the combustion engine as a drive system toward partly or fully electric drives has accelerated considerably and is expected to continue. All major automotive manufacturers have announced big offensives for electric vehicle models in 2021.

Regulatory environment of Rheinmetall Automotive

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 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. This concession will cease to apply from 2021, with the target value applying to the entire new car fleet in a given year. In accordance with the agreement reached between EU institutions, CO_2 emissions per kilometer are to be cut by a further 37.5% by 2030.

A limit of 147 g CO_2/km has applied to light-duty commercial vehicles in Europe since 2020. A further reduction of 31% is required by 2030.

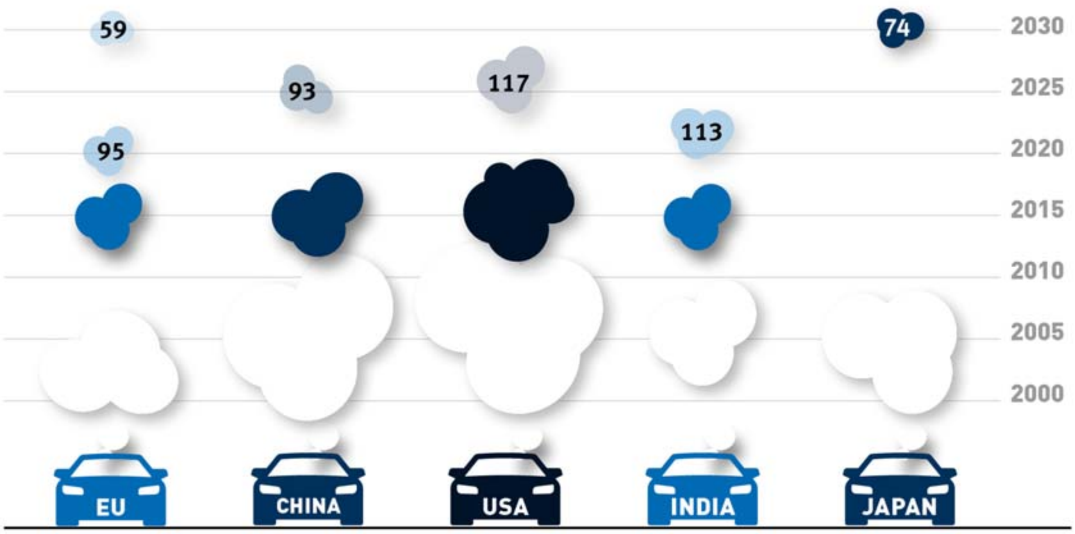
Non-compliance with the CO_2 fleet values may lead to substantial financial penalties for passenger car manufacturers. Every gram by which the limit is exceeded will cost manufacturers €95 – per vehicle. Whether and to what extent fines will apply depends, among other things, on how quickly manufacturers 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.

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.

Limits for CO_2 emissions by region/country g/km



Source: The International Council on Clean Transportation: Policy update, CO_2 emission standards for passenger cars and light commercial vehicles in the European Union, January 2019

The Euro standards are being adapted by many countries worldwide and introduced simultaneously or with a time delay. Some countries, primarily the US and Japan, are issuing their own limits on emissions of pollutants. Standards around the world for reducing emissions of harmful substances will therefore gradually continue to become more stringent in the future.

Basic information on the Rheinmetall Group
Business model

Operating activities of Rheinmetall Defence

The Defence sector of the Rheinmetall Group is among the defence and security industry's leading providers of innovative products for the German and international armed and security forces. Rheinmetall Defence provides 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. It also develops customized training and simulation solutions.

As a leading European systems supplier for armed forces technology, Rheinmetall Defence has many years of experience and innovation in armored vehicles, weapons and ammunition and in the areas of air defence and electronics – including serving 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 sector has a wide product portfolio of platforms and components, which are offered as individual and connected system solutions. This makes Rheinmetall Defence a strong and reliable partner 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 on deployment. Rheinmetall Defence continuously sets 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.

Corporate sector	Division	Areas of activity
Defence	Vehicle Sytems	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

Markets of Rheinmetall Defence

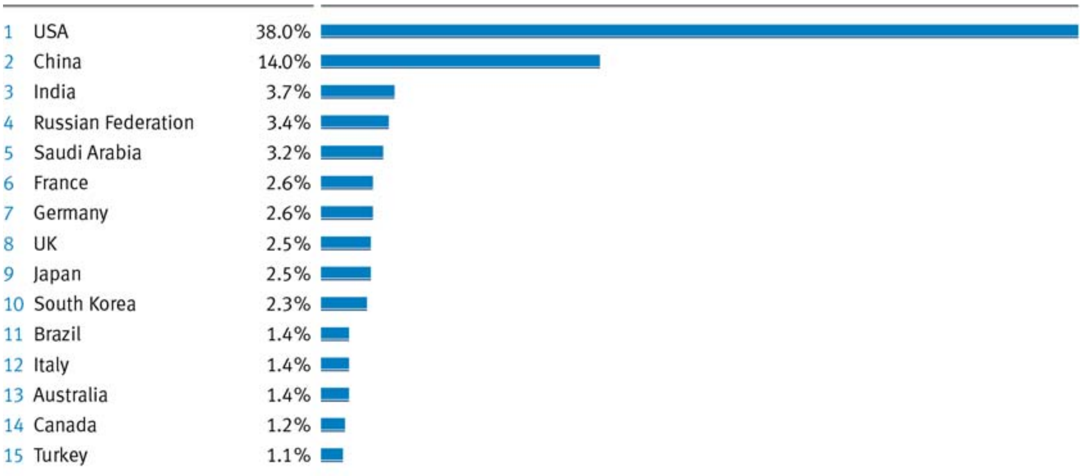
The world of the 21st century occasionally faces very tense security situations as well as complex and new threats.

Blurred boundaries between peace and war, military interventions, latent trouble spots, the outbreak of new conflicts, uncontrolled and irregular refugee and migration flows on an unprecedented scale and the consequences of the collapse of state structures in countries in geopolitically sensitive regions call for new answers to the significantly increased number of challenges and constant risks associated with external and internal security and new and/or extended and powerful capabilities for international efforts to maintain stability, security and peace.

The range of products and capabilities of Rheinmetall Defence is tailored to central defence technology requirements that result nationally and internationally from many armed forces' substantial ongoing need for technical modernization and replacements on the one hand 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, for example in order to ensure the security of allies or engage in international peace-keeping missions, on the other.

The market potential for Rheinmetall Defence comes mainly from the defence budgets of customer nations. Rheinmetall Defence 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. The overall trend toward increased spending is due in part to complex existing and new geostrategic challenges in terms of security and defence policy, the continuing significant need for modernization in the armed forces of many emerging and developing 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.

2019 defence spending and share in worldwide armaments expenditure



Source: Trends in World Military Expenditure 2019, SIPRI Fact Sheet, April 2020

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 Defence, particularly with respect to procurement projects in the European and German market. Based on NATO's outlook from October 2020, 16 out of 29 NATO countries are already meeting or exceeding this target in fiscal 2020. Germany's investment share is estimated at 16.8% for 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's outlook from October 2020 suggests that the number of countries has now risen to nine. NATO allies including Poland, Latvia, Lithuania and Romania already have laws and agreements specifying this target.

While European NATO countries and Canada were spending $252.7 billion or 1.47% of their GDP on defence in 2013, NATO estimates from October 2020 put this figure at $313 billion or 1.78% of GDP in 2020. For NATO as a whole, the defence budget as a percentage of GDP increased over the same period from 2.76% to 2.85%.

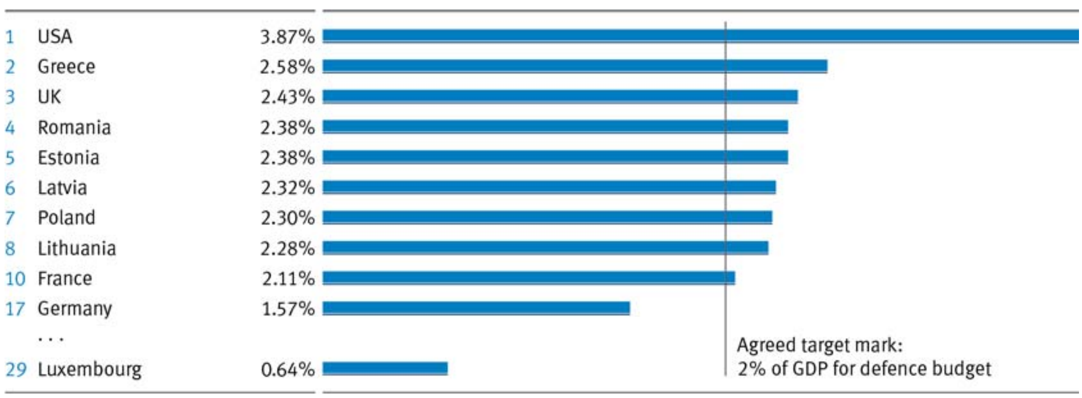
Basic information on the Rheinmetall Group
Business model

The German defence budget has been rising continuously for years, from €33.1 billion in 2014, through €45.2 billion in 2020 to an envisaged €46.9 billion in 2021. According to the Inspector General of the Bundeswehr, the German parliament has approved a total investment volume of €27 billion for the next few years. This is intended in particular to clear the existing investment backlog and to provide the German armed forces as a whole with significantly better equipment over the coming decade, with a focus on the defence of nations and alliances. This increase in the budget is also required to invest in preserving capabilities and developing new capabilities. The current defence budget provides for total investment expenditure of around €12.2 billion. Particular items included in the budget are pioneering joint developments with other European countries, such as Rheinmetall's important main ground combat system with France.

In the next few years, this will continue to be contingent on receiving adequate funding for the German armed forces. The German armed forces, guided by its capability profile, must be able – and continue to be able – to achieve its capability targets and meet its sworn international commitments as a reliable partner. The equipment requirement calculated by planners within the German armed forces is defined by the constantly increasing range of tasks expected of the German armed forces, including ongoing global deployments and growing responsibilities within NATO and on NATO's Very High Readiness Joint Task Force (VJTF).

At the Riga Security Forum in October 2019, the defence minister made it her stated aim to successively increase the German defence budget to 2% of gross domestic product by 2031. This naming of a year correlates with the specifications of the capability profile "National Ambition 2032," which was signed in September 2018 by the Inspector General of the Bundeswehr and details the requirements of the Bundeswehr and the key modernization steps to be taken by 2031. In summer 2020, in view of the coronavirus-related decrease in GDP, in place of the 2% target the defence ministry brought another target to the fore: Germany's contribution of 10% of capabilities to the NATO alliance. At regular intervals, the alliance defines what type of deployments it would like to undertake and the military requirements this would entail. These requirements are then divided up to the member states responsible for procurement.

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



Source: NATO release, October 2020 | Excluding Iceland, which has no armed forces | Outlook

We will also continue with the internationalization of Rheinmetall Defence, which has been successfully pursued for years. The sector's strategic priority still lies in expanding its local presence in promising growth regions. We continue to see particular potential in Asia and Australia, as well as in the Western and Eastern European markets. In fiscal 2020, we achieved 36.1% of Defence sales with customers outside Europe.

Regulatory environment of Rheinmetall Defence

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.

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.

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.

Basic information on the Rheinmetall Group
Business model

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. Council Regulation (EC) No. 428/2009 of May 5,2009, "setting up a Community regime for the control of exports, transfer, brokering and transit 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. They 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 in the following cases in particular: if the goods are intended to be used or may be used in connection with the development, manufacture, handling, maintenance, storage, tracking, identification or operation of atomic, biological or chemical weapons and missiles for such weapons, or an arms embargo has been imposed on the purchasing country or country of destination, or the goods are intended – in full or in part – to be used as a component in military equipment that was previously exported illegally or the goods are generally intended for a military end purpose.

Basic information on the Rheinmetall Group
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 developments. Various regional aspects of the business units that operate internationally are also taken into account. Strategic decisions are also reviewed against a background of Rheinmetall's long-term orientation with respect to the environmental and societal context. From a technological and market perspective, Rheinmetall's strategy development remains focused overall on a range of products and services that enables sustainable and profitable growth across economic cycles.

In light of this, there are three strategic objectives that are paramount for Rheinmetall in the years ahead: Firstly, Automotive's share of total Group sales – particularly with products for the combustion engine – is to be scaled back. Secondly, a profitability level of at least 10% of the operating margin is to be targeted for all business units. Thirdly, a continuous portfolio management policy is to be implemented to achieve these first two objectives.

Adaptation of the product range to megatrends such as digitalization and electrification

In recent years, Rheinmetall has built up the organizational structures for systematic technology management and stepped up the technology transfer between its corporate divisions. The aim is to operate as an integrated technology group and, as such, generate additional growth potential in the medium and long term. Strategically relevant technology fields identified in this regard include automation, digitalization, artificial intelligence and connectivity, but also cyber security as well as new drive technologies and forms of mobility. Across our various divisions and locations, we possess knowledge, experience and the relevant development capacities in these areas. In the future, we want to combine this technological expertise in a centrally managed and controlled exchange to speed up innovation processes, create new products and market them for new applications. To sustain and continuously enhance Rheinmetall's competitiveness, we continually review our product range and adapt it where necessary. Technological megatrends such as digitalization and electrification are paramount from a strategic perspective.

Transformation into an integrated technology group

To better live up to Rheinmetall's more technologically integrated focus and drive forward its transformation into an integrated technology group, we will be aligning our Group structure even more strongly to this aim going forward. At the beginning of fiscal 2021, we therefore abandoned our former organizational separation into the Defence and Automotive sectors. This is also resulting in the elimination of the interim holding Rheinmetall Automotive AG. This separate control and management unit for the divisions operating in the automotive business is being discontinued and incorporated in the existing Group structure.

From the current fiscal year onwards, the new Group structure comprises five divisions that, as 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 Weapon and Ammunition, Electronic Solutions, Vehicle Systems, Sensors and Actuators, and Materials and Trade.

The Weapon and Ammunition, Electronic Solutions and Vehicle Systems divisions continue to operate mainly on the security and defence technology markets. The Sensors and Actuators division comprises the product areas of the former Mechatronics division: Pumps, Actuators, Air Emission Systems, Solenoid Valves and Commercial Diesel Systems. Materials and Trade consists of the former product areas of Bearings, Aftermarket and Castings, which includes the joint ventures with Chinese partners that, as before, are being accounted for using the equity method.

Since the start of 2021, the Pistons business unit, which combines small- and large-bore pistons business, is being continued as a non-core business. As we already announced in the last fiscal year, we are currently assessing the strategic options for the further development of this business in light of the transformation phase that is ongoing in the international automotive industry. One possibility is for the piston business to be completely taken over by a potential partner.

Security technology and e-mobility 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 electromobility, and their shares are expected to increase as a percentage of consolidated sales, which are rising on the whole. On the other hand, the share of combustion engine business is being adjusted to reflect the market conditions anticipated in the medium term. Security and defence technology is expected to account for around 70% of consolidated sales by 2025, compared with 63% in 2020. Dependence on the combustion engine is being further reduced and, from the current level of nearly 30% of consolidated sales, is expected to be scaled down to below 20% by 2025.

Global defence spending continues to increase

Over the past few years, changes in the geostrategic power structure and developments in the international security situation as well as new and previously unknown threats such as cyber or drone attacks have already led to a new trend in defence spending, which since the middle of the last decade has continued to rise on a global scale. This trend is set to continue. More and more countries are prepared to invest more in their own security again and are modernizing their armed forces. Based on current findings and known budget plans, even the higher level of public debt in a number of countries as a result of the pandemic has not altered 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 our 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 that we will leverage as part of our strategic further development.

Basic information on the Rheinmetall Group
Strategy

Growing national demand among land forces

The objective postulated by NATO member states to bring national defence budgets up to the level of 2% of their respective gross domestic product by 2024 and to invest 20% of total spending in new equipment (heavy equipment), including associated research and development, is resulting in greater market potential. In addition, the conflict in Crimea and Ukraine is causing NATO to refocus on the necessities and responsibilities of defending alliances. This defence of alliances in some cases requires different equipment for armed forces than that needed for stabilization missions abroad, which has boosted the political will to modernize and expand the armed forces in many countries in the western defensive alliance.

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. This also applies to Germany, where the defence budget has risen from €33 billion in 2014 to €46 billion in 2020. The federal government has reiterated several times that it wants to hit a target of 1.5% for the national defence budget – as a proportion of gross domestic product – by 2024 and gradually move towards the 2% NATO target in the years thereafter.

This trend is 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 increased demand over the next few years for new and additional equipment for land forces in particular. Consequently, Rheinmetall will see an increase in the share of sales that it generates from security and defence products for the German customer. At the same time, the share of export sales attributable to the EU, NATO or NATO partnerships will increase and the export share attributable to third countries will decrease.

Strategically important markets in Eastern Europe, Great Britain and Australia

Of special significance to us in the export business in the area of security and defence technology are the markets in Great Britain, Australia and various Eastern European NATO member states.

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. This development will offer new opportunities for Rheinmetall to establish itself over the coming years as a long-term partner, especially for equipping armies.

Rheinmetall achieved an important milestone in this regard last year in Hungary, acquiring a customer for its new Lynx infantry fighting vehicle for the first time with the Hungarian armed forces. 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. We will also supply Hungary with radar systems from our Canadian subsidiary and – working in close cooperation with the country's armed forces – we envisage further business potential over the years ahead.

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 successful acquisition of major orders for military trucks, wheeled armored vehicles and munitions. Our Military Vehicle Center of Excellence became operational in Queensland last year. 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, we formed a joint venture back in fiscal 2019 with BAE Systems, in which Rheinmetall holds a majority stake of 55%. This joint venture – which will handle, among other things, the large order to equip the British armed forces with Boxer wheeled armored vehicles – marks the starting point for the establishment of Rheinmetall as a key equipment partner to the British armed forces. It also represents another step toward consolidation of the European land systems industry.

The joint project agreed between the German and French governments to develop a new European battle tank (Main Ground Combat System), in which Germany will play the leading role from a military and industrial viewpoint, is of particular strategic importance to Rheinmetall. Rheinmetall, along with Krauss-Maffei Wegmann (KMW, Germany) and Nexter (France), has been asked to develop realization concepts and be involved in the initial development phase.

We are expanding the systems business of Rheinmetall Defence. The aim of this strategy is to increase the number of our 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 us to improve our prospects for successfully marketing system-independent key components such as electronics, weapon systems, munitions and protection packages.

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

Technological upheavals in automotive manufacturing

The automotive industry is set to be confronted with a range of major technological upheavals over the coming years, with new mobility concepts becoming increasingly important. Alternative drive technologies will also expand with growing momentum, and this trend will be linked to increasing digitalization and a gradual transition to partially and fully autonomous driving. Irrespective of this technological change, the global trend toward a growing demand for mobility looks set to continue. Following the pandemic- and economy-driven declines in production over the past three years, a resurgence in vehicle production can therefore be expected going forward, albeit to varying degrees from region to region. IHS Markit forecasts from February 2021 (Market Research Automotive Industry Climate) suggest that the previous high in global annual vehicle production (vehicles up to 6.0 t) of 94 million units that was achieved in 2018 will not be reached again until 2025.

Basic information on the Rheinmetall Group
Strategy

Product portfolio becoming increasingly independent from drive system type

In light of ever-tightening statutory emissions reduction regulations worldwide, we are anticipating a trend toward hybridization in the coming years – in other words, toward a combination of conventional and electric drives in one vehicle. All-electric mobility will also become increasingly widespread. We have strategically prepared for these developments – developments that will lead to a structural decline in the number of conventional combustion engines. Over the last few years, we have tailored our product portfolio to the strict emissions regulations and successively expanded the product range in terms of hybrid technology, all-electric drive systems and fuel cell technology, and we have also reduced the reliance of the product range on passenger-car-only engines.

We – along with our joint ventures – have since acquired numerous orders for alternative passenger car drive system types. We want to continue along this path and are channeling our development resources in this direction. In the medium term, the aim is for our 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.

We also want to direct our expertise in areas such as thermal management and hydrogen technology towards non-automotive applications as well and leverage sales potential in new markets. These include, among others, the dynamic-growth market for 5G technology or stationary hydrogen applications. In addition, we will apply our breadth of expertise in the areas of sensor technology and artificial intelligence that we have gained from military applications to new mobility concepts with semi-autonomous control units.

The overarching strategic aim remains to direct Rheinmetall’s technological development towards high-growth products and future markets, and subsequently begin in the medium term to significantly reduce the share of sales with products for the combustion engine.

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

A focus on sustainability will be an integral part of the Rheinmetall Group’s strategy going forward. We are aligning not only our locations and business processes to this strategy, but our incentive model as well. The aim is for the Group to achieve CO_2 neutrality by 2035. As our business grows overall, we want to dramatically reduce our energy consumption, switch to renewable energies as much as possible and cut our water consumption by 10% over the next two years.

We will progressively improve the data we provide on the basis of sustainability criteria to make the impact of our business activities more measurable and verifiable. We want to create the highest degree of transparency possible so that we can also continue to steadily improve Rheinmetall’s ESG ratings in the process. To support these aims, from now on the implementation of ESG projects will form part of the remuneration policy for senior and middle management and account for approximately 20% of the long-term incentive.

Economic report
Executive Board statement on the general economic situation

Rheinmetall Group – forecast vs. actual business performance in 2020

	Actual | Fiscal 2019	Forecast 2020 | Annual Report 2019	Update | Q1/2020	Update | Q2/2020	Update | Q3/2020	Actual | Fiscal 2020
	February 2020	February 2020	May 2020	August 2020	November 2020	February 2021
		Figures compared with previous year	Figures compared with previous year	Figures compared with previous year	Figures compared with previous year	
Sales						
Group	€6,255 million	Organic sales growth of between 1% and 3%	Sales guidance well below original forecast		Sales decline by between 6% and 7%	€5,875 million
Automotive	€2,736 million	Sales decline by 2% to 3%	Sales guidance well below original forecast	Sales outlook reflecting changed market situation not possible	Sales decline by between 20% and 23%	€2,151 million
Defence	€3,522 million	Sales growth of between 5% and 7%	Sales growth of between 5% and 7%	Sales growth of between 6% and 7%	Sales growth of around 6%	€3,723 million
Operating result *						
Group	€505 million					€426 million
	Operating margin of 8.1%	Operating margin of around 7%	Operating result well below original forecast		Operating margin of between 6% and 6.5%	Operating margin of 7.2%
Automotive	€184 million					€33 million
	Operating margin of 6.7%	Operating margin of around 5%	Operating result well below original forecast	Operating result of between €-30 million and break-even	Operating result of between €10 million and €20 million	Operating margin of 1.5%
Defence	€343 million					€414 million
	Operating margin of 9.8%	Operating margin of between 9% and 10%	Operating margin of between 9% and 10%	Operating margin of around 10%	Operating margin of between 10% and 11%	Operating margin of 11.1%
EBT						
Group	€477 million	Significantly lower than in the previous year	Not reported in outlook	Not reported in outlook	Not reported in outlook	€57 million
ROCE						
Group	15.4%	Around 13%	Not reported in outlook	Not reported in outlook	Not reported in outlook	2.7%

* Additional statements on page 51

Following consolidated sales of around €6.3 billion in fiscal 2019, on February 27, 2020, we forecast organic sales growth of between 1% and 3% for the Rheinmetall Group in the year under review.

Sales performance in the Automotive sector 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. On the basis of market expectations at the time, we anticipated that sales at Rheinmetall Automotive – before currency effects – would decline by 2% to 3% in fiscal 2020. This forecast was based on the assumption that the spread of coronavirus would not lead to a significant disruption of supply chains and associated lengthy production downtimes in the automotive plants we supply. For the Defence sector, we anticipated sales growth of between 5% and 7% in fiscal 2020. In the Group, we planned to achieve an operating margin of around 7%, with a figure of around 5% for Automotive and between 9% and 10% for Defence.

Economic report
Executive Board statement on the general economic situation

Q1 | 2020 – The first quarter of 2020 was already influenced by the impact of the beginnings of the COVID-19 pandemic. In this challenging situation, we succeeded in slightly increasing consolidated sales during the first quarter of fiscal 2020 as well as compensating for crisis-related reduced performance in the Automotive sector with sales growth in the Defence business. In the reporting for the first quarter of 2020, we did not expect the COVID-19 crisis to have any lasting impact on the Defence sector's business performance in the current year. For this reason, the annual forecast for the Defence sector published in mid-March 2020 was confirmed.

In the Automotive sector, the potential effects of the COVID-19 crisis on end-customer demand, automotive manufacturers' production figures and global supply chains could not be reliably forecast. Under the circumstances, an outlook for the Automotive sector for 2020 as a whole could not be given due to the high level of uncertainty associated with the changed market situation. Sales and the operating result for the Automotive sector and the Rheinmetall Group were expected to be significantly lower than in previous forecasts, which did not yet account for the effects of the coronavirus crisis.

Q2 | 2020 – In light of the positive development in the first half of the year, in August 2020 we adjusted the expected sales growth for Defence in 2020 to between 6% and 7%, after 5% and 7% previously. As things stood in August 2020, we still did not expect the coronavirus crisis to have any lasting impact on business performance in 2020. A figure of around 10% was now targeted for the operating margin, which is the upper figure of the annual forecast of between 9% and 10%.

In the Automotive sector, the effects of the coronavirus crisis on end-customer demand, automotive manufacturers' production figures and global supply chains still could not be reliably forecast. An adjusted sales and earnings outlook for 2020 as a whole reflecting the changed market situation was still not possible given the existing uncertainties. Provided there would be no new lockdown, operating net income of between €-30 million and break-even was targeted for the Automotive sector.

Q3 | 2020 – We still did not expect the coronavirus crisis to have any lasting impact on the Defence sector's business performance in 2020. Projected sales growth for Rheinmetall Defence, adjusted for currency effects, was therefore around 6%. The operating margin, for which the most recent forecast was around 10%, was now raised to between 10% and 11%.

Based on the performance in the first nine months of fiscal 2020 and provided there would be no new shutdown of international automotive production between now and the end of the year, we anticipated a decline in sales, adjusted for currency effects, of between 20% and 23% for the Automotive sector. The forecast for operating net income in the Automotive sector, which was specified as between €-30 million and break-even in the first half of 2020, improved in light of the market recovery in the second half of 2020, with positive operating net income of between €10 million and €20 million now anticipated.

For the Rheinmetall Group, we forecast a decline in sales, adjusted for currency effects, of between 6% and 7% and – taking into account holding costs – a positive operating margin of between 6% and 6.5%.

Additional statements on developments during the year under review are made in the comments on the business performance of the Rheinmetall Group on pages 50 et seq. and of Rheinmetall AG on pages 82 et seq.

Economic report
General economic conditions

Global economy shaken by coronavirus pandemic

The global economy was hit with unprecedented severity by the COVID-19 pandemic in 2020. Not only did the countermeasures taken to contain the rate of infection disrupt retail, tourism, the restaurant trade and the event industry, but they also forced automotive manufacturers and suppliers to drastically scale back their production or even shut it down completely on a temporary basis. Despite a recovery in the second half of the year, the coronavirus crisis continued to have a dramatic impact on the world economy. Calculations by experts at the International Monetary Fund (IMF) suggest that global economic output declined by 3.5% year-on-year in 2020. The IMF had calculated growth of 2.8% for 2019, which was already characterized by low growth.

In its World Economic Outlook Update published in January 2021, the IMF identified some significant regional differences in the extent of the crisis and the recovery trend in the year under review. For established industrial nations, it calculated a significant decline in economic output of 4.9%. While the US reported a contraction of 3.4%, Japan suffered a substantial reduction in gross domestic product of 5.1%. The decline was even more drastic in the eurozone, where economic output fell by 7.2%. Great Britain, for example, was particularly hard hit (decline of 10.0%), when the country was also being affected by the imponderables of Brexit. The IMF experts calculated a reduction in gross domestic product of 5.4% in Germany. The "Joint Economic Forecast #2-2020" of leading German economic research institutes stated "never before has economic activity fallen more rapidly and drastically since the founding of the Federal Republic of Germany" as a result of the coronavirus containment measures taken in the first half of 2020, with a particularly concentrated slump in the months of March and April 2020. A strong counter movement began in May, underpinned by fiscal policy measures on a massive scale, but in the fall of 2020 economic experts verified that the events of the pandemic were causing the recovery to lose momentum again.

China was an exception, where – according to the leading German economic research institutes – the course of the epidemic and economic activity were around a quarter ahead of the rest of the world. The IMF therefore calculated growth in gross domestic product of 2.3% for the Chinese economy. By contrast, the pandemic dealt a particularly heavy blow to the Indian economy in 2020, with the country's economic output dropping by 8.0%. The IMF calculated a decline of 4.5% for Brazil, whereas economic output for developing and emerging economies on the whole had decreased by 2.4%.

Overall, this led IMF Chief Economist Gita Gopinath to conclude in October 2020 that the world economy was in the grip of a "deep recession" in 2020.

Massive challenges facing the global automotive industry

For the automotive industry, which was already in a tough situation in 2019 as a result of technological transformation, the coronavirus crisis in 2020 posed the biggest challenge since the Second World War. The President of the German Association of the Automotive Industry (VDA), Hildegard Müller, summed up the situation on the German market as follows in December 2020: "The coronavirus crisis led to an unprecedented slump in the German passenger car market, particularly in the first half of the year. There was a modest recovery in the second half of the year, but it will not be able to make up for the shortfall."

Despite there being regional differences, the industry was heavily impacted by the coronavirus pandemic worldwide. In February 2021, analysts at IHS Markit indicated that the number of passenger cars and light-duty commercial vehicles (up to 6.0 t) produced fell by 16.2% overall in 2020. Just 74.5 million units were produced worldwide, compared with 89.0 million vehicles last year. All relevant markets were affected by this downward trend.

Economic report
General economic conditions

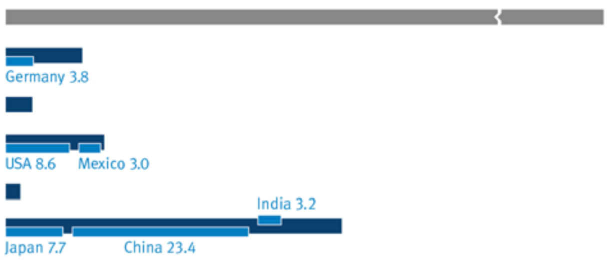
Although the recovery in China had gained momentum in the second half of the year, IHS Markit calculated a decline in Chinese production of 4.2% in 2020. By contrast, Japan reported a reduction of 16.2%, while India's decline in production was as high as 23.4%. For the Asian countries as a whole, IHS Markit estimated a decline of 11.1%.

In USMCA (US, Mexico, Canada), the drop in production was 20.1%, which was also roughly equivalent to the decline in production figures in the US (18.6%). Brazil was hit particularly hard by the crisis and saw its production fall by 32.1% year-on-year. Europe also experienced a severe setback as a result of the coronavirus pandemic. IHS Markit calculated a reduction of 24.9% altogether for the Western European markets, with the shock waves of the crisis particularly acute in France (39.8% decline) and Great Britain (28.0% decline). In Germany, vehicle production declined by 23.9% year-on-year in 2020 – a setback on a scale previously unseen. By way of comparison, in 2009 – the year of the global financial crisis – the fall in production in Germany had been 12.5%.

The Association of the German Automotive Industry responded to the Brexit deal agreed between the European Union and Great Britain in December 2020 with huge relief. "This outcome has eliminated the risk of a 'no deal' Brexit and at last companies can concentrate on implementing a free trade agreement," commented President of the VDA Müller.

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

	Change %	2020	2019
World	−16.2	74.5	89.0
Western Europe	−23.9	10.1	13.4
Eastern Europe	−18.7	3.6	4.4
USMCA	−20.1	13.0	16.3
Brazil	−32.1	1.9	2.8
Asia	−11.1	44.7	50.3



Source: IHS Markit, February 2021 | Figures for 2019 taken from IHS Markit from February 2021

Rheinmetall Automotive was unable to escape the general downward trend on the markets and it, too, suffered pandemic-related losses in all its markets. The regional distribution of Rheinmetall Automotive's sales in 2020 was as follows: We generated 60% of our sales in Europe (Western and Eastern Europe, including Germany), 17% in USMCA and 7% in China. The share of sales generated in both Brazil and India was 4%.

Commercial vehicle market suffers coronavirus-related setback as well

The global market for medium- and heavy-duty commercial vehicles weighing more than 6.0 t was hit equally hard by the impact of the COVID-19 pandemic. Similar to the situation in the passenger car segment, there was a slight recovery in the summer months from the drastic slumps seen in spring. But calculations by IHS Markit from January 2021 put the number of units produced worldwide at around 3.0 million trucks overall, which is down 11.2% on the previous year's figure.

In Western Europe, the market slowdown in 2019 was followed by a dramatic slump in the year under review. IHS Markit estimates that Western European truck production fell by 26.9% year-on-year in 2020. This roughly equated to the decline in Germany, where production figures dropped by 26.7%.

The only ray of light in 2020 came from China where the recovery picked up speed earlier than in other markets, which resulted overall in growth of 16.6% to 1.7 million units. The sharpest fall in 2020 was reported on the Indian commercial vehicle market at 57.8%, with Russia's decline of 14.1% still comparatively moderate by contrast. Despite the growth in China, the world's largest commercial vehicle market, the analysts from IHS Markit calculated a slight decline in production of 0.9% in Asia overall.

Performance on the North American market was considerably worse. In USMCA, truck production fell by 34.3% in 2020. Production declined by the same amount in the US, with a slightly bigger decline of 35.0% reported in Mexico. Declining figures were also reported in South America (-23.1%) and Brazil (-22.3%), where the crisis likewise left an indelible mark on the automotive industry.

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

Source: IHS Markit, January 2021 | Figures for 2019 taken from IHS Markit from January 2021

Supporting industry change with innovative strength

The transformation of the industry did not lose momentum during the coronavirus crisis. Despite the general purchasing restraint, at the end of 2020 the VDA reported new registration records for electric vehicles and plug-in hybrids. For example, sales of electric passenger cars increased sevenfold year-on-year to 82,802 new registrations in December 2020 alone. Highly efficient systems and components from Rheinmetall Automotive made a contribution to this industry transformation, one example being the nine-figure major order that Rheinmetall's joint venture HASCO KSPG Nonferrous Components (Shanghai) Co., Ltd., (KPSNC) received in November 2020. The company is supplying electric motor housing for the water-cooled synchronous motor of a premium automotive manufacturer. The housing will be used across the manufacturer's entire electric-powered vehicle fleet.

In addition to the growing success in electromobility, Rheinmetall Automotive is also participating in the ongoing trend in combustion engine optimization and plug-in hybrid growth. In July 2020, for example, we announced that Rheinmetall Automotive had acquired a major order for electric vacuum pumps with a total volume of €250 million from a renowned international automotive manufacturer.

Economic report
General economic conditions

In hybrid vehicles, electric vacuum pumps enable all-electric driving when the combustion engine is switched off. But the pumps can also be used in fully electric vehicles and even in conventional drive systems.

These examples show that, with its technologies, Rheinmetall Automotive covers a broad product range for environmentally friendly mobility and is making a substantial contribution to the sustainable transportation of the future – whether for new forms of mobility in urban areas or for low-emission driving on highways and over long distances.

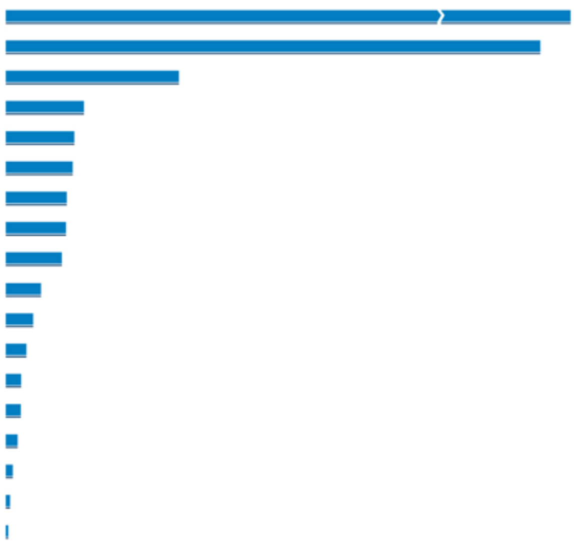
Security policy challenges give the defence sector immunity from the global recession

The defence sector was one of very few industries that was not gripped by the coronavirus-related recession in 2020. The ongoing need for substantial modernization of many armed forces was the reason for the economic robustness of the defence technology industry. Increasing digitalization and tactical mission changes are posing challenges that call for the further development of military strategies and the procurement of additional equipment. German federal defence minister Annegret Kramp-Karrenbauer mentioned some examples of new threats in her second keynote speech in November 2020. These included attacks in the cyber world staged by states or entities close to states, AI-controlled drone swarms and hypersonic missiles that are still virtually impossible to defend against.

In light of this, the armed forces of the future will be able to fulfill their mission only if they are just as well-defended in cyberspace as they are in the air, on the ground and at sea – not just individually, but also collectively and across branches of the military. Being able to meet current and future security policy challenges requires forward planning of defence spending. In the year under review, this was again reflected in increased investment in protecting soldiers and modernizing military equipment. According to the "Jane’s Defence Sector Analysis" conducted by IHS Markit, global defence spending rose by 1.5% to $1,825.1 billion in 2020, after $1,798.7 in the previous year. In the US, the country with the biggest defence budget, the budget was 0.6% higher than the previous year’s figure at $746.0 billion. The big economies in Europe of Great Britain and France also increased their defence budgets by around 2% and 3% respectively. Hungary, which is an increasingly important NATO partner for Rheinmetall Defence, reported a significant increase of 22.1% in its defence budget. IHS Markit calculated a strong increase for the People’s Republic of China as well. In what is now the second-largest defence market worldwide, defence spending rose by around 6.3% to $228.5 billion. Russia’s defence budget was around 2% higher than in the previous year at $45.2 billion.

Within NATO, the economic slump as a result of the coronavirus crisis in 2020 led to a discussion around the previous spending target of 2% of gross domestic product, as it meant that a percentage increase was now possible without an actual spending increase. In relation to this, German federal defence minister Kramp-Karrenbauer called for Germany to provide or fund 10% of NATO capabilities in the future. In her keynote speech in November 2020, the minister also stated the key point, "that we expand our defence capabilities and reliably boost our defence budgets to this effect, even in times of coronavirus." This stipulation was reflected accordingly in the German defence budget for 2020. In the year under review, spending for the German armed forces increased by 4.6% to approximately €45.2 billion, after €43.2 billion in the previous year.

Defence budgets of selected countries $ billion



	2020	2019
World	1,825.1	1,798.7
USA	746.0	741.5
China	228.5	215.0
India	63.1	58.9
UK	54.4	53.4
France	54.0	52.4
Germany	49.2	48.1
Saudi Arabia	48.5	47.1
Russian Federation	45.2	44.4
Australia	28.3	28.6
United Arab Emirates (UAE)	22.0	20.7
Canada	16.5	15.4
Poland	12.3	11.4
Netherlands	12.1	11.6
Algeria	9.4	8.5
Norway	5.6	5.4
South Africa	3.3	3.3
Hungary	1.9	1.6

Source: IHS Markit, January 2021 | Figures for 2019 taken from IHS Markit from January 2021

Rheinmetall Defence achieves sustained sales successes in growth markets

Rheinmetall Defence has strengthened its role as an equipment partner to the German armed forces in a number of projects and has thereby made substantial contributions to modernizing the forces. The spectrum of projects has ranged from an order for 4,000 state-of-the-art military trucks, through laser duel simulators for the Puma infantry fighting vehicle, to a development order for a laser source demonstrator, which will form a key component of the German armed forces' future laser weapons system.

Moreover, in 2020 we succeeded in consolidating Rheinmetall Defence's market positioning in key growth markets. This entailed, for example, more sales successes in Great Britain (modernizing the Fuchs NBC armored reconnaissance vehicle), France (new air force ammunition for the Mirage 2000 and Rafale combating fighter jets) and Australia (opening of a Military Vehicle Center of Excellence for the development, production and maintenance of military vehicles, platforms and turrets). The partnership with the EU member state and NATO partner Hungary is worth mentioning in particular. We achieved a breakthrough on the Hungarian market with the newly developed Lynx infantry fighting vehicle and were awarded a major order to supply 218 infantry fighting vehicles and 9 Buffalo armored recovery vehicles with a total value of over €2 billion. Together with its partner Israel Aerospace Industries (IAI), Rheinmetall also succeeded in acquiring an important order to supply active 3D radar systems. This has made Hungary our top export customer for radar system integration.

These sales successes with NATO partners and friendly states once again demonstrate that Rheinmetall is well-positioned to participate in the need for modernization and the corresponding budget increases in relevant markets.

Economic report
General economic conditions

Metal and energy markets in 2020

Trends on the metal and energy markets are vitally important for Rheinmetall due to the high level of purchases of metal alloys from aluminum, copper, nickel and tin and the considerable demand for energy (electricity and gas) for the manufacture of its products.

In 2020, activity on the metal markets was heavily influenced by the development of the coronavirus pandemic. A collapse in metal prices in spring 2020 was followed by an even stronger period of recovery, which meant that all metal prices ended the year with an increase. The LME industrial metals index gained 20% since the start of the year, climbing by as much as 53% from its low in March 2020.

In retrospect, the sentiment of market participants overshadowed the fundamental data for long periods, even though it did not initially appear this would be the case after the coronavirus-related slump in the spring. However, the fiscal stimulus packages proposed by governments on both sides of the Atlantic and the consistently loose monetary policy of central banks did not fail to have the desired effect in this regard.

The strong interim increases in metal prices in 2020 were due to a lesser extent to the recovery in the demand for metal since the middle of the year, and much more to speculative financial investors who had bet on rising metal prices. Positive reports on the availability of an effective vaccine also gave metal prices a further boost during the last few months of the year.

China again played an important role on the metal markets in 2020. The country recovered from the coronavirus crisis much faster than originally anticipated, which gave fresh impetus to the demand for metals and metal prices alike. The Bank of China encouraged commercial banks to adopt an expansionary lending policy, which strongly benefited the demand for metals. As seen on many occasions in the past, Chinese traders took advantage of the temporarily low prices and imported large quantities of metals.

The global copper market was largely balanced in 2020 but many analysts had based their forecasts on a supply overhang, and from March 2020 onwards the changed situation led to a sharp price increase.

The continued restrictions on imports of copper scrap to China for environmental reasons were offset only by higher demand for copper concentrates and refined copper, which drove up prices. More import quotas are not expected for next year. Only high-quality copper scrap that meets certain requirements will then be allowed to be imported.

Supply shortages in major producer countries of copper and nickel caused by the coronavirus pandemic was a particular point of focus for market participants. In South America in particular, mine production was severely impacted by measures taken to tackle coronavirus as mine operators extracted less than originally planned. On the buyer side, this stoked fears of a dwindling supply. But these fears were unwarranted because the lower supply was offset by a decrease in demand. As a result, this year saw high supply surpluses build up on most metal markets. However, this was pushed into the background by the euphoric sentiment on the financial markets. The rally on the stock markets also resulted in strong demand for industrial metals as a cyclical raw material. But until recently prices were also driven up by high speculative buying interest.

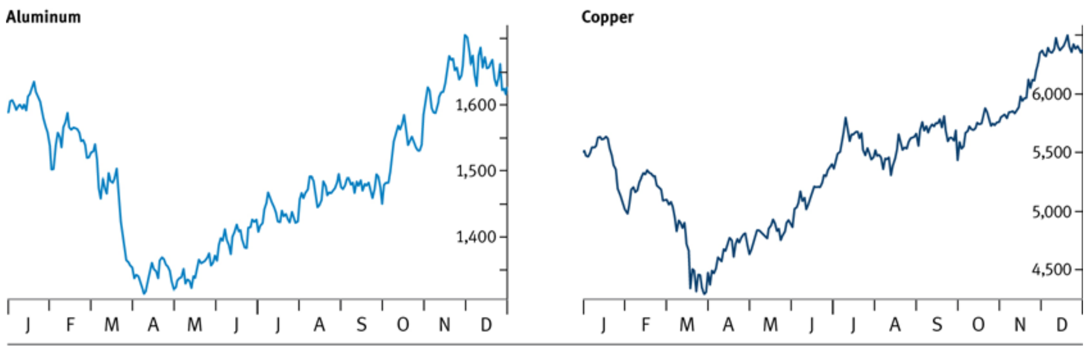
This year saw a high supply surplus on the global aluminum market as well. As a result of weak demand and record-high production in China, this now totals three million tons according to estimates by the World Bureau of Metal Statistics (WBMS), an independent data platform for the global metal industry, and the Commodity Research Unit (CRU), a leading provider of analyses, prices and advice for the mining, metals and fertilizer markets.

The automotive industry was – and still is – heavily impacted by the coronavirus pandemic, whereas in previous years it had been a major driver of aluminum demand as part of the transport sector. The automotive industry is now on track to recovery – as evidenced by the rising sales figures in core sales markets – and demand for aluminum along with it.

The global nickel market also reported high supply surpluses in 2020. This was caused primarily by a sharp decline in demand for stainless steel, the key demand component for nickel. The anticipated additional demand stimulus from electromobility largely failed to materialize in 2020 as a result of the coronavirus pandemic.

In 2020, the price of tin was driven by both the high demand for consumer electronics and the dynamic development in the field of electromobility, the expansion of renewable energies, the development of the 5G mobile communications standard and robotics. The restrictions on social contact imposed by the German government in spring and in fall/winter 2020 to combat the coronavirus led, among other things, to a massive shift from working in the office to working from home, which significantly increased demand for computer hardware worldwide. This benefited the semiconductor industry to a significant extent and also drove up the demand for tin.

Aluminum and copper prices in 2020 €/t



Source: REFINITIV

Economic report
General economic conditions

The energy markets, like almost all the financial markets, experienced the typical coronavirus-related slump in spring 2020 before recovering significantly for the most part. The sharpest price volatility was seen on the oil market.

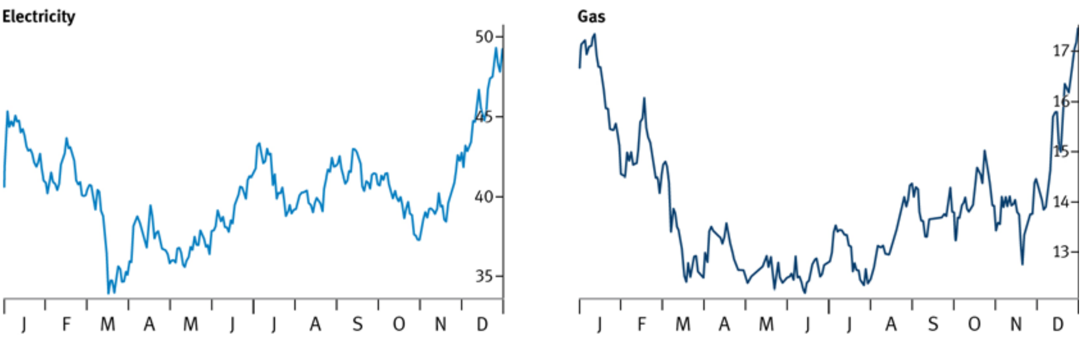
Ultimately, almost all measures taken to contain the pandemic meant a restriction of mobility. This resulted in a correspondingly steep drop in demand, particularly in the industrialized countries. It was mainly the result of the equally unprecedented production cuts by the OPEC+ production cartel and the decline in US oil production that prices recovered so quickly, despite the high rise in oil stockpiles. The already weak demand for gas on the US gas market also plummeted on account of the mild winter, which delayed the price recovery that was starting to take shape. Coal prices also came under pressure, but China surprised the market with robust demand for imports, which quickly caused prices to increase again. There was also a significant correction in CO_2 prices in EU emissions trading. The government-imposed lockdown ultimately slowed greenhouse gas emissions and consequently curbed the demand for emissions certificates. However, the ever-ambitious EU climate policy quickly caused prices to creep back up.

The German trading price of electricity was also affected by coronavirus-related volatility in 2020. The base-load price for the next calendar year started to slide in March and by mid-month was 15% lower than at the start of the year. However, the price rallied significantly as early as July 2020 and climbed to over €40. There are a number of reasons why the decline was not quite as severe as on many other markets. Firstly, the contract is less prone to fluctuations in the short term due to its long term. Secondly, electricity consumption did not fall quite as sharply as other economic indicators. Thirdly, a price determinant that has increasingly gained in significance in recent years recovered quickly along with the CO_2 price and dragged the price of electricity back up. The CO_2 price combined with the gas and coal prices together explain the increase in the price of electricity.

The forward price for base-load electricity for supply in 2021 became 21% more expensive over the course of 2020. The EEX price for supplies of natural gas in 2021 was €17.50 per MWh at the end of 2020, which was 3% higher than at the start of the year.

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 2020.

Electricity and gas prices in 2020 €/MWh



Source: www.eex.com

RHEINMETALL GROUP

KEY FACTS

5,875 SALES € MIL

426 OPERATING RESULT € MIL

301 CAPITAL EXPENDITURE € MIL

25,329 EMPLOYEES

13.4 ORDER BACKLOG € BIL

6.3 R&D INTENSITY %

Economic report
Rheinmetall Group business performance

General disclosures

All figures in this combined management report have been rounded on a standalone basis. This can result in minor deviations when adding figures together. The new rounding method can also lead to minor deviations between the previous year's figures stated here and the figures in the combined management report for 2019.

Consolidated sales of €5.9 billion

In fiscal 2020, which was strongly impacted on a macroeconomic level by the global coronavirus crisis, the Rheinmetall Group generated consolidated sales of €5,875 million. This meant that sales were down by €380 million or 6.1% on the previous year's figure. Adjusted for currency effects of €87 million and first-time consolidated sales from M&A activities of €50 million, sales declined by 5.5%.

Sales € million

	2020	2019
Rheinmetall Group	**5,875**	**6,255**
1 Automotive	2,151	2,736
2 Defence	3,723	3,522
Consolidation	0	(3)

Fiscal 2020 was characterized by contrasting sales performances for the two sectors Automotive and Defence: While the Defence sector – bolstered by a high order backlog and an unchanged positive market and industry environment – increased its sales by 5.7% or €201 million to €3,723 million, the sales performance in the Automotive sector was influenced by negative development in the global automotive industry, where production and sales figures fell well short of previous years in 2020. The anticipated weaker automotive industry and specifically the pandemic-related production downtime in almost all global automotive markets, which severely impacted the first half of 2020 in particular, resulted in a sales decline of €585 million to €2,151 million at Rheinmetall Automotive in 2020. This corresponds to a decline of 21%. At 66%, the international share of consolidated sales in the year under review was lower than in the previous year (69%).

Sales by region € million

	2020	2019
Rheinmetall-Konzern	**5,875**	**6,255**
1 Germany	2,018	1,949
2 Other Europe	1,656	1,866
3 North-, Middle- and South America	607	655
4 Asia	1,001	1,080
5 Other regions	593	708

Third-highest consolidated operating result despite the coronavirus crisis

In fiscal 2020, the Rheinmetall Group achieved a consolidated operating result (EBIT before special items) of €426 million, which was €79 million or 16% lower than the previous year's figure of €505 million. Nevertheless, this was the third-highest operating result in the company's recent history – despite the negative impact of the coronavirus crisis on the automotive business. The Group's operating margin was 7.3%, which was slightly lower than the previous year's figure of 8.1%.

The Defence sector achieved an operating result of €414 million, exceeding the previous year's figure of €343 million by more than 21%. At €33 million, Rheinmetall Automotive's operating result was well below the previous year's figure of €184 million – as a result of the significant decline in sales. In Others/Consolidation, the operating result changed only slightly from €-22 million in the previous year to €-21 million in the year under review.

Operating result € million

	2020	2019
Rheinmetall Group	**426**	**505**
Automotive	33	184
Defence	414	343
Others/consolidation	(21)	(22)

The operating result in fiscal 2020 was adjusted for special items totaling €337 million. These special items mainly related to the non-cash impairment of €300 million that was incurred in the Automotive sector as a result of the lower growth momentum that became apparent in the medium term. The special items also included provisions of €40 million for restructuring measures that were also recognized in the Automotive sector. Positive non-recurring effects of €3 million were recognized in the Defence sector. They were due to the net effect of restructuring measures (€-7 million) and a subsequent purchase price adjustment in connection with the sale of the unmanned aircraft systems product area in fiscal 2012 (€10 million). Taking into account all the special items, EBIT in the Rheinmetall Group was €89 million and thus €422 million below the previous year's figure of €512 million.

Special items in 2020 € million

	Operating result	Corporate transactions	Restructuring	Others	Special items	EBIT
Rheinmetall Group	**426**	**10**	**(47)**	**(300)**	**(337)**	**89**
Automotive	33	-	(40)	(300)	(340)	(307)
Defence	414	10	(7)	-	3	417
Others/consolidation	(21)	-	-	-	-	(21)

Special items in 2019 € million

	Operating result	Corporate transactions	Restructuring	Others	Special items	EBIT
Rheinmetall Group	**505**	**-**	**(2)**	**9**	**7**	**512**
Automotive	184	-	-	2	2	186
Defence	343	-	(2)	-	(2)	341
Others/consolidation	(22)	-	-	7	7	(15)

Net income € million

	2020	2019
EBIT	**89**	**512**
Net interest	(33)	(35)
EBT	**57**	**477**
Income taxes	(56)	(123)
Group net income	**1**	**354**
of which:		
Minority interests	27	19
Rheinmetall AG shareholders	(27)	335
Earnings per share from continuing operations (€)	(0.62)	**7.77**

Economic report
Rheinmetall Group business performance

Net interest income was €-33 million in fiscal 2020, compared with €-35 million in the previous year. The Rheinmetall Group's earnings before taxes (EBT) therefore amounted to €57 million, after €477 million in the previous year. The decrease of €420 million was mainly due to special items (€337 million) and the €151 million coronavirus-related decline in the operating result in the Automotive sector. Earnings after taxes of €1 million were €353 million lower than the previous year's figure of €354 million. After deduction of earnings attributable to non-controlling interests of €27 million (previous year: €19 million), earnings attributable to shareholders of Rheinmetall AG were €-27 million, compared with €335 million in the previous year. Taking into account the weighted number of shares (2020: 43.17 million; 2019: 43.06 million), earnings per share came to €-0.62, compared with €7.77 in the previous year.

Order intake significantly above annual sales

In fiscal 2020, the Rheinmetall Group had an order intake of €8,516 million. This again exceeded the previous year's figure by €656 million (previous year: €7,889 million). This also put the Group's order intake significantly above annual sales in fiscal 2020. The order intake in the Automotive sector totaled €2,130 million, after €2,705 million the year before. The order intake in the Defence sector was €6,387 million in 2020, which was €1,201 million higher than the already high figure of €5,186 million in the previous year.

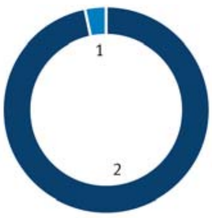
Order intake € million

	2020	2019
Rheinmetall Group	**8,516**	**7,889**
1 Automotive	2,130	2,705
2 Defence	6,387	5,186
Consolidation	(2)	(3)

Order backlog rises significantly to over €13 billion

On December 31, 2020, the order backlog in the Rheinmetall Group was €13.4 billion. This significantly exceeded the figure of €10.8 billion at the end of the previous year by around €2.5 billion or 23%.

Order backlog € million



	2020	2019
Rheinmetall Group	**13,368**	**10,846**
1 Automotive	426	447
2 Defence	12,942	10,399

Capital expenditure at a high level

In fiscal 2020, 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 and in order to provide additional security with regard to the liquidity situation and free cash flow development, more restrictive benchmarks were set across the whole Group in 2020 for every single investment decision. This meant that capital expenditure on property, plant and equipment and intangible assets amounted to €301 million in fiscal 2020, after €322 million the year before. This is equivalent to 5.4% of consolidated sales (previous year: 5.2%). A total of €81 million of the capital expenditure volume related to leases as per IFRS 16 (previous year: €72 million). Capital expenditure was offset by depreciation and amortization of €557 million (previous year: €280 million).

Capital expenditure € million

	2020	2019
Rheinmetall Group	**301**	**322**
Automotive (Net investments[1])	95	143
Defence	201	166
Other	5	13

[1] Total capital expenditure less payments received from customers of €17 million (previous year: €36 million).

Employees

Rheinmetall had 23,268 employees (FTE) at the end of the 2020 reporting period, compared with 23,780 on December 31, 2019.

Employees by area

	2020	2019
Rheinmetall Group	**23,268**	**23,780**
Automotive	10,631	11,405
Defence	12,344	12,100
Rheinmetall AG and Service companies	293	275

FTE | on the reporting date

Employees in figures

	2020	2019
Employees	**25,329**	**25,767**
Men	20,108	20,428
Women	5,222	5,339
Trainees	746	767
Germany	405	420
Abroad	341	347
Part-time staff	1,098	1,117
Temporary staff	2,264	1,663
Interns	173	166
Graduates (during the year)	48	54
Disabled persons Germany	582	575
Foreign employees in Germany	826	859

Total workforce

In the year under review, just less than half of the workforce (49.2%; previous year: 50.2%) was employed at Rheinmetall companies outside Germany:

Economic report
Rheinmetall Group business performance

Employees by region

	2020	2019
Total	25,329	25,767
Germany	12,875	12,835
Abroad	12,454	12,932
EU excl. Germany	5,784	5,899
North America	2,162	2,247
South America	1,172	1,366
Asia	1,548	1,523
Africa	1,315	1,527
Australia	473	370

Total workforce

The proportion of female employees was 20.6% as of December 31, 2020, after 20.7% at the end of the previous year.

Female employees by area

	Automotive		Defence		Holding + Service Companies		Rheinmetall Group	
	Number	%	Number	%	Number	%	Number	%
2020	2,623	22.5	2,475	18.5	124	38.5	5,222	20.6
2019	2,807	22.6	2,420	18.5	112	38.1	5,339	20.7

Total workforce

Whether employees are young or a little older, whether they have only recently joined Rheinmetall or have been here longer, our corporate culture aims to ensure that each individual employee can make an active contribution with their personal qualities, skills, qualifications 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: 43.3). In 2020, the average age in the German companies was 44.7 (previous year: 44.8); in the Rheinmetall companies outside Germany, it was 42.2 (previous year: 41.9). The average age of managers at the German Rheinmetall companies was 48.4 (previous year: 48.7).

Age structure

		2020	2019
Post-war generation	(Years 1946-1955)	230	424
Generation Babyboomer	(Years 1956-1965)	4,935	5,432
Generation X	(Years 1966-1980)	9,125	9,318
Generation Y	(Years 1981-1995)	9,039	8,761
Generation Z	(Years from 1996)	766	628
Total		24,095	24,563

Salaried staff | on the reporting date

In the year under review, the average tenure with the company was 13.7 years in the Automotive sector (previous year: 13.0), 10.4 years in the Defence sector (previous year: 11.0) and 8.1 years in the holding/service companies (previous year: 8.4), while the average within the Rheinmetall Group in 2020 was 11.9 years, the same as in the previous year. The tenure of female employees in Germany was 13.8 years (previous year: 14.1), which is slightly above the figure for male employees whose average tenure at Rheinmetall was 12.8 years (previous year: 13.0). In the past fiscal year, 471 people had been employed at the company for more than 40 years (previous year: 449).

On average, employees in the Rheinmetall companies outside Germany had worked at the company for 9.8 years (previous year: 9.9), while those in the German companies averaged 13.9 years (previous year: 14.0). The average tenure for managers at the German companies fell slightly to 14.6 years, compared with 15.0 years in the previous year.

Tenure at the company

	2020	2019
Length of service in years	11.9	11.9
Germany	13.9	14.0
Abroad	9.8	9.9

Total workforce

In the last fiscal year, Rheinmetall's German companies employed 9,532 staff covered by collective wage agreements (previous year: 9,570), 1,540 staff with contracts not covered by collective wage agreements (previous year: 1,486) and 227 managerial staff (previous year: 240).

Personnel expenses came to €1,723 million in the year under review, compared with €1,678 million in the previous year, which corresponded to a personnel expenses ratio of 29% (previous year: 27%). Personnel expenses per employee amounted to €74 thousand (previous year: €72 thousand). Sales per employee stood at €252 thousand in the last fiscal year (previous year: €267 thousand).

Additional indicators

		2020	2019
Personnel expenses	€ million	1,723	1,678
Personnel expenses / employees	€ '000	74	72
Sales / employees	€ '000	252	267
Personnel expenses ratio	%	29	27

Research and development

Expenditure on research and development at the Rheinmetall Group was €372 million in fiscal 2020 (previous year: €355 million). Of this amount, €74 million was passed on to customers (previous year: €76 million). Of the total expenditure on research and development, €47 million was capitalized as development costs in the year under review (previous year: €41 million). The research and development ratio in relation to the Group's total sales was 6.3% (previous year: 5.7%). In 2020, the corresponding ratio was 8.9% at Rheinmetall Automotive (previous year: 7.7%) and 4.8% at Rheinmetall Defence (previous year: 4.1%).

Research and development € million

	2020	2019
Employees in research and development	4,276	4,129
Employees in research and development as % of total workforce	16.9	16.0
R&D: Expenses	372	355
of which capitalized	47	41
R&D ratio (research and development expenses in relation to sales)	6.3	5.7

Additional statements on research and development activities are made in the comments on the business performance of the Rheinmetall Group divisions for 2020.

Economic report
Rheinmetall Group business performance

Statement of cash flows

Despite a significant increase in non-cash amortization and depreciation, the considerable reduction in earnings after taxes together with lower working capital contributed to the €148 million decrease in cash flow from operating activities, from €602 million to €453 million. Following a figure of €20 million in the previous year, €42 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 €217 million (previous year: €314 million). At a ratio of 3.7% of sales, it lay within the strategic range of 2% to 4%. Capital expenditure included in operating free cash flow decreased significantly from €288 million to €237 million.

Taking into account the proceeds from the sale of assets and divestments, in addition to the payments for acquisitions, free cash flow amounted to €265 million, which was €84 million lower than the previous year's figure of €350 million.

Statement of cash flows € million

	2020	2019
Net income	**1**	**354**
Amortization, depreciation and impairments	557	280
Payment into external Fund (CTA)	(42)	(20)
Changes in Working Capital and others	(63)	(12)
Cash flows from operating activities	**453**	**602**
Investments in property, plant and equipment, intangible assets and investment property	(237)	(288)
Operating free cash flow	**217**	**314**
Cash receipts from the disposal of property, plant and equipment, intangible assets and investment property	20	8
Net cash outflow from financial investments in/divestments of consolidated subsidiaries and other financial assets	8	(56)
Payments for the purchase of short-term commercial papers	21	84
Free Cash Flow	**265**	**350**

Asset and capital structure

The Rheinmetall Group's total assets declined by €148 million or 2.0% to €7,267 million in fiscal 2020. As of December 31, 2020, non-current assets accounted for 40% of total assets, after 43% in the previous year. They went down by €267 million to €2,928 million mainly as a result of the impairment charges recognized. Current assets increased by €119 million overall year-on-year to €4,339 million. A total of €110 million of this increase was attributable to inventories and €108 million to cash and cash equivalents. Contract assets, on the other hand, fell by €35 million.

Asset and capital structure € million

	Dec. 31, 2020	%	Dec. 31, 2019	%
Non-current assets	2,928	40	3,195	43
Current assets	4,339	60	4,220	57
Total assets	**7,267**	**100**	**7,415**	**100**
Equity	2,053	28	2,272	31
Non-current liabilities	2,326	32	2,365	32
Current liabilities	2,888	40	2,779	37
Total equity and liabilities	**7,267**	**100**	**7,415**	**100**

The equity ratio is 28%, following 31% at the start of the year. The equity of the Rheinmetall Group decreased by €219 million or 9.6% to €2,053 million in fiscal 2020. This decrease was almost entirely attributable to the distribution of the dividend to the shareholders of Rheinmetall AG amounting to €104 million and a negative other income figure of €120 million.

The €39 million decrease in non-current liabilities to €2,326 million is essentially due to a reduction in other non-current provisions (€-23 million) resulting from transfers to other current provisions.

Current liabilities increased by €109 million. This increase results mainly from increased current provisions (€+87 million). This can be accounted for by the transfers from other non-current provisions, but also by increased restructuring provisions. Income tax liabilities, on the other hand, fell by €23 million.

ROCE € million

	Dec. 31, 2020	Dec. 31, 2019
Net financial debts (-)/Net liquidity (+)	4	(52)
Pension provisions	1,177	1,169
Equity	2,053	2,272
Capital Employed	**3,226**	**3,493**
Average capital employed	3,359	3,334
EBIT	89	512
ROCE (in %)	**2.7**	**15.4**

The average capital employed decreased due to the lower equity at the end of 2020. Combined with significantly lower EBIT as a result of special items and the impact of the coronavirus crisis, this brought ROCE down from 15.4% in the previous year to 2.7%.

In relation to total assets adjusted for cash and cash equivalents, the equity ratio was 33%, after 35% in the previous year. Financial liabilities increased by €31 million or 3.1% compared with the beginning of the year to €1,023 million. As of the end of the reporting period, cash and cash equivalents totaled €1,027 million, after €920 million at the end of the previous year. At the end of 2020, no amount was held in commercial paper as the liquidity reserve (previous year: €20 million). Net liquidity for the 2020 reporting year totaled €4 million, after €-52 million (net financial liabilities) at the beginning of the year. The share of net liquidity in relation to adjusted total assets was 0.1% in the fiscal year, compared with 0.8% for net financial liabilities at the start of the year.

Economic report
Rheinmetall Group business performance

Capital structure € million

	Dec. 31, 2020	%	Dec. 31, 2019	%
Equity	**2,053**	**33**	**2,272**	**35**
Current financial debts	150	2	112	2
Non-current financial debts	873	14	880	14
Total financial debts	**1,023**	**16**	**992**	**15**
Near-cash assets	-	-	20	-
Cash and cash equivalents/financial resources	1,027	16	920	14
Net financial debts (-)/Net liquidity (+)	**4**	**-**	**(52)**	**1**
Total assets adjusted for cash and cash equivalents	**6,240**	**100**	**6,496**	**100**

Value added

The Rheinmetall Group generated value added of €1,832 million in fiscal 2020, falling short of the previous year's figure of €2,212 million. The Group's total operating performance was €6,531 million, compared with €6,912 million in the previous year. The ratio of value added to the Group's total operating performance went down from 32% in the previous year to 28%. Value added per employee decreased from €95 thousand to €81 thousand. At 94%, most of the value added benefited the employees in fiscal 2020. A total of 4% related to the Treasury. Interest payable to lenders was 2% in the year under review. The shareholders of Rheinmetall AG received 5% of the value added, or €86 million. The Rheinmetall Group contributed €85 million to the use of value added, after having retained €251 million in the Group in the previous year.

Source and use of value added € million

	2020	%	2019	%
Source				
Group's total operating performance	6,531	100	6,912	100
Input	(4,142)		(4,421)	
Amortization and depreciation	(557)		(280)	
Value added	**1,832**	28	**2,212**	32
Use				
Employees	1,723	94	1,678	76
Treasury	67	4	134	6
Lenders/banks	42	2	46	2
Shareholders	86	5	103	5
Companies	(85)	(5)	251	11
Value added	**1,832**	**100**	**2,212**	**100**

The Group's total operating performance comprises all income, i.e. total operating performance, other operating income, income from equity holdings, interest income and other financial income. Upfront expenses include all expenses except personnel expenses, interest and taxes.

RHEINMETALL AUTOMOTIVE

KEY FACTS

2,151 SALES € MIL

33 OPERATING RESULT € MIL

95 CAPITAL EXPENDITURE € MIL

11,643 EMPLOYEES

426 ORDER BACKLOG € MIL

8.9 R&D INTENSITY %

Economic report
Business performance of Rheinmetall Automotive

Decrease in sales due to sharp downturn in automotive production

After the global automotive industry was negatively impacted by the effects of the coronavirus crisis in the first half of 2020 – particularly the repercussions of the widespread shutdown of international automotive production – production figures gradually recovered in the second half of 2020, although they fell short of the previous year's level. According to the IHS Markit analysis from February 2021, for 2020 as a whole, the number of light vehicles (vehicles up to 6 tons) produced globally came to 74.5 million vehicles, which was 16.2% or 14.4 million units below the previous year's figure.

In the Automotive sector, the negative impact of the coronavirus crisis left its mark in all relevant markets. A sharp drop in sales in the first half of 2020 was followed by improved business performance in the second half of the year with the gradual restart of global vehicle production. However, the sector's sales for 2020 as a whole declined by 21% or €585 million to €2,151 million. Adjusted for currency effects, the decline in sales was 19%.

Sales € million

	2020	2019
Rheinmetall Automotive	**2,151**	**2,736**
Mechatronics	1,202	1,525
Hardparts	688	937
Aftermarket	345	361
Others/consolidation	(84)	(87)

Sales in the Mechatronics division decreased by 21% to €1,202 million in 2020. There was a decline in sales with customers in Europe in particular. At €688 million, sales in the Hardparts division were 27% lower than in the previous year. In Small Bore Pistons, this sales decline was mainly attributable to the performance of the markets in Europe and North America. Large Bore Pistons, on the other hand, suffered from the weakness in the global large-bore piston market. Sales in the Aftermarket division decreased by 4.4% to €345 million.

The distribution of sales between Germany and the international market in fiscal 2020 was nearly the same as in the previous year. The share of sales with customers in Germany went down slightly by one percentage point to 18%, and accordingly the share generated with customers outside Germany was 82%. In international business, however, sales with customers in Western and Eastern Europe fell slightly to 42% (previous year: 43%). Sales generated with buyers in North and South America represented 21% of all sales (previous year: 20%). This included business with customers in the USMCA economic region, i.e. the US, Mexico and Canada, which increased slightly to a share of 17% (previous year: 16%). The share of sales with customers in Asia remained stagnant at the previous year's level of 18%, with customers in China accounting for a slightly lower share of 7% (previous year: 8%). The share of sales represented by customers in other Asian countries increased to 2% (previous year: 1%).

The joint ventures operated with Chinese partners in China and Germany are accounted for using the equity method and are therefore not included in consolidated sales. The sales of these companies totaled €1,129 million in fiscal 2020, which corresponds to a decline of 11% year-on-year, or 9.3% after adjustment for currency effects.

Positive operating result despite coronavirus crisis

The operating result of Rheinmetall Automotive (EBIT before special items) was €33 million in the year under review, after €184 million in the previous year. The operating margin fell by 5.2 percentage points to 1.5% (previous year: 6.7%). The decrease in the operating result of the sector and its three divisions can be explained primarily by the pandemic-related slump in sales.

Operating result € million

	2020	2019
Rheinmetall Automotive	**33**	**184**
Mechatronics	36	118
Hardparts	(13)	28
Aftermarket	20	35
Others/consolidation	(11)	3

The Automotive sector took early action to respond to the crisis, adopting various measures to adapt its production operations and introducing a strict cost management policy. A complete hiring freeze was initiated, the number of contract workers was reduced and temporary employment contracts were no longer extended. Employees' working time accounts were also decreased and working hours were reduced at numerous production sites – all the way up to a complete shutdown of production. These measures affected the administrative areas as well. Drastic cuts were made to all non-staff and administrative costs. These extensive and fast-acting measures significantly reduced the size of the earnings decline in the Automotive sector.

The sector's reported earnings before interest and taxes (EBIT) amounted to €-307 million in fiscal 2020, €493 million lower than in the previous year. As well as the declining operating result, the reduction in EBIT is also attributable to negative special items totaling €340 million. This figure includes the impairment of €300 million that was recognized in the second quarter of 2020. These impairment charges were primarily due to the lower growth rates for international vehicle production that experts were projecting for the coming years. Restructuring provisions of €40 million were also recognized in the third quarter of 2020, which are expected to become cash-effective in the period from 2021 to 2023. They mainly include costs for capacity adjustments and production relocations undertaken to optimize the global locations in the Hardparts division (€24 million), as well as costs for the realignment and the new structural orientation in the Mechatronics division (€16 million).

Capital expenditure volume down 34%

To stabilize the liquidity situation in the crisis year of 2020, investment decisions made in the Automotive sector were highly restrictive. The investment volume – after deducting payments received from customers – came to €95 million, after an investment volume of €143 million in the previous year. The decline of 34% or €49 million affected the Mechatronics division most of all (€-38 million), while the investment volume was €8 million less in the Hardparts division. There was also a decline of €9 million in development costs capitalized in the investment volume (previous year: €17 million). A total of €10 million related to right-of-use assets in accordance with IFRS 16 (previous year: €11 million). The investment ratio fell to 4.4% of sales (previous year: 5.2%).

Economic report
Business performance of Rheinmetall Automotive

Investments[1] € million

	2020	2019
Rheinmetall Automotive	**95**	**143**
Mechatronics	54	92
Hardparts	33	41
Aftermarket	7	7
Others/consolidation	1	3

[1] Total capital expenditure less payments received from customers of €17 million (previous year: €36 million)

The share of the Mechatronics division in the total capital expenditure of the sector decreased by seven percentage points year-on-year to 57%, while the capital expenditure share of the Hardparts division increased by six percentage points to 35%. The capital expenditure of the Aftermarket division represented a share of 7% (previous year: 5%), while the other sector companies accounted for a share of less than 1%.

Capital expenditure in Germany amounted to 42% of Rheinmetall Automotive's total capital expenditure volume in fiscal 2020, while the international market accounted for a share of 58% (previous year: 51% and 49% respectively). The decline in Germany was primarily seen at the locations of the Mechatronics division. The region that received the biggest share of total capital expenditure outside Germany was USMCA with a share of 24% (previous year: 13%), with the share going up in both the US and Mexico. Capital expenditure at the Western and Eastern European locations came to 17% (previous year: 12%), with increases primarily at the sites in Italy and Spain. The share of capital expenditure attributed to the Asian plants decreased to 14% (previous year: 20%), with the share of capital expenditure declining most of all in India.

Number of employees fell by nearly 7%

The pandemic-related decline in the automotive industry had an impact on the sector's headcount as well. On December 31, 2020, there were 10,631 permanent employees worldwide, which equates to a decrease of 6.8% or 774 FTE compared with the end of the previous year.

Employees FTE

	2020	2019
Rheinmetall Automotive	**10,631**	**11,405**
Mechatronics	4,563	4,723
Hardparts	5,096	5,664
Aftermarket	819	833
Others/consolidation	153	185

Of the sector's employees at the end of 2020, 58% worked at the companies outside Germany (previous year: 60%). The number of employees at our locations outside Germany fell by 635 FTE in absolute terms. The headcount in Germany declined by 139 employees.

The decline in sales also required an adjustment in the number of contract staff. As of December 31, 2020, we employed 700 contract staff (previous year: 749). This meant that the share of this employee group within the total workforce was unchanged at 6.2%.

Further steps taken to adapt staff capacity to the reduced order volumes included the use of reduced working hours and comparable instruments in Germany and abroad, which included not only those employees working directly in production but also the development, sales and other administrative areas. Moreover, during the period of underutilization as a result of the pandemic, mandatory requirements were introduced to reduce vacation leave and overtime, and employment contracts were changed to a reduced number of hours per week. A government-backed early retirement scheme was also used at the Italian locations.

Research and development

New mobility requirements and increasing environmental awareness among car buyers are continuing to drive the global transformation of the automotive industry. The established drive technologies in the form of cost-effective, tried-and-tested combustion engines are losing their appeal, while electromobility is becoming increasingly widespread. According to experts, around 20% – so around 20 million units – of all light vehicles produced globally by 2030 will be equipped with a battery-electric drive. In addition to the change in buying preferences among end customers, which in some countries are additionally influenced through state subsidies, legislative requirements regarding emission reductions will help to increase the popularity of e-mobility going forward.

Alongside the battery-electric drive, regeneratively produced hydrogen is once again becoming increasingly popular as an energy carrier and is being supported by governments through funding programs. The focus here is on the use of hydrogen in fuel cell systems for commercial vehicles to achieve the ranges possible with fossil fuels.

To enhance the efficiency of the drive train, it is becoming increasingly electrified. Based on current market analyses, however, we expect the combustion engine to remain highly relevant in this decade.

In the central area of Research and Development in the Automotive sector, the primary focus in fiscal 2020 – in addition to the predevelopment of systems for alternative drive technologies – was on the technology fields of connectivity and advanced driver assistance systems (ADAS) as well as alternative mobility concepts, especially for alleviating traffic problems in urban centers. Specific development activities included driver monitoring systems, which, under European legislation, will be fitted as standard in passenger and commercial vehicles from 2024 onwards. The sensor technology used in these systems and downstream information processing allow Rheinmetall Automotive to draw upon the capability potential of specific Defence divisions and leverage synergies.

Research and development € million

	2020	2019
Rheinmetall Automotive	**192**	**210**
Mechatronics	153	176
Hardparts	33	34
Aftermarket	6	–
Others/consolidation	–	–

Rheinmetall Automotive reduced spending on research and development activities in fiscal 2020. After deduction of research and development revenue of €21 million (previous year: €29 million), self-financed expenses came to €171 million, of which €9 million related to research projects in the field of e-mobility (previous year: €4 million).

Economic report
Business performance of Rheinmetall Automotive

The R&D ratio as a ratio of expenses to sales increased sharply by 1.2 percentage points to 8.9% (previous year: 7.7%). As of December 31, 2020, a total of 1,268 employees were employed in the research and development departments of the Automotive companies (previous year: 1,275). This means that around one in nine employees was entrusted with research and development tasks.

Employees in research and development FTE

	2020	2019
Rheinmetall Automotive	**1,268**	**1,275**
Mechatronics	988	988
Hardparts	245	268
Aftermarket	27	12
Others/consolidation	8	7

Mechatronics division

Key figures

		2020	2019
Sales	€ million	1,202	1,525
Operating result	€ million	36	118
Operating margin	in %	3.0	7.7
Capital expenditure	€ million	54	92
Employees (Dec. 31)	FTE	4,563	4,723

Sales – Against a background of a decline in global automotive production, sales in the Mechatronics division also fell significantly in fiscal 2020 in all relevant sales markets. Compared with the previous year, the division’s total sales fell by 21% – or €323 million – to €1,202 million. After adjustment for currency effects, the decline equates to 20%.

Regionally, the division’s sales generally performed in line with the relevant market trend, with the decline in sales in the Mechatronics division in Europe considerably sharper than in Asia. In the North and South America regions, however, the division performed better than the market due, among other things, to larger-scale launches of new electric vapor pumps and solenoid valves in the US.

Sales performance in the division’s individual product areas is strongly influenced by the chronological sequence of product ramp-ups and discontinuations. The newly introduced product applications in the Automotive Emission Systems area to meet the Indian Bharat Stage VI emission standard had a positive impact on sales, prompting the Mechatronics division to perform significantly better there than local automotive production. In the Commercial Diesel Systems product area, however, the discontinuation of a cooling module for a European customer had a negative impact. New projects for divert-air valves and water and oil valves allowed the Solenoid Valves product area to soften the decline in sales.

Operating result – The operating result in the Mechatronics division amounted to €36 million in fiscal 2020. This equates to a decline of 69% – or €81 million – compared with the previous year. The division’s operating margin decreased by 4.7 percentage points to 3.0% in 2020. There were cuts among temporary personnel working in production, development and administration as well as among permanent staff. The instrument of reduced working hours was also used. A strict cost management policy helped to significantly lower overheads. This encompassed all areas on which influence can be exerted, including travel expenses, maintenance costs, consultancy fees and IT costs. Services by third-party companies were avoided or reduced as much as possible.

Capital expenditure – Companies in the Mechatronics division invested a total of €54 million in 2020, which was €38 million or 41% less than in the previous year. Customer projects and related investment were also postponed as a result of the coronavirus crisis. Cost cuts in development also led to a reduction in capital expenditure relating to capitalized development costs.

To strengthen the company's competitive position in China, an investment was made in the in-house production of electromagnetic driving coils for valves at the Kunshan location. Following the successful launch of the electric vapor pump at the Fountain Inn location in the US in 2019 and for the Chinese joint venture Pierburg Huayu Pump Technology in Shanghai, investments were made in 2020 to significantly expand capacity for this product. In India, the company invested in equipment for customer projects relating to the stricter Bharat Stage VI emission standard that will apply country-wide from 2020 onwards. In addition, Mechatronics has acquired several projects for coolant valves over the last few years and, in 2020, invested in new production lines for these new projects at various locations.

Employees – At the end of 2020, the division employed a total of 4,563 people, 160 less than at the end of the previous year. At nearly all the companies, the workforce was reduced over the course of 2020 in response to the weak market development. The European locations were particularly affected by this. The primary means of doing this included not extending temporary contracts and not filling newly vacant positions.

Research and development – In the year under review, development activities in the Mechatronics division focused on application projects, series production of existing products and the development of existing and new product families. Collaboration with the Defence division Vehicle Systems in the field of electric and hybrid drives was stepped up and development work began on a drive containing power electronics.

In the field of alternative drive systems, the Mechatronics division also focused on thermal management and fuel cell systems. The division is taking thermal management technologies from the existing portfolio. Mechatronics has had a strong market position for many years in the field of electric coolant pumps, which extends to all performance classes and now also to all standard voltage levels. To round off the portfolio, in 2020 two new valve types were developed and corresponding orders received.

In the category of valves that hold the valve position without consuming power, Mechatronics developed a proportional rotary valve. The drive unit – a Wolfrom gear drive with an electric motor – is integrated in the valve body in a highly compact, space-saving design. The unique design of the valve body ensures minimal leakage and significantly reduced flow resistance.

In the category of solenoid-driven valves that cannot be controlled without power, the Mechatronics division is benefiting from its established strong technological and market position for various solenoid valve types, enabling it to develop and validate a portfolio of water valves in a short space of time. The first customer projects for controlled solenoid valves are expected in 2021.

Economic report
Business performance of Rheinmetall Automotive

Not only are the regulatory requirements surrounding more ecofriendly mobility strengthening the trend toward electromobility, but they are also reflected in progressively stricter emission standards for conventional drives (e.g. Euro 7). The main focus here is on exhaust gas aftertreatment, specifically active temperature management for exhaust gas aftertreatment systems. Hybrid drive systems are especially challenging here because intermittent electric driving causes the exhaust gas aftertreatment system to "cool down," increasing the demand on thermal management. Three solutions are being pursued technology-wise: electrical heating of the catalytic converters, introduction of a (fuel-based) fan-powered burner and controlled secondary air injection during engine operation involving high fuel enrichment. The Mechatronics division is traditionally strong in the secondary air injection product segment. Meeting the new requirements will require development of fans with an extended product life and improved controllability. Early customer inquiries for new products have already been received. The Mechatronics division therefore expects to maintain and expand its strong market position in this segment heading into the future.

In the past, too, Mechatronics has proved successful with the evolutionary development of everything from products and know-how to technologically innovative applications. In keeping with this approach, the company continued to develop its solenoid expertise in solenoid-driven contactors for circuits in the area of e-mobility. For the first generation of these contactors, the Mechatronics division is currently in the contract awarding phase with a number of major European carmakers.

Hardparts division

Key figures

		2020	2019
Sales	€ million	688	937
Operating result	€ million	(13)	28
Operating margin	in %	(1.9)	3.0
Capital expenditure	€ million	33	41
Employees (Dec. 31)	FTE	5,096	5,664

Sales – In 2020, sales in the Hardparts division fell by 27% or €249 million to €688 million. Adjusted for currency effects, the reduction in sales amounts to 24%. All the consolidated business units in the division were affected by the decline in sales as a result of the impact of the coronavirus crisis on the relevant markets.

While the Bearings business unit reported a sales decline of just 12%, the sales of the other business units were much significantly lower than the previous year's figures. The Small Bore Pistons business unit saw sales fall by 31%, which was due primarily to the decline in business with customers in Europe, North America and Brazil. The Large Bore Pistons business unit saw sales fall by 36% compared with the previous year. The weakness in the global large-bore piston market that first emerged in the fourth quarter of 2019 was exacerbated in 2020 by the coronavirus crisis.

Operating result – The Hardparts division achieved an operating result of €-13 million in fiscal 2020, down €41 million on the previous year. The division's operating margin reduced year-on-year by 4.9 percentage points to -1.9%.

The market- and coronavirus-related declines in earnings suffered by the joint ventures in Asia and Europe are included in the divisional result on a pro rata basis in accordance with the equity method. This relates to the entire Castings business unit and the joint ventures of the Small Bore Pistons business unit. At a total of €15 million, at-equity earnings were down €11 million on the previous year's figure. Comparatively low sales losses enabled the Bearings business unit to generate a small, positive operating result, while the other business units slipped into the red due to the substantial decline in sales and associated profit contribution loss.

All business units have responded to limiting the negative impact on earnings due to the coronavirus crisis by adopting a strict cost management policy, including not only personnel adjustments but also reduced working hours, temporary plant closures and reductions in working time. The divisional result also includes upfront expenses for the development of new product areas, which are intended to reduce dependence on passenger car combustion engines. This was offset by a positive impact on earnings due to the reduced amortization and depreciation resulting from the asset impairment recognized in the half-year financial statements for 2020.

Capital expenditure – Capital expenditure in the Hardparts division in 2020 fell by 19% year-on-year to €33 million; this was largely attributable to lower investment in the Small Bore Pistons and Bearings business units. Investments were made primarily in production facilities for new steel pistons at the plant in Mexico and in modernization of the machinery at the small-bore pistons plant in the Czech Republic.

Employees – At the end of 2020, the division employed a total of 5,096 people, 568 less than at the end of the previous year. The biggest decrease was suffered by the Small Bore Pistons business unit, particularly the companies in Brazil and the Czech Republic. The number of employees in the Bearings business unit – and especially in Germany – as of the end of 2020 was lower than at the end of the previous year.

Research and development – The development activities of the Hardparts division encompassed the (further) development of components and systems for automotive and non-automotive applications.

Within the context of stricter CO_2 legislation, in the established product segments and markets the company not only pressed ahead with optimizing the product portfolio but also initiated or continued new developments, for example in relation to the use of hydrogen as a fuel for piston stroke engines or the development of plain bearings for wind turbines. In addition, projects were initiated with the aim of opening up new product fields and markets and expanding the product portfolio outside the combustion engine into areas such as carbon- and glass-fiber-reinforced plastic components and housing for the 5G mobile communications network.

Within the scope of transformation and diversification, the Hardparts division is making use of innovative product technology and industrialization concepts in the fields of not only mobility but also energy and heat management. The partnership with two startups specializing in spring systems made from compound materials and containing carbon-fiber structural elements is currently developing innovative products for extremely lightweight chassis with high-grade functional integration. At the same time, new energy and heat management products for the electrification of industrial applications to enhance the efficiency and effectiveness of electric-battery-powered vehicles are being brought to series maturity. This is taking place in close collaboration with reputable OEMs and new market operators, resulting in the first prototypes already being tested and validated.

Economic report
Business performance of Rheinmetall Automotive

The Small Bore Pistons and Large Bore Pistons business units developed a range of new technologies with improved products to respond to ever-increasing requirements to lower fuel consumption, reduce emissions and noise and increase service life. To meet demand for efficient, high-performance and, above all, low-emissions passenger car combustion engines in the future too, the Small Bore Pistons business unit successfully continued the industrialization of its latest piston generation featuring LiteKS technology. The use of coolant passage and ring carrier technology for small, highly stressed pistons for gasoline engines is also being implemented and optimized across the board.

In the commercial vehicle segment, the Hardparts division developed the latest piston generations (CrownteKS and WeldteKS technology for heavy-duty engines and LiteKS-D technology for medium-duty engines) to contribute to the fulfillment of the strict regulatory requirements in major markets such as China and India. In parallel, work began on the advance development of the next product generation designed to meet the future EU7/GHG standards in Europe and the US. When developing state-of-the-art piston systems, the business unit is focusing not only on characteristic friction reduction of the pistons, running surfaces and piston rings, but also targeted use of materials on the piston head to improve combustion performance. Innovative design solutions also additionally enhance engine efficiency thanks to reduced cooling requirements.

In 2020, the Large Bore Pistons business unit supplied and tested piston test parts for dual-fuel engines with a focus on hydrogen applications. The products sold by the Large Bore Pistons business unit are versatile and flexible and are – for example when it comes to reserve energy for renewables or data centers – an essential backbone of the bridge technology for the planned energy transformation.

In 2020, the research and development activities of the Plain Bearings business unit focused on expanding the product portfolio for automotive applications in the vehicle interior, exterior and chassis and for commercial vehicle braking systems. A number of development investments were made for a range of industrial applications to successively expand capacity in machining production. The focus for continuous casting products was on developing and industrializing lead-free continuous casting alloys for the sanitary and mechanical engineering industries.

KS HUAYU AluTech further expanded its expertise in series use for complex casting applications. A premium German automotive manufacturer acquired a new e-mobility project involving the use of a special casting method to meet the high, component-specific requirements of the electric motor housing. Development is taking place here in close international cooperation with the automotive manufacturer and its production partners. The development work is taking place at KS HUAYU AluTech in Germany, with series production based exclusively in China.

KS HUAYU AluTech will be taking on the production of aluminum engine blocks using low-pressure sand casting for a high-performance engine application on behalf of a premium German automotive manufacturer. The new engine program will go into series production in 2024. The casting, finishing and coating of the block running surfaces will all take place under one roof in a central location. The aluminum engine blocks are being delivered pre-assembled to the automotive manufacturer; they meet the most stringent mechanical requirements for the component and the block running surfaces.

In the category of non-automotive applications, in the year under review KS HUAYU AluTech identified additional business potential in connection with the expansion of the 5G infrastructure. Energies were focused here on application development for components with high thermal conductivity requirements and their specially adapted design involving aluminum alloys and casting. This development will also open up promising new business areas for KS HUAYU AluTech, for example in the area of new energies for inverter housing in the operation of residential and industrial PV systems.

Aftermarket division

Key figures

		2020	2019
Sales	€ million	345	361
Operating result	€ million	20	35
Operating margin	in %	5.8	9.8
Capital expenditure	€ million	7	7
Employees (Dec. 31)	FTE	819	833

Sales – In 2020, sales in the Aftermarket division declined by 4.4% or €16 million year-on-year to €345 million. Adjusted for currency effects, the reduction in sales amounted to 1.0%. Both the Independent Aftermarket (IAM) and Original Equipment Supplier (OES)/Original Equipment (OE) segments failed to achieve the previous year's sales level due to pandemic-induced market weakness. The reduction in sales in the IAM business was minimized thanks to good parts availability, the cultivation of customer contact during the crisis and the inclusion of new products in the service range. Sales losses in OES/OE were primarily attributable to temporary automotive plant closures and the scheduled discontinuation of products.

Operating result – The division achieved an operating result of €20 million in fiscal 2020, which was down €15 million or 43% on the previous year's result. In the year under review, the division's operating margin fell to 5.8% after 9.8% in 2019. The decline in earnings was also the result of sales-related profit contribution losses and the first-time allocation of micro mobility activities to the Aftermarket division.

Capital expenditure – At €7 million in 2020, capital expenditure in the Aftermarket division was on a par with the previous year. Investments were made primarily in the procurement of equipment and tools for strategic projects, predominantly to expand micro mobility activities. Logistical capacity was also extended in China. On top of this were also rental and lease agreements to be recognized under IFRS 16.

Employees – As of December 31, 2020, the Aftermarket division employed 819 people worldwide. This equated to a slight decrease of 14 (FTE) compared with the end of the previous year. Not including the addition of employees from the micro mobility segment, the number of employees decreased by 57 to 776. The company in China in particular had a bigger workforce than in the previous year due to the expansion of logistical capacity. Reduced capacity in the production plants was countered by capacity adjustments at the plant in the Czech Republic as well as reduced working hours and early retirement schemes in Italy.

Economic report
Business performance of Rheinmetall Automotive

Joint ventures with Chinese partners

Sales – Political leaders in China responded to the outbreak and rapid spread of coronavirus with a variety of measures. The imposition of a harsh lockdown lasting several weeks was one particularly extensive measure that had significant negative repercussions for the economy. This brought demand for and production of passenger cars and light-duty commercial vehicles almost to a complete standstill. The lifting of the lockdown quickly led to a turnaround in domestic demand, which was reflected in the rapid rise in local vehicle production figures. Despite this, China, too, saw a decline in production figures for passenger cars and light-duty commercial vehicles in 2020. According to an IHS Markit publication in February 2021, 4.2% fewer vehicles left the assembly line in China than in the previous year. The sales of the four joint ventures that Rheinmetall Automotive operates with Chinese partners fell by 8.3% or €84 million year-on-year to €926 million in fiscal 2020. Adjusted for currency effects, the reduction in sales amounted to 6.4%.

Kolbenschmidt Huayu Pistons Co., Ltd., which specializes in the production of small-bore pistons, also failed to match the previous year's sales level, as too did HASCO KSPG (Shanghai) Nonferrous Components Co., Ltd., which produces not only engine blocks and cylinder heads but also structural parts and components for electromobility. The production of cast aluminum components for expansion of the 5G mobile communications network in China, which HASCO KSPG started last year, was not expanded to the planned extent. Measured in the local currency, the sales of Pierburg Huayu Pump Technology Co., Ltd. were only slightly lower than in the previous year. A mutual agreement was reached between Pierburg Yinlun Emission Technology (Shanghai) Co., Ltd. and its joint venture partner to end their partnership, which meant that no more sales were generated in fiscal 2020.

The German joint venture KS HUAYU AluTech Group generated sales of €203 million in the year under review, after €256 million in the previous year (-21%). In addition to the pandemic-induced weakness in the European market, the decline in project business from the sale of tools to customers had an especially strong impact on the company's sales performance.

Key figures € million

	Joint Ventures in China		KS HUAYU AluTech Group Germany	
100%-Basis	**2020**	**2019**	**2020**	**2019**
Sales	926	1,010	203	256
EBIT	64	72	(7)	0
EBIT-Margin (in % of sales)	6.9	7.2	(3.5)	0.1
Net income	42	51	(9)	(2)
Net income (in % of sales)	4.5	5.0	(4.2)	(0.7)

Earnings after taxes – The four joint ventures in China generated total earnings after taxes of €42 million, which was down 18% or €9 million on the previous year. HASCO KSPG (Shanghai) Nonferrous Components Co., Ltd. and Pierburg Huayu Pump Technology Co., Ltd. suffered a sales-related decline in earnings, while Kolbenschmidt Huayu Pistons Co., Ltd. saw slight earnings growth thanks to lower quality costs and impairment losses. Pierburg Yinlun Emission Technology (Shanghai) Co., Ltd. broke even with its earnings after taxes, after a small loss in the previous year. The KS HUAYU AluTech Group generated earnings after taxes in fiscal 2020 of €-9 million after earnings after taxes of €-2 million in the previous year.

RHEINMETALL DEFENCE

KEY FACTS

3,723 SALES € MIL
414 OPERATING RESULT € MIL
201 CAPITAL EXPENDITURE € MIL
13,364 EMPLOYEES
12.9 ORDER BACKLOG € BIL
4.8 R&D INTENSITY %

Economic report
Business performance of Rheinmetall Defence

Rheinmetall Defence increases sales to €3,723 million

In fiscal 2020, the Defence sector generated sales of €3,723 million, exceeding the previous year's figure by €201 million or 5.7%. Taking into account exchange rate changes and M&A activities, organic growth was 5.1%. The increase in sales was achieved through, among other factors, the higher supply volumes of Boxer vehicles to the Australian armed forces (Land 400 Phase 2 project) and the shipment of unarmored transport vehicles to the German armed forces. The Vehicle Systems division increased its sales by 2.0% to €1,823 million in fiscal 2020. In the Weapon and Ammunition division, growth in export business and the supply of medical protective equipment led to a sales increase of around 17% to €1,196 million. The Electronic Solutions division, on the other hand, suffered a slight dip in sales of 1.7% to €931 million. In addition to the German market with 44% of total sales (previous year: 41%), other high-sales regions in fiscal 2020 mainly included Europe (excluding Germany) with 20.1% (previous year: 19.7%). Countries in the Middle East and Asia accounted for 16.3% of annual sales (previous year: 16.9%), Australia/Oceania for 10.9% (previous year: 13.0%) and North America for 3.8% (previous year: 2.6%). The share of sales attributed to other regions was 5.0% (previous year: 7.2%).

Sales € million

	2020	2019
Rheinmetall Defence	**3,723**	**3,522**
Vehicle Systems	1,823	1,787
Weapon and Ammunition	1,196	1,018
Electronic Solutions	931	948
Others/consolidation	(227)	(231)

Order intake exceeds €6 billion for the first time ever

Rheinmetall Defence acquired orders of €6,387 million in the period under review, after €5,186 million in the previous year. This represents an increase of €1,201 million, or 23%. The rise in the order intake was largely influenced by the acquisition of the order to supply 209 units of the newly developed Lynx infantry fighting vehicle to Hungary. The division also acquired further orders for military logistics vehicles for the German armed forces with a value of €865 million. This included swap body systems with a volume of €293 million and unarmored military transport vehicles with a total value of €456 million. The order for a radar system for the Hungarian armed forces in the Weapon and Ammunition division also contributed to the order intake. The Electronic Solutions division received the first order of a Skynex air defence system for an international customer. The book-to-bill ratio in the Defence sector was 1.7 in 2020 (previous year: 1.5). The individual divisions of the Defence sector demonstrated their future growth potential with a respective book-to-bill ratio of over 1.

Order intake € million

	2020	2019
Rheinmetall Defence	**6,387**	**5,186**
Vehicle Systems	4,389	3,326
Weapon and Ammunition	1,757	1,204
Electronic Solutions	1,065	1,001
Others/consolidation	(823)	(344)

Order backlog reaches almost €13 billion

The order backlog as of December 31, 2020 was €12.9 billion. Compared with the previous year's figure of €10.4 billion, this represents an increase of €2.5 billion (or 24%). The largest single orders in the order backlog are the major Lynx infantry fighting vehicle project for Hungary and the Boxer order for Australia acquired in 2018. Other key orders in the order backlog include the Mechanized Infantry Vehicles (MIV) modernization program for the British customer and contracts for military logistics vehicles with the German customer.

Order backlog € million

	2020	2019
Rheinmetall Defence	**12,942**	**10,399**
Vehicle Systems	9,290	6,722
Weapon and Ammunition	2,736	2,308
Electronic Solutions	2,298	2,188
Others/consolidation	(1,382)	(819)

Operating result and margin increase again

The operating result (EBIT before special items) amounted to €414 million in fiscal 2020, after the previous year's figure of €343 million. This represents an increase of 21%. The operating margin rose by 1.4 percentage points from 9.8% in the previous year to 11.1% in the period under review.

Operating result € million

	2020	2019
Rheinmetall Defence	**414**	**343**
Vehicle Systems	150	150
Weapon and Ammunition	185	123
Electronic Solutions	93	75
Others/consolidation	(14)	(6)

The significant improvement in the result was achieved thanks to the positive performance of the Weapon and Ammunition (+50%) and Electronic Solutions (+23%) divisions, which can be attributed primarily to sales growth and associated economies of scale as well as increased cost optimization measures. At €150 million in fiscal 2020, the operating result of the Vehicle Systems division was at the same high level as in the previous year.

The year 2020 was adversely affected by special items totaling €7 million as a result of restructuring measures in the Weapon and Ammunition division. In the Electronic Solutions division, the conclusion of an ongoing procedure resulting from the transfer of Rheinmetall Airborne Systems to Airbus in 2012 generated income of €10 million. This brought the Defence sector's EBIT to €417 million in the period under review.

Investments totaling €201 million

In 2020, Rheinmetall Defence invested a total of €201 million (previous year: €166 million) in property, plant and equipment, intangible assets and right-of-use assets from leases in accordance with IFRS 16. The investment ratio as a ratio of capital expenditure to sales was 5.4%, which is 0.7 percentage points higher than the previous year's figure of 4.7%.

Economic report
Business performance of Rheinmetall Defence

A total of €38 million of the capital expenditure volume related to capitalized development costs from important technology projects (previous year: €23 million) and €65 million to right-of-use assets in accordance with IFRS 16 (previous year: €54 million). Investments in property, plant and equipment amounting to €99 million (previous year: €89 million) focused primarily on the establishment and expansion of production capacities and the modernization of production facilities.

Capital expenditure € million

	2020	2019
Rheinmetall Defence	**201**	**166**
Vehicle Systems	124	90
Weapon and Ammunition	53	59
Electronic Solutions	23	16
Others/consolidation	1	1

Employees

The Defence sector employed a total of 12,344 people (FTE) as of December 31, 2020. The comparable figure for the previous year was 12,100 people. The increase in the headcount by 244 employees is mainly attributable to the recruitment of new staff to process major orders for Germany, Great Britain, Australia and Hungary in the Vehicle Systems division. While the Vehicle Systems division saw its workforce increase by 10% compared with the previous year, the number of employees in the Electronic Solutions and Weapon and Ammunition divisions decreased by 1.0% and 2.6% respectively, which means that employee capacities at Rheinmetall Defence as a whole have increased by just 2.0%.

Employees

	2020	2019
Rheinmetall Defence	**12,344**	**12,100**
Vehicle Systems	4,510	4,091
Weapon and Ammunition	4,767	4,893
Electronic Solutions	2,984	3,013
Others/consolidation	83	104

FTE

Research and development

Rheinmetall Defence specializes in the development and production of components and systems for protecting people, vehicles, aircraft, ships and assets and, in its role as an equipment supplier, helps to protect armed forces involved in military operations. The Defence sector is continuously setting new technological standards: from vehicle, protection and weapon systems, through infantry equipment and air defence, to the networking of function sequences and in the areas of simulation and training. It systematically gears its 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 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 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.

Research and development € million

	2020	2019
Rheinmetall Defence	**180**	**145**
Vehicle Systems	62	35
Weapon and Ammunition	81	82
Electronic Solutions	37	28

In fiscal 2020, Rheinmetall Defence invested €180 million (previous year: €145 million) in research and development projects. The research and development ratio as the ratio of expenses to sales rose by 0.7 percentage points to 4.8% (previous year: 4.1%). Of the development expenses, €53 million (previous year: €47 million) was passed on to customers.

As of December 31, 2020, a total of 2,992 people were employed in the research and development departments of the Defence companies (FTE); this was 164 – or almost 6% – more employees than at the end of the previous year (previous year: 2,828).

Employees in research and development

	2020	2019
Rheinmetall Defence	**2,992**	**2,828**
Vehicle Systems	1,100	982
Weapon and Ammunition	656	678
Electronic Solutions	1,236	1,168

Headcount

Vehicle Systems division

Key figures

		2020	2019
Sales	€ million	1,823	1,787
Order intake	€ million	4,389	3,326
Order backlog (Dec. 31)	€ million	9,290	6,722
Operating result	€ million	150	150
Operating margin	in %	8.2	8.4
Capital expenditure	€ million	124	90
Employees (Dec. 31)	FTE	4,510	4,091

Sales – In fiscal 2020, the Vehicle Systems division generated sales of €1,823 million, slightly exceeding the previous year's figure of €1,787 million. The sales volume achieved can be largely attributed to the continued ramp-up of major orders to supply 211 state-of-the-art all-wheel Boxer vehicles to the Australian customer (Land 400 Phase 2 program) and to the shipment of military trucks to the German armed forces. In this program with the German customer, around 1,000 vehicles were handed over on schedule in 2020. In addition, 19 Puma infantry fighting vehicles were delivered to the German armed forces. This also includes the first vehicle assigned to the order received in 2019 to increase combat capability within the context of the NATO spearhead function of the German armed forces (Very High Joint Readiness Task Force). Significant sales were also generated through the delivery of logistical vehicles to the Australian customer based on the contract concluded back in 2013. In addition to the major projects in Germany and Australia, a further sales focus was the delivery of supply kits for manufacturing Fuchs wheeled armored vehicles to an international customer.

Economic report
Business performance of Rheinmetall Defence

Order intake – The order intake for the Vehicle Systems division in the year under review was €4,389 million, after €3,326 million in the previous year. In the year under review, Hungary was the first NATO and EU member state to place an order for the newly developed Lynx infantry fighting vehicle. The order worth around €3,000 million includes the delivery of 209 Lynx infantry fighting vehicles and support vehicles. Furthermore, a major order for military logistics vehicles for the German armed forces was signed, which specifies the delivery of up to 4,000 trucks equipped with a swap-body truck system over a period from 2021 through 2027. The German customer also placed an order for another batch to supply 1,400 unarmored transport vehicles.

Operating result – In 2020, the Vehicle Systems division achieved an operating result of €150 million, the same level as the previous year. The operating margin was 8.2%, which was slightly lower than the previous year's figure of 8.4% due to product mix effects.

Capital expenditure – The Vehicle Systems division invested a total of €124 million in 2020, compared with €90 million in the previous year. Investments were made in systems and facilities at German and international locations to expand existing capacities and cope with the sharply increased order backlog. In addition, the focus in the area of tactical and logistical vehicles was on development activities aimed at expanding the product portfolio. In addition to the rental agreement for the Military Vehicle Center of Excellence opened in Queensland, Australia, further rental and lease agreements at different locations in Germany and abroad were capitalized in accordance with IFRS 16.

Employees – The Vehicle Systems division employed 4,510 people as of the end of the fiscal year (previous year: 4,091). This increase 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.

Research and development – A key focus of current development work in the Vehicle Systems division is the digitalization of land forces and development of future combat vehicles. The exploration of vehicle-to-vehicle communication, the associated platform connectivity and the processing and analysis of sensor data and data distribution among individual vehicles all constitute a major challenge. The aim of these tests and experiments is to ascertain whether the applicable infrastructure used to record data, share data and distribute information and tasks is suitable and fit for the future. A further aim is to identify development potential for distributed architectures within a vehicle and beyond vehicle constraints. Digitalization goes hand in hand with an anticipated reduction in vehicle manpower right down to just two men per vehicle, the simultaneous automation of individual processes and the development of fully automated vehicles.

Considering these points in particular, ergonomic crew compartment design including ergonomic workstations is essential. Multi-mission, multi-function, multi-role workstation modules (BAM) are being developed within the context of a NATO generic vehicle architecture, which allows all in-vehicle information to be displayed across all workstations. These modules display the information required for the specific operator's role in a time-critical manner, including only the essentials, on high-resolution and intelligent monitors. Augmented reality methods are also used here.

Augmented reality is the computer-assisted enhancement of the perception of reality. In essence, this kind of information can include all the human senses. But it is often understood to mean merely the visual representation of information, i.e. the augmentation of camera images with computer-generated additional information – such as the insertion of target distances or classified assets.

In the field of vehicle automation, work is currently underway on improving teleoperation through the use of broadband communication capability and on the automated use of logistical vehicles. In the medium term, these vehicles will also have a function for "unmanned platform convoys," which will ultimately help to protect soldiers.

The Vehicle Systems division is also active in defining new system, vehicle and assembly concepts. State-of-the-art drive concepts, future-proof electronic architectures, enhancement of vehicle protection and achievement of weight reduction through the use of new materials and cutting-edge production techniques are just some of the cross-functional activities that are being pursued, some of which involve collaboration with universities.

Weapon and Ammunition division

Key figures

		2020	2019
Sales	€ million	1,196	1,018
Order intake	€ million	1,757	1,204
Order backlog (Dec. 31)	€ million	2,736	2,308
Operating result	€ million	185	123
Operating margin	in %	15.5	12.1
Capital expenditure	€ million	53	59
Employees (Dec. 31)	FTE	4,767	4,893

Sales – The Weapon and Ammunition division generated sales of €1,196 million in the year under review. Measured against the previous year, this represents an increase in sales of €177 million or 17%. This positive performance overall was boosted by growth in export business and by supplies of medical protective equipment as part of the coronavirus pandemic effort. The sales of Rheinmetall Denel Munition, South Africa, recovered again significantly in fiscal 2020, after a tragic accident meant that production restrictions were imposed for several months in 2018. American Rheinmetall Munition, US, also significantly increased its sales from €13 million in 2019 to €32 million in the year under review.

Order intake – At €1,757 million, order intake in the Weapon and Ammunition division was up €553 million on the previous year's figure of €1,204 million. The division's single biggest order was the radar system for the Hungarian armed forces with a total value of €276 million, which is being delivered by the Canadian subsidiary. The increase in order intake was boosted by orders for medical protective equipment worth €53 million and an intra-Group supply order with a value of €218 million for protection systems in connection with a vehicle program from the Vehicle Systems division. Large-scale single orders from Germany were also received for artillery ammunition.

Economic report
Business performance of Rheinmetall Defence

Operating result – The operating result in the Weapon and Ammunition division increased by €61 million to €185 million during the fiscal year (previous year: €123 million). The margin improved thanks to increased cost optimization measures and the higher volume of sales, increasing from 12.1% in the previous year to 15.5% in the year under review.

Capital expenditure – A total of €53 million was invested in the Weapon and Ammunition division in fiscal 2020 (previous year: €58 million). In Italy, the construction of a standalone filling system for polymer-bonded explosives (PBX) and the expansion of mixing and filling capacity, which began in 2016, were continued. Both projects are scheduled for completion in 2021. In Maryborough, Australia, work was continued on the construction of an artillery shell production facility following the purchase of a plot of land in 2019. The South African locations pressed ahead with the expansion and rationalization program spanning several years, with investments in production and infrastructure facilities.

Employees – The Weapon and Ammunition division employed a total of 4,767 people as of the end of the fiscal year. This equates to 126 fewer employees than at the end of the previous year. The main reason for this reduction in the number of staff is the loss of 150 employees in the headcount of the South African subsidiary Rheinmetall Denel Munition as a result of the required restructuring. By contrast, the Australian and Canadian subsidiaries both continued their recruitment drives.

Research and development – In fiscal 2020, research and development within the Weapon and Ammunition division focused on the particular challenges of defending nations and alliances. The division is seeking to find responses to new threats in the protection department and to leverage general technical advancement for future effectors on the effectiveness front. The spectrum of projects in this context ranges from electronic measures against modern target detection systems, through active defence against large-caliber kinetic energy penetrators and development of a strongly performance-enhanced main armament for battle tanks, to a future laser weapons system. The overriding goal is to ensure the survivability and one-on-one effectiveness of cutting-edge and future main weapons systems. To support these main weapons systems, Rheinmetall is developing unmanned, autonomous and highly mobile platforms, which allow for deployments in extreme conditions without endangering own forces.

The latest generation of anti-ship missiles, for example, can no longer be deceived or distracted using conventional means such as hazy decoy smoke screens. For this reason, Rheinmetall has developed a more effective means of combating them. First, the signature of the high-value target to be protected is emulated through coordinated use of highly structured aircraft decoys and decoy smoke screens. Once the warhead has switched onto the decoy signature, it is 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.

Over recent years, the threat posed by anti-tank weapons, air-to-air missiles and kinetic energy penetrators has continued to grow. Conventional technologies are increasingly unsuitable to defend against modern threats due to weight limits.

In the fiscal year, Rheinmetall achieved two significant results in its mission to develop a high-performance active protection system against these modern threats: First, preparation work began on the series production launch of the combat vehicle hybrid protection technology that was unveiled in 2019; second, its effectiveness was proven against 125 mm KE penetrators.

In a one-on-one situation against a better-protected opponent over a long distance, having an impact with superior firepower has once again become an essential capability. In the medium term, Rheinmetall offers this capability with its performance-enhanced 120 mm L55A1 weapons system and the next generation of kinetic energy ammunition. As a long-term solution, the Weapon and Ammunition division started work back in 2016 on developing a 130 mm weapons system with a view to significantly increasing the penetrating power of a future main tank armament. It was developed continuously using theoretical analyses, simulations, test firing devices and initial experimental shellings, culminating in the presentation of a 130 mm smooth-bore gun demonstrator at the US military trade show AUSA in 2019. Building on the progress made, in fiscal 2020, within the context of an international Rheinmetall collaborative project, the company developed a 130 mm weapons system equipped with the main components of weapons, ammunition and an auto loader. The aim is to develop a new future-proof main armament on all NATO battle tanks.

Rheinmetall has been working on the basics of laser weapon technology for a decade. The aim is to develop a silent, modular, scalable and high-precision effector system for relevant ranges. The core modules and all the relevant assemblies – including the laser source, beam guidance system, precision and rough tracking, and laser weapons stations – can be produced within the Rheinmetall Group. With respect to the laser source in particular, Rheinmetall's spectral coupling technology is the leading technology on the market right now with growth potential up to 100 kW and excellent beam quality. In the past fiscal year, Rheinmetall achieved major development advances in the spectral coupling of high-power fiber lasers. Developments made to the laser source resulted in an order for the production of a cross-functional 20 kW laser source demonstrator. This will initially be tested on the German navy's Sachsen frigate, before extensive testing takes place over the coming years under realistic conditions.

2020 was characterized by the continuation of intensive research and development activities to further increase the autonomous capabilities of highly mobile deployment platforms such as the Mission Master, an unmanned 8x8 multi-purpose vehicle that is currently being tested and validated by numerous armed forces. Research activities centered on the expansion of analysis algorithms for data fusion using artificial intelligence methods. Data captured from the surroundings using a number of sensors (e.g. LIDAR, IR, optical camera) is analyzed, correlated and then translated into intelligent control commands. The advancements achieved in the year under review are allowing the company to expand the autonomous capabilities of its A-UGV (autonomous unmanned ground vehicle), resulting in new deployment concepts such as platooning and operational capability even under extreme climatic and environmental conditions.

Economic report
Business performance of Rheinmetall Defence

Electronic Solutions division

Key figures

		2020	2019
Sales	€ million	931	948
Order intake	€ million	1,065	1,001
Order backlog (Dec. 31)	€ million	2,298	2,188
Operating result	€ million	93	75
Operating margin	in %	10.0	7.9
Capital expenditure	€ million	23	16
Employees (Dec. 31)	FTE	2,984	3,013

Sales – The Electronic Solutions division generated sales of €931 million in fiscal 2020. This equates to a slight decrease of €16 million – or 1.7% – compared with the previous year's figure. Sales in the period under review were largely influenced by the supply of 68 platoon systems for the Future Soldier System to the German armed forces and by sales as part of the German VJTF (Very High Readiness Joint Task Force) program. Further significant sales were generated through the supply and modernization of Skyguard air defence systems and the first order, which was awarded in 2020, of Skynex air defence systems for an international customer. Relevant sales also resulted from the Electronic Solutions division's involvement in the major Land 400 Phase 2 project for Australia.

Order intake – The Electronic Solutions division reported an order intake of €1,065 million in fiscal 2020, compared with €1,001 million in 2019. This represents an increase of 6.4%. The share of the major Hungarian order for the new Lynx infantry fighting vehicle attributable to the Electronic Solutions division was recognized in fiscal 2020. Another substantial order intake related to the first order for the Skynex air defence system, which is being delivered to an international customer.

Operating result – At €93 million, the operating result achieved by the Electronic Solutions division in fiscal 2020 was up €18 million on the previous year's figure of €75 million. This represents an increase of 23%. Despite the fall in sales, the operating margin improved thanks to the successful processing of major orders, the improved performance of the Norwegian subsidiary and increased further cost optimization measures, from 7.9% in the previous year to 10.0% in the year under review.

Capital expenditure – The total capital expenditure volume of the Electronic Solutions division amounted to €23 million in the period under review, after €16 million in the previous year. Additional office and laboratory space was created at the Bremen location to process major projects and IT equipment modernization was continued. A further focus was on the production of demonstration and reference devices, including for an unmanned multi-purpose vehicle. Major development expenditure at the Zurich location related to modernizing and expanding machinery for parts and electronics production and to modernizing laboratory facilities. A reference device for an air defence gun was also manufactured 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.

Employees – The Electronic Solutions division employed 2,984 people as of the end of the fiscal year (previous year: 3,013). This puts the total headcount slightly below the previous year's level. The necessary recruitment of personnel to process acquired major projects was offset by the transfer of personnel at one company to a new operator as part of a transfer of business.

Research and development – Artificial intelligence (AI) will play a bigger role, including in the military environment, going forward. Rheinmetall's technology roadmap states the importance of mastering key technological capabilities in artificial intelligence within the Group to ensure the development of high-performance systems, now and in the future. One focal point of research and development activities for the Electronic Solutions division is therefore the development of application-related AI algorithms so that it can establish itself as the leading supplier of this technology in the defence market.

AI is a key technology for a broad scope of applications. In addition to the use and integration of unmanned platforms and the self-organization of swarms of unmanned systems, the analysis of sensor and mass data, and decision-making aids to relieve users of responsibility, cognitive AI capabilities are one of the core components of the technology roadmap. One particular example is AI-based image processing and speech recognition, which constitutes a clear differentiating factor for Rheinmetall in the field of military drones and driving and walking robots.

A demonstrator for an AI-based autonomous platform is currently being developed in the Electronic Solutions division based on the "LASSy – Last mile Autonomous Soldier Supply" walking robot. The aim is for the system to be able to interact with humans using natural speech, navigate complex surroundings, and automatically recognize and classify objects in its direct surroundings. Realization of these characteristics was a major field of study this year. The project is laying solid groundwork for further work on creating and integrating robotic assistance and support platforms in Rheinmetall systems.

A lot of attention was devoted to AI technology in the Air Defence and Radar Systems (ADRS) business unit as well. For instance, an unmanned aerial vehicle platform was introduced as a technology carrier to develop AI-based functions aimed at further improving the performance of our air defence systems going forward. A 3D mission planning tool was used to plan and successfully demonstrate an automated reconnaissance mission, in which the drone used electro-optical sensors to detect, identify and independently track a threat.

Further research and development work in the past year focused entirely on civilian and military drone defence. For the civilian segment, an automated drone defence system was showcased at the Munich airfield. It is capable of detecting very small drones in the airspace and distinguishing them from birds with the help of AI. The modular system components can be integrated in stationary facilities and in vehicles for mobile use. Active and passive sensor information is being merged with the Skymaster command system, and the data compared with air situation information from cooperating drones. The Skyranger 30 mobile air defence system was introduced for the military segment. It combines active and passive sensors and various effectors within a single turret, which can be integrated in various vehicle platforms.

Economic report
Rheinmetall AG

Rheinmetall AG as the Group holding company

The single-entity financial statements of Rheinmetall AG for fiscal 2020 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 and central procurement – particularly for IT technology – as well as support and service functions for finances, HR, corporate communications, law and taxation.

Results of operations

Rheinmetall AG's results of operations reflect its function as a holding company. In addition to the results of subsidiaries, the financial result is determined by expenses and income in central Group financing. 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 € million

	2020	2019
Investment income	142	228
Net interest	21	8
Net financial income	**162**	**236**
Sales	80	74
Other operational income	191	100
Staff costs	47	41
Amortization of intangible and depreciation of tangible assets (incl. write-down)	5	4
Depreciation of financial assets	29	-
Other operating expenses	227	145
Extraordinary expenses	**126**	**220**
Earnings before taxes (EBT)	(36)	(30)
Net profit for the year	**90**	**190**
Appropriations to retained earnings	-	85
Net earnings	**90**	**105**

Net investment income of €142 million was generated in fiscal 2020 (previous year: €228 million). The decline in net investment income is as a result of various developments in the two corporate sectors. The Defence sector, for example, increased its contribution to net investment income from €151 million in the previous year to €190 million.

The coronavirus-related market slump in the automotive industry meant that the Automotive sector dragged Rheinmetall AG's net investment income down by €48 million, after having contributed €82 million in the previous year.

Thanks to the improved liquidity situation and the growth of the intra-Group cash pool, net interest income increased by €13 million, from €8 million to €21 million. Rheinmetall AG's financial result deteriorated from €236 million to €162 million as a result of the influences outlined.

Higher allocations saw sales increase from €74 million in fiscal 2019 to €80 million in the year under review. Due to business as a holding company, personnel costs amounted to €47 million (previous year: €41 million). The balance from other operating income and expenses fell from €-50 million to €-70 million. In the past fiscal year, this figure included write-ups on shares in affiliated companies of €14 million and write-downs on receivables from affiliated companies of €29 million.

Earnings before taxes amounted to €126 million (previous year: €220 million). Following deduction of €36 million in taxes (previous year: €30 million), net income of €90 million remained for fiscal 2020 (previous year: €190 million). As a result of the coronavirus-related impact on net investment income in the Automotive sector, net income did not reach the anticipated range of between €130 million and €150 million.

Proposed dividend

At the Annual General Meeting on May 11, 2021, the Executive Board and the Supervisory Board of Rheinmetall AG will propose that the net earnings be used to pay a dividend of €2.00 per share (previous year: €2.40 per share), whereby the treasury shares held by Rheinmetall AG (December 31, 2020: 361,392; previous year: 475,608) 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 – € million

Assets

	Dec. 31, 2020	Dec. 31, 2019
Fixed assets		
Intangible assets	8	10
Property, plant and equipment	35	36
Financial assets	1,496	1,482
	1,538	**1,527**
Current assets		
Inventories		
Receivables and other assets	1,139	1,094
Bonds	157	170
Cash in hand	618	649
	1,914	**1,914**
Deferred income	**11**	**11**
Active difference from asset offsetting	-	-
Total assets	**3,463**	**3,452**

Economic report
Rheinmetall AG

Financial assets include shares in affiliated companies in the amount of €1,488 million (previous year: €1,475 million). The increase is due mainly to the write-up of an investment. The share of total assets remains the same at 43%.

Receivables and other assets mainly comprise receivables from affiliated companies of €1,121 million (previous year: €1,066 million). These originate almost exclusively from intra-Group financing and central liquidity management. The share of these receivables in total assets amounts to 32% (previous year: 31%).

Securities used for liquidity management decreased by €13 million, from €170 million to €157 million. Cash and cash equivalents also went down by €31 million to €618 million.

Balance sheet of Rheinmetall AG in accordance with the German Commercial Code – € million

Equity and liabilities

	Dec. 31, 2020	Dec. 31, 2019
Share capital	112	112
Treasury stock (notional value relating to the share capital)	(1)	(1)
	111	110
Capital reserves	558	555
Retained earnings	248	243
Net earnings	90	105
Equity	**1,007**	**1,013**
Provisions	**97**	**94**
Liabilities		
Liabilities due to banks	654	653
Other liabilities	1,703	1,688
	2,356	**2,341**
Deferred income	**3**	**4**
Total liabilities	**3,463**	**3,452**

Equity amounted to €1,007 million as of December 31, 2020, after €1,013 million at the end of the previous year. Part of this change involved the fact that the dividend payment for 2019 of €104 million was offset by the net income generated for the year of €90 million. In addition, equity increased by €3 million as a result of the reduction in treasury shares (114,216). The equity ratio is still the same at 29%. For further information on treasury shares, see (17) in the notes to the consolidated financial statements and (8) in the notes to the single-entity financial statements of AG.

Provisions include pension provisions of €28 million (previous year: €36 million). Measured pension obligations of €113 million (previous year: €107 million) are covered by plan assets of €85 million (previous year: €71 million).

Other liabilities include liabilities to affiliated companies of €1,658 million (previous year: €1,671 million). As with the receivables, these originate almost exclusively from intra-Group financing and central liquidity management. The share of these liabilities in total assets is unchanged at 48%.

Economic report
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 measures 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 these internal financing resources 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 monthly 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.

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.

Another key principle of Rheinmetall's financial management is the company's financial independence from individual banks and financial services providers. To prevent cluster risks, Rheinmetall has therefore put in place a broadly diversified portfolio of financial partners for every service involved in processing operational business. In addition, the strict definition of creditworthiness-linked counterparty limits helps to mitigate the default risk.

There is also a strict policy in place to uphold the principle of dual control and to separate implementation, processing and checking in the front office, middle office and back office. On the one hand, this ensures compliance with legal guidelines and, on the other, that financial transactions are entered into with respect to the operating business only 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 secures its global financing requirements using a mix of existing internal liquidity sources across the Group and external, short- and long-term negotiated financial instruments. Here the aim is to broadly diversify the financing elements it uses in terms of sources, maturities and lenders and to optimize the interest rate. The top priority is to ensure, over the long term, that it has sufficient financial scope at all times so that it can continually meet its financing requirements on time, including in unexpected stress situations or stress periods.

Various promissory note loans with different investors and original maturities of five to ten years totaling €403 million and the development loan of €250 million taken out with the European Investment Bank (EIB) in 2016 are two of Rheinmetall's most important financing sources. While the EIB loan is due with a bullet repayment in August 2023, the maturities of the various promissory note loans range from 2021 to 2029, with a payment concentration of €136 million in 2024.

Economic report
Financing

Rheinmetall also has a syndicated credit facility maturing in September 2022 and an unlimited commercial paper program at its disposal, each amounting to €500 million. The two instruments had not been utilized by the end of 2020.

Within the scope of its asset-backed securities (ABS) program, which has been in place since 2004, Rheinmetall subsidiaries in both sectors sell trade receivables each month on a revolving basis. At the same time, sale without recourse passes any potential customer default risk to the acquirer. The volume allocated by the end of the fiscal year was €85 million and €73 million had been fully utilized.

Bilaterally committed cash and guarantee credit facilities from a range of national and international banks and insurance companies with a total volume of €3.1 billion provide Rheinmetall with even further flexibility in its financing. By the end of the year, €1.1 billion or 43% of the guarantee credit facilities and €61 million or 13% of the cash credit facilities had been drawn. Real estate and additional development loans financed through the EIB totaling €44 million are also available.

Financing instruments € million

	Term	Nominal	Financing source
Promissory note loans	2021–2029	403	International financial institutions
Development loans Research and development	2017–2023	250	European Investment Bank (EIB)
Commercial paper (CP)	Unlimited	500	Money market investors
Syndicated loan	9/25/2022	500	13 banks
Real-estate financing and development loans	2020–2026	44	banks
Bilateral credit facilities (cash and guarantee credit)	2021	3,102	Banks and insurance companies
Asset-backed securities program	2022	85	Money market investors and banks

Financing activities in 2020

Rheinmetall's excellent liquidity level meant that there were no strategic financial transactions in 2020. During the course of the year, ongoing business was financed through available cash and cash equivalents, the commercial paper program and/or the use of bilateral cash credit facilities. As of December 31, 2020, there are only bilateral liabilities to banks and real-estate and development loans totaling €105 million. Rheinmetall ensures security and flexibility regarding its liquidity sources for future years using a combination of existing strategic instruments consisting of promissory note, bank and development loans and by means of short-term financing options on the commercial paper market and through syndicated loans. The successive buildup of trust assets to serve obligations in Germany is used to finance the occupational pension scheme. In 2020, the contractual trust arrangement was allocated €42 million for the occupational pension scheme, insolvency protection for partial retirement obligations and balances from working time accounts. On December 31, 2020, trust assets amounted to €179 million.

Rheinmetall's rating

The rating agency Moody's has been assessing Rheinmetall's credit rating since 2000. In September 2020, Moody's confirmed the rating at "Baa3 stable outlook," which means that Rheinmetall's rating has not changed since April 2018 and remains investment grade. Key factors influencing the rating include the Group's concentration on two business sectors, which are subject to different economic cycles, the strong defence business and Rheinmetall's conservative financing policing including its excellent liquidity situation.

Risks and opportunities

Entrepreneurial behavior – leverage opportunities, reduce risks

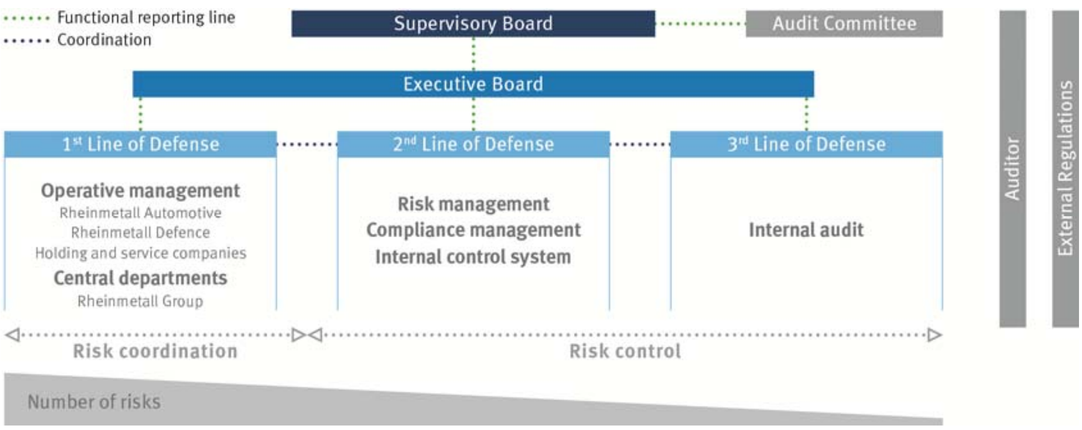
In light of rapid market changes, increasing uncertainty, the greater complexity of framework conditions that vary significantly from one country to the next and major technological progress, business decisions are increasingly dependent on the ability to reliably evaluate potential risks. As an internationally active technology group in the fields of defence and automotive and 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. It 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 not only the regulatory framework conditions including the 15 risk type categories, roles and responsibilities, but also the handling and documentation of identified risks and specific thresholds.

Risks and opportunities

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 by the Supervisory Board in accordance with section 107(3) of the German Stock Corporation Act, and takes into account the legal requirements regarding the monitoring duty of the Supervisory Board and 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 entailing a "high" minimum loss extent and "medium" probability of occurrence can 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 sectors prepare operational risk reports for Group Controlling every quarter, while the operational risk situation is reported every month within the sectors. Any relevant individual issues and important, higher-level incidents/issues must be discussed in the committee meetings at the level of the divisions, sectors 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, the previous year's risk inventory is revised 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 sectors and 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, an extensive peer group benchmark analysis was undertaken in the year under review. After the results had been analyzed, in consultation with the Audit Committee of the Rheinmetall AG Supervisory Board the ranges for the value thresholds used to classify the extent of loss were increased and a further distinction was made between the categories "high" and "substantial." The ranges for the loss extent classes of "low" (€2 million to €5 million) and "medium" (€5 million to €20 million) that existed in the previous year were combined in 2020 within the loss extent class "low" (€2 million to €20 million). Extent of loss within the unchanged range of €20 million to €50 million is classed as "medium" (2019: "high"). From 2020, a high extent of loss is classed as a figure within the range of €50 million to €250 million. In the previous year, risks higher than €50 million were classed as "substantial" with no further delimitation. The loss extent class "substantial" now starts at an extent of loss that is greater than €250 million. This new approach has an impact on the classification of the risk fields into risk classes. The change to the risk matrix 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 assessment, and the composition and scope of the risks have remained fundamentally the same.

Risks and opportunities

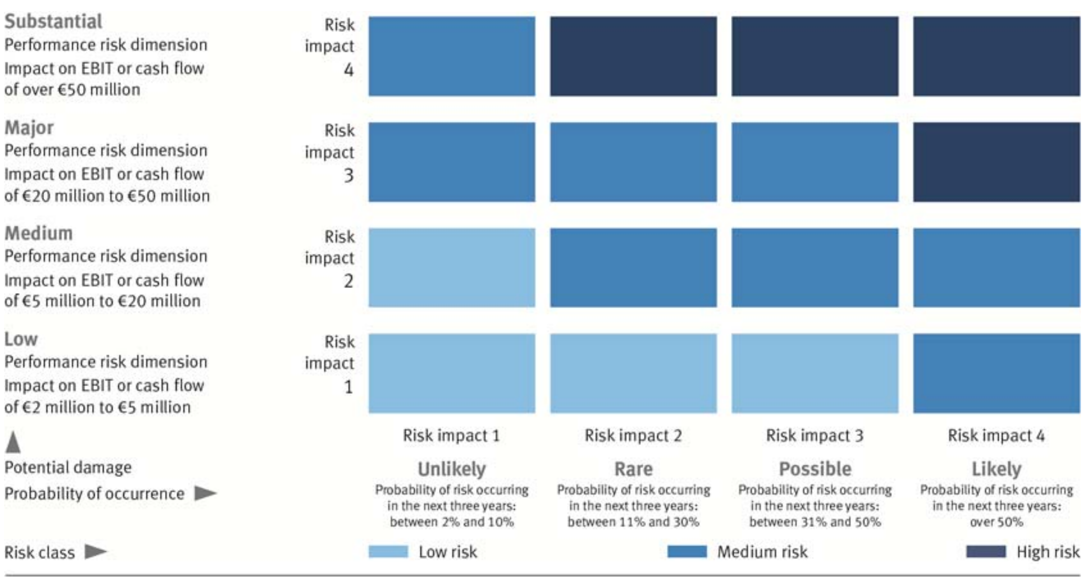
Significant corporate risks

Risk fields

Risk field	Risk class
Customer and market	Medium 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	Medium risk
Compliance	Medium risk
Public perception and corporate social responsibility	Low risk
Corporate security	Low 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 page 89

Risk classification matrix



Customer and market

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. They could potentially utilize their bargaining power and increase the pressure on the margins. 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.

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 noncompliance 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 Automotive and Defence sectors help to ensure that temporary economic fluctuations can be offset in part by more favorable developments in other regions and markets. The Group counteracts global economic fluctuations with its different sectors, 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.

Risks and opportunities

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

Innovative strength is a key success factor, which we consider to be a vital driver of profitable growth. The future earnings situation of the Rheinmetall Group also depends on the ability to identify technological trends in good time, correctly assess their impact on operational business and promptly develop new, marketable applications, products and systems and launch them on the market. The sometimes long development lead times, continuously refined technologies and intense competition are key factors contributing to uncertainty regarding the economic success of current or future products.

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, the involvement of customers in the definition, design, development and testing of new products and safeguarding our technological position through patents reduces potential 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 Rheinmetall Technology Center was established in the year under review with the aim of generating capacity to develop and quickly implement new technologies and innovations, also in areas that lie outside the current core business. The initial focus is on new mobility, sensor technology and artificial intelligence (AI). To spur on its systematic development in old and new technology fields, the Group embarked on a project to implement a Group-wide technology management system.

Despite compliance with the processes described and the use of state-of-the-art project management, monitoring and controlling measures, developing and launching new products and changes to the existing product portfolio harbor cost risks.

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. Compliance with production specifications is ensured through, for example, internal policies, quality handbooks, procedural instructions and our quality management systems. Our quality management systems have been certified in accordance with the internationally recognized ISO 9001, IATF 16949 and AQAP 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.

Risks also arise from capacity bottlenecks and overcapacity, production downtime, excessive scrap levels, a high level of working capital 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 preventative maintenance with ongoing checks and constant modernization as well as through targeted investment. Production can, however, be impacted by natural disasters, disruptions in the infrastructure, delivery stops or technical failure. 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.

Risks and opportunities

The scope and complexity of projects can entail risks in planning, calculating, implementing 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 lower prices to more favorable, standardized payment and delivery conditions. In addition, the Purchasing Council ensures through regular meetings that the purchasing organization is aligned with the requirements, the purchasing employees are properly trained and that both the 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 price increases. 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, quality and reliability checks on suppliers, alternative suppliers and subcontractors, medium- and long-term supply contracts and appropriate safety stocks also reduce potential risk. Stronger internationalization of our supplier circle can leader to more favorable purchasing conditions. These expanded purchasing activities could also help us to identify new suppliers possessing, for example, specialized product knowledge, which, in turn, could allow us to improve our competitive situation. Appropriate market observation and cooperation with the development departments can also help to counter legal bans on substances/materials. Cost escalation clauses are also agreed in contracts where possible, to minimize negative effects from increases in purchase prices to a large degree.

As a result of the COVID-19 pandemic, since March 2020 there have been significantly more supplier failures compared with previous years caused by insolvencies or disruptions to the supply chain, due for instance to the lockdown measures taken in China. At present, we do not expect the situation to improve in the short term because we are expecting further supplier failures in the future with a time delay depending on the situation in the international supply countries. 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.

An inadequate energy supply for companies of the Rheinmetall Group under cost-efficient conditions constitutes a risk for competitive production at the sites. However, 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 can jeopardize the ability of energy-intensive industrial companies, like some companies in the Mechatronics and Hardparts divisions, to compete in the international marketplace.

Human resources

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

We mitigate potential personnel risks, for example, by positioning Rheinmetall as a fair and attractive employer and performing target-group-oriented recruitment and employer branding campaigns for communicating our strengths to the outside world, in particular to younger people. Further elements to minimize risks include performance-based pay at standard market rates with performance-based incentive schemes, modern HR practices and structured personnel development on the basis of our "Management by Objectives" program. 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 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 succession planning and training activities. We counteract the demographic change in particular through funding programs for young people.

Rheinmetall Automotive is faced with tough competition from other companies 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.

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 twelve-month liquidity plans. The values calculated are compared with the available financial scope to identify any potential financing gaps early on.

Risks and opportunities

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 in both sectors 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 fixed either in the original contracts themselves or through appropriate offsetting derivatives, 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 two corporate sectors. 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, forexample, 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 could increase 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

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). 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.

Risks and opportunities

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. German legislators are also planning to introduce new corporate criminal conduct legislation ("Law to Strengthen Integrity in Business"), which specifies that the company will have to pay up to 10% of total global sales in the event of gross breaches of compliance. There is also the risk of significant and lasting damage to the Group'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 as well as 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 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 these companies. 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 spheres of work. For new employees, this training is an important part of the induction process.

Public perception and corporate social responsibility

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 event that our financial communication is insufficient or delayed, this can result in fines or even legal action.

If we 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 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 such as MSCI, ISS ESG, Sustainalytics and Gaia.

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 to mitigate these risks as far as possible through suitable measures.

With 129 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 and possibly, in turn, made stricter. This applies in particular to provisions relating to not only the environment, chemicals, hazardous substances and critical raw materials, but also 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. Violations of official regulations that apply to how we exercise our business activities or the infringement of social and environmental standards could potentially harm the reputation of Rheinmetall and entail all manner of stipulations, remediation obligations and compensation payments. We actively counter these risks in various ways including through integrated management systems and certifications to various international standards (ISO 14001, ISO 50001, ISO 45001). We evaluate measures that go above and beyond compliance with legal requirements on a cost–benefit basis.

Risks and opportunities

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 pollution has also been generated during this time as a result of production that Rheinmetall is not yet aware of. Sufficient provisions have been recognized for necessary measures to safeguard against or clean up identified pollution. 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, professional and safe storage of hazardous substances and environmentally friendly disposal of waste and hazardous substances. 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.

Corporate security

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.

Like any other multinational company, Rheinmetall is at constant risk of cyber attacks and risks resulting from industrial espionage or sabotage. 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. Serious 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. Furthermore, we work with our IT department to analyze not only a range of threat scenarios but also new sources and forms of cyber attacks in order to identify patterns of attack and further optimize our protection systems.

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.

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.

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 new 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 continuing to strengthen 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.

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. 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, potential 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.

Risks and opportunities

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 from its 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 in the Rheinmetall 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 in order to be able to continuing 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 for 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 strategy meetings for periods beyond this horizon, where they are assessed and prioritized in terms of their significance for the future development of the business and assigned a budget if necessary.

Risks in the Automotive sector

Any change with regard to customers – e.g. relocation of production sites, termination of customer relationships, sales and mergers of companies, insolvencies, declines in demand and changes in customer requirements – can lead to fluctuations in prices, quantities and margins, which can result in a decline in operating activities and/or reduce the value of investments. Vehicle manufacturers are engaged in fierce international competition, which means that they are exposed to tough innovative and, especially, cost reduction constraints, which they attempt to pass on to their suppliers. Companies in the Automotive sector are combating the impact of this development by investing in new products, deploying modern manufacturing processes, cost-saving technologies and new materials and realizing potential savings in corporate functions.

Risks and opportunities

Declines in automotive demand worldwide and in certain countries are countered by the expansion of our international presence and by marketing products outside the automotive industry. Advantageous economic parameters for new locations and the expansion of existing production capacities are exploited. Additionally, the diversified customer structure allows fluctuations in the production figures of individual automotive manufacturers to be balanced out.

Thanks to the broad product range and low reliance on individual customers, it is possible to cushion price risks, weak demand and insolvency risks. Despite all measures taken in relation to sales, production and the product portfolio to ensure capacity is utilized at the sites, the need to adjust capacity even to the extent of closing certain sites may arise. The coronavirus crisis left an indelible mark on the global automotive industry in 2020. Production of passenger cars and light-duty commercial vehicles fell by more than 17% year-on-year. Production is not expected to recover to 2019 levels until 2023 at the earliest. Based on this assessment, impairment tests were performed in the Automotive sector, which resulted in impairment of €300 million being recognized in Rheinmetall's consolidated financial statements in the first half of 2020. Provisions of €40 million were also recognized within the Group for necessary restructuring programs.

Furthermore, Rheinmetall Automotive's risk profile may be influenced by structural market risks such as the emergence of new suppliers, product substitution, delivery bans and protectionist trade barriers such as punitive tariffs as well as consolidation trends on sales markets. For example, for some years now diesel drive systems have been a topic of intense debate due to their high level of nitrous gas and particulate emissions in passenger car applications.

Upheaval is coming in the automotive and automotive supply industries due, among other things, to new drive concepts. In response to climate target commitments and economic risks in the wake of the coronavirus crisis, government stimulus measures were taken in a number of countries in relation to new registrations of partially and fully electric vehicles. In relative terms, electric vehicles were the winners of the 2020 pandemic. Hybridization and electromobility require new vehicle components, making it necessary to redefine the classic technology and supply chain relationships between manufacturers and suppliers.

Bottlenecks in supply and sharp fluctuations in prices for energy and 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 sector's central Commodities Office manages the timing of purchases and the volume purchased in consultation with the operating units, making use of financial hedging instruments.

The potential insolvency of suppliers represents a further risk on the procurement side. This risk is countered by carefully selecting subcontractors, spreading the risk by distributing the purchase volume across further suppliers and supporting suppliers in emergency situations if necessary. In fiscal 2020, to secure our supply of supplier parts, it was necessary to assume one supplier's relevant activities through an asset deal.

Appropriate insurance cover is in place for warranty, product liability and recall risks, which is reviewed periodically and adjusted where necessary. Three people died in a Cessna crash in December 2017. The death of the pilot and passengers meant that Rheinmetall Automotive, as the alleged manufacturer of the piston in the US, was sued for damages in an unspecified amount. So far, it is unclear whether the incident involved a piston that was manufactured and sold by us and whether the failure of said piston was the cause of the crash. Nevertheless, based on the current status of the proceedings, a risk provision was recognized on the balance sheet as of December 31, 2020.

Rheinmetall Automotive is faced with tough competition from other companies 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 of electrical engineering throughout the world. Generally, this situation may get worse, as the pressure to innovate in the industry as a whole will increase and extend to include production workers in countries with low unemployment levels.

In the automotive industry, manufacturers and suppliers are closely linked in working together to develop and produce vehicles. When selecting or even preselecting suppliers, the evaluation of whether the respective sustainability standards, which include, among other things respect for employment and social standards as well as internationally recognized human rights, are complied with in the delivery chain is increasingly significant for automotive manufacturers. A large number of manufacturers, including virtually all well-known European and North American manufacturers, oblige their suppliers to submit annual self-assessment questions, which enable them to rate performance and progress regarding sustainability. There is a risk that Rheinmetall Automotive does not sufficiently comply with OEM requirements and therefore cannot be considered when contracts are awarded.

Rheinmetall Automotive has for years had a comprehensive set of compliance-related rules in the form of guidelines plus company directives and operating instructions that are designed to ensure that staff comply with legislation at all times and prevent violation of applicable legislation and that guarantee staff act appropriately and correctly in their day-to-day business. However, despite multi-level inspection and control mechanisms, the possibility of risks arising from unlawful activities of individual parties cannot be ruled out. Provisions are created for any possible compliance cases.

The IT infrastructures of private and public companies have been exposed to an increasing number of malware attacks recently. They have the potential to cause significant disruption to routine business processes. The technical and organizational emergency, protection and preventive measures in place in the Automotive sector – in particular, modern backup and recovery procedures in conjunction with the speedy involvement, where necessary, of external specialists – ensure that customers can still take delivery of their orders in accordance with their call-off plans to the best possible extent. In the future, too, the technical design and functional security structures will be reviewed at defined intervals and continuously improved together with highly skilled, ISO 27001-certified service partners.

Risks and opportunities

Opportunities in the Automotive sector

Although business in the international automotive industry – measured by the number of passenger cars and light-duty commercial vehicles produced – was extremely sluggish in 2020 for cyclical reasons, but also primarily due to extensive production shutdowns in the first half of the year triggered by the coronavirus pandemic, with 16.7% fewer vehicles produced year-on-year, IHS Markit experts are optimistic for the future in February 2021, but are not expecting a return to 2019 production levels until 2023. For 2021, IHS Markit is projecting an increase of 14% in passenger cars and light-duty commercial vehicles compared with the significantly reduced base figure in 2020. We generally see development opportunities in the following areas:

Opportunities through the optimization of conventional drive systems – The combustion engine will remain the dominant drive system for individual mobility in the short to medium term. However, the engines used will have to comply with 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.

Consumption and emissions in combustion engines can be influenced both directly, through technical measures relating to mixture control and gas exchange, and through applications that will indirectly help to minimize friction losses and utilize auxiliary units according to individual needs. Rheinmetall Automotive offers a wide range of innovative and competitive components and systems in both areas. 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. Building on this high level of technological expertise, Rheinmetall Automotive will further exploit its capacity for innovation.

In parallel with the transition toward electromobility, lightweight construction methods will play an increasingly important role. Through the acquisition of a strategic stake in Carbon Truck & Trailer, a startup specializing in the development and production of innovative supporting components made from carbon-fiber-reinforced plastic, Rheinmetall Automotive is aiming to support the partner in the industrialization of the manufacturing process. This, in turn, 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 through new drive concepts – The role of the combustion engine will change. The proportion of vehicles that rely solely on a combustion engine will decline in the medium to long term, while the proportion of hybrid vehicles as a bridge technology to electromobility and electric vehicles will increase.

As a specialist in the field of drive systems, we see far more opportunities than risks in any extended portfolio. For example, we offer cast components for battery trays in electric vehicles and complex cooled aluminum housings for electric drives. Added to this are all-electric auxiliary units such as electric vacuum pumps that ensure comfort and safety, for example during braking, even when the combustion engine is switched off or there is no combustion engine. The efficient use of energy is a key capability, especially in electrically powered vehicles.

The heating and cooling of drive components and the passenger compartment is of paramount importance in electric vehicles. As a development partner that considers the overall system, Rheinmetall Automotive supports customers with all issues relating to efficient thermal management – from valves and pumps for fluid management, through electric climate compressors, all the way through to complete thermal management modules. Another key starting point for future vehicle concepts is light construction, which we are addressing with aluminum structural components and chassis components.

In addition to products for battery-electric vehicles, Rheinmetall Automotive is also developing components for alternative drive concepts such as fuel cells. This includes a special recirculation blower for any remaining hydrogen within the fuel cell, special coolant pumps for voltage levels of 400 V and 800 V and a range of electric valves.

Opportunities through diversification – Policies on pollutants and greenhouse gases set targets not only for passenger cars and light-duty commercial vehicles, but also for heavy-duty commercial vehicles. This is why highly robust, sophisticated and innovative drive systems also have to be introduced for heavy-duty commercial vehicles. For these vehicles, Rheinmetall Automotive leverages its extensive specialist knowledge developed in connection with advanced drive technologies for passenger cars. We also have long-standing close relations with manufacturers of heavy-duty commercial vehicles, which we have developed as a key pistons supplier in this segment.

We were therefore also able to supply products from the Mechatronics division to these customers and manufacturers of heavy construction site vehicles and agricultural machinery, such as exhaust gas recirculation valves, exhaust gas recirculation cooling modules and exhaust gas mass sensors, and to win related contracts. We also used our specialist technological expertise from the Hardparts division for products outside the automotive industry, for example in order to develop large-bore pistons and plain bearings specifically for electricity generation, heavy construction site vehicles, mining equipment, locomotives, shipbuilding and agricultural machinery.

Geographical opportunities – Rheinmetall Automotive 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.

Our aim is to pursue the prudent expansion of our existing production capacities in China and India and to deploy our expertise from the major automotive markets in USMCA and Western Europe. Furthermore, we want to play an active role in the further expansion of electromobility in China and establish ourselves as a serious player in this trend-setting technology. In India, we intend to increase our market share with the aid of our production facilities in Pune and Supa.

Risks and opportunities

Risks in the Defence sector

Defence's business areas are not directly dependent on the state of the economy. Rheinmetall Defence's customers 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. Higher pre-financing due to worsening conditions for prepayments and possible financial investments in projects also constitute risks.

Unforeseen difficulties with the implementation of projects can also lead to unplanned charges. As well as uncertainty in calculations, these include altered economic and technical terms and conditions following the conclusion of a contract, unplanned changes or additional customer requirements, unexpected technical difficulties or faults, problems with business partners or suppliers and deferred dates of acceptance and settlement. By means of professional project management and comprehensive quality management measures, as well as the appropriate formulation of contracts, it is possible to limit these risks, but not to exclude them altogether.

The expansion of international business activities harbors the risk that, in some regions of the world, due to the industry-specific practices in place in the countries in question, delays may arise in order processing or risks arising from the payment practices of customers or business partners that are customary in these regions may increase.

Risks are limited as far as possible by means of compliance checks on business partners in line with the business partner guideline, professional project management, comprehensive project controlling and suitable formulation of contracts. However, despite ongoing monitoring, delayed payments or even payment defaults on the part of contractual parties may unexpectedly arise.

The business activities of Rheinmetall Defence have a strong international focus. 56% of sales are transacted with customers outside Germany. New laws or changes to general legal and regulatory conditions, in procedural matters with existing export control regulations or in the national and international licensing practice for military equipment exports can hinder the development of our Defence business and thus negatively impact the earnings situation at the Rheinmetall Group.

Risks for the business of the Defence sector also lie in the impacts of the export control policy of the German government and also of other countries. As a result of these restrictions, which have arisen especially in the past two years, Rheinmetall Defence is barred from pursuing business activities in significant sales markets. Cooperation with other companies in the European Union, especially France, is complicated considerably by the restrictive approach of the German government to export issues. As a global player, it is not just German export control regulations that we have to comply with. The legal situation of other nations also has to be respected, especially that of the US. This can result in additional risks.

Opportunities in the Defence sector

Opportunities thanks to the modernization of armed forces – In most western industrialized nations, there is an ongoing need for extensive modernization of military equipment, especially in terms of armed forces technology. Current threats and foreseeable potential risks in foreign military deployments mean that ongoing investment is still needed in improving equipment and protecting soldiers.

The companies in this corporate sector specialize in the development and production of components and systems for the protection of people, vehicles, aircraft, ships and assets. They are a strong partner to the German armed forces, their allies and friendly armies, along with civil national security forces, and protect the forces involved in foreign operations.

Opportunities for the business units of the Vehicle Systems, Weapon and Ammunition, and Electronic Solutions divisions result from the changing military requirements of the German armed forces and other armed forces around the world. The range of products and capabilities of Rheinmetall Defence is tailored to central defence technology requirements resulting internationally from the ongoing need for substantial modernization of armed forces and new military deployment scenarios. Reference projects commissioned by the German armed forces, such as the series contract for the Boxer protected transport vehicle, the Puma infantry fighting vehicle and the Gladius infantry project, are key factors in winning further orders abroad.

Opportunities resulting from political developments – Foreign deployments of UN and NATO troops, crisis intervention, peace keeping missions as well as the increasing importance of defending nations and alliances: Owing to constant changes in national and international security and defence policy, brought about, for example, by the geopolitical realignment of economically strong nations, political upheaval, new hot spots and escalating conflicts, the armed forces of the 21st century are facing new challenges in national security as well as in the planning, implementation and securing of military deployments abroad.

Huge threats to external and internal security arise from unstable nations and dictatorial regimes as well as terrorists and radical activists. Effective protection systems are of central importance in the deployment scenarios of today and the future, in order to offer a maximum level of safety to soldiers. The deployment of forces in crisis regions may bring about opportunities for the Defence sector from ad hoc procurements.

Opportunities from German and European programs – Armed forces that are ready for operations and capable of reacting require sufficient resources and equipment, both in terms of personnel and material, that is correctly structured and adequate for the task. In Germany, defence expenditure as a percentage of gross domestic product has fallen significantly since 1990 (1990: 2.7%, 2020 estimated: 1.57% | Research Services of the German Bundestag dated March 2017 and NATO press release dated October 2020). Numerous hotspots, expectations that Germany will play a more active role in foreign and security policy as well as demands arising from national and alliance defence have, however, led in the meantime to a change of thinking and a reversal of the trend. In its Strategic Level Report, which it presented in February 2019, the federal government pledged to NATO that it would increase the defence budget to 1.5% of GDP by 2024. In absolute figures, this means almost doubling defence spending from €33 billion to €60 billion within a decade. In January 2021, the industry news service griephan reported on the 6th information event of the Federal Office of Bundeswehr Equipment, Information Technology and In-Service Support (BAAINBw) on the subject of armaments management. When responding to questions, the BAAINBw planning department referred to statements made by the federal government, which announced on multiple occasions that it would spend 1.5% of GDP on defence by 2024 and move toward the 2% mark.

Risks and opportunities

We also see opportunities in European customer nations in the next few years. The importance of the European market will continue to increase due to the comparatively low unit figures for national markets and increased production and development costs. By expanding their budgets, the Europeans are following the goal trend to increase military and security spending. According to a NATO press release published in October 2020, defence spending in its member states (excluding the US and Canada) increased by around 6% in the period 2013–2020 (values for 2019 and 2020 estimated). The main reasons for this are the growing risks in the relationship with Russia and the pressure that the US is exerting on its European partners in NATO to take on more military responsibility of their own. This is accelerating the development of a common defence and security policy.

Additional strategic opportunities for Rheinmetall Defence are also arising from the specific European initiatives to establish permanent structured cooperation in defence and in armaments projects, known as the Pesco Initiative (Permanent Structured Cooperation), which aims to increase interoperability between participating member states in order to enhance the operational capability of multinational organizations by dovetailing defence capabilities and systems. This cooperation is particularly important for the projects agreed between Germany and France to develop joint military hardware for their land forces, in which we will have a significant part to play.

In June 2018, the European Commission published its proposal for a regulation on the "Establishment of a European Defence Fund" (EDF Regulation), which is part of the European Defence Action Plan (EDAP). In April 2019, the European Parliament provisionally adopted an initial draft bill on the European Defence Fund. At the end of December 2020, the European Council and the European Parliament reached a provisional agreement on setting up the European Defence Fund and setting aside funding of around €8 billion over seven years (2021 to 2027). According to the European Council press release, the European Defence Fund cooperation initiatives and cross-border cooperation within the EU are intended to be promoted at each stage of the industrial process for defence-related products and technology. Until it is formally adopted by EU ambassadors and the European Parliament, the preliminary agreement as of December 2020 envisages around €2.7 billion for research funding and around €5.3 billion for skills development.

Rheinmetall Defence is well positioned to participate successfully in the tenders for major European military vehicle programs in the medium to long term. We anticipate demand for around 300 tracked vehicles in Germany and for approximately 800 in Europe. For wheeled vehicles, we estimate demand at around 1,200 in both Germany and Europe.

Opportunities through further internationalization – Despite a recent continuous rise in defence budgets, including those of countries that have traditionally been key Rheinmetall customers, Defence's strategic priority lies in tapping into new growth markets. We believe Asia and Australia, but also individual countries in Western and Eastern Europe, represent particularly attractive growth opportunities.

Opportunities through consolidation – Other growth opportunities may arise for us 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.

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.

Risks and opportunities

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 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.

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.

Assessment of the general risk 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. 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) 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. Accounting for the changed risk matrix and in spite of the coronavirus pandemic, on the whole the overall risk situation in the Rheinmetall Group did not change substantially in fiscal 2020 compared with the previous year. 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

Global economy in the grip of the pandemic

At the start of 2021, the Chairman of the German Council of Economic Experts, Professor Lars Feld, spoke of the high forecast uncertainty due to the continuing coronavirus pandemic: "We need to accept that all aspects of life this winter, including the economy, will be dependent on the rate of infections." In its World Economic Outlook Update published in January 2021, the International Monetary Fund (IMF) also emphasized the significant impact that the pandemic is continuing to have on the world economy. However, the IMF experts are projecting a return to economic growth as expected recovery effects take hold and the advanced recovery in China continues. For 2021, they are forecasting growth in global economic output of 5.5% (after -3.5% in 2020). In October 2020, the forecast was only 5.2%. The IMF estimates that the approval of multiple vaccines in particular has had a positive impact. It also believes that the recovery will be boosted by investment in sustainability and climate protection.

The latest IMF study from January 2021 projects growth of 4.3% for established industrial nations. The forecast for the eurozone, on the other hand, is slightly lower at 4.2%. The IMF is anticipating a stronger recovery for the US economy, with the forecast from January projecting an increase in gross domestic product of 5.1% in 2021. The increase is expected to be weaker in Japan at 3.1%.

For developing and emerging economies, the IMF estimates a comparatively strong growth rate of 6.3%. In China, gross domestic product is expected to increase by 8.1%, whereas an increase of 11.5% is expected in India in 2021 after the steep decline in the previous year. The forecast estimates growth of 3.0% and 3.6% for Russia and Brazil respectively.

In January 2021, the IMF also stressed the forecast uncertainty due to the continuing coronavirus pandemic and related countermeasures. It expects the recovery rate to vary greatly depending on medical success and the effectiveness of fiscal policy measures.

With respect to German economic development, there was a comparatively high level of disagreement among economic researchers at the start of the year. The Head of the German Institute for Economic Research (DIW), Prof. Marcel Fratzscher, in particular was rather pessimistic on the basis of the lockdown being extended in January 2021: "The longer it goes on, the more companies will be pushed to their limits and more of them will go out of business. That is the biggest risk that lies ahead of us this year: a wave of business collapses coupled with a rise in unemployment. The first quarter of 2021 will definitely be tough, and the German economy will slide into recession again." By contrast, in January 2021 the Chairman of the German Council of Economic Experts, Lars Feld, continued to see good prospects for a robust economic recovery: "There is a lot of pent-up consumption, and we have a very high savings rate. Many areas of consumption will make up for lost ground (…). We shouldn't underestimate fiscal policy measures either." In its World Economic Outlook Update in January 2021, the International Monetary Fund also gave a rather more optimistic assessment of growth prospects in Germany. According to the IMF study from January 2021, German gross domestic product will increase by 3.5% year-on-year in 2021.

Automotive market recovery picks up speed

The coronavirus crisis continued to define automotive market development at the turn of the year. In February 2021, the Association of the German Automotive Industry (VDA) estimated that global markets would see widespread growth in 2021, but would still be a long way off pre-coronavirus levels. Some major regional differences in the speed of recovery also emerged. In their forecast from February 2021, the experts at IHS Markit are not expecting a return to 2019 production levels until 2023 either.

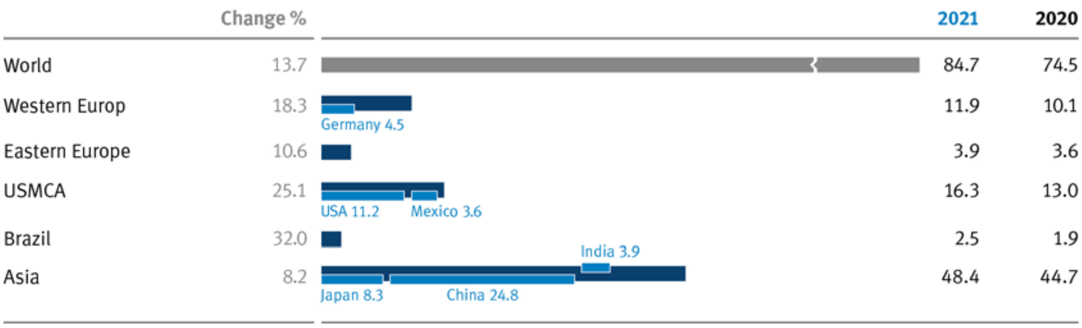
Report on expected developments

After the significant setback in 2020, on the whole the analysts at IHS Markit are also anticipating a return to normal market conditions and a growth trajectory in 2021. Their forecast from February 2021 indicates growth in global production of passenger cars and light-duty commercial vehicles up to 6.0 t of 13.7% to 84.7 million units. But this would still put the production volume well below the comparable figure for 2019, when approximately 89.0 million vehicles left the assembly lines. For USMCA, IHS Markit is forecasting particularly strong growth of 25.1%, predominantly for the US where growth is expected to reach 29.4%. Brazil, which suffered particularly weak development in the previous year, is the only country expected to surpass this figure with projected growth of 32.0%.

The market analysts are also optimistic for Western Europe on the whole, and estimate growth in production of 18.3%. Germany, whose automotive industry suffered a sharp decline in 2020, is expected to see growth of 21.5%. A slightly higher figure of 25.4% is expected for France, while growth in Spain is expected to be 18.9%. In the first year after completing the Brexit process, Great Britain, by contrast, is seeing a less dynamic recovery. Nevertheless, IHS Markit is still anticipating UK market growth of 15.2%. In Eastern Europe, the production volume is expected to increase by 10.6%.

After recovery on the Asian markets already proceeded at a stronger rate in 2020, an increase in production of 8.2% overall is expected in Asia. The IHS Markit forecast projects growth of 6.1% for China, while production in Japan is expected to increase by 7.8%. For the Indian automotive market, which was hit harder than China by the 2020 coronavirus crisis, strong growth of 22.5% is estimated for 2021.

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



Source: IHS Markit, February 2021

Three trends emerged at the start of 2021 that are indicative of the upheaval in the industry and the current high level of forecast uncertainty on the market. Firstly, in a publication in January 2021, the Association of the German Automotive Industry (VDA) stated that the "coronavirus effect" had had a stalling effect on replacements of older cars in the year under review. Secondly, sales of electric cars had continued to grow dynamically despite the tough market environment. In December 2020, for instance, as many as one in four new cars had an electric drive (electric vehicles and plug-in hybrids), which generally indicates high growth potential for this market segment looking forward to 2021. At the same time, discussions around extending and tightening the lockdown have again led to uncertainty among consumers and made it harder to provide a more accurate assessment of the situation. Thirdly, the tense microchip supply situation that has been ongoing since the end of 2020 is causing automotive manufacturers to shut down their production lines. After the coronavirus-related slump last spring, chip manufacturers had not anticipated a quick recovery in the automotive industry and prioritized deliveries to customers in other industries such as consumer electronics.

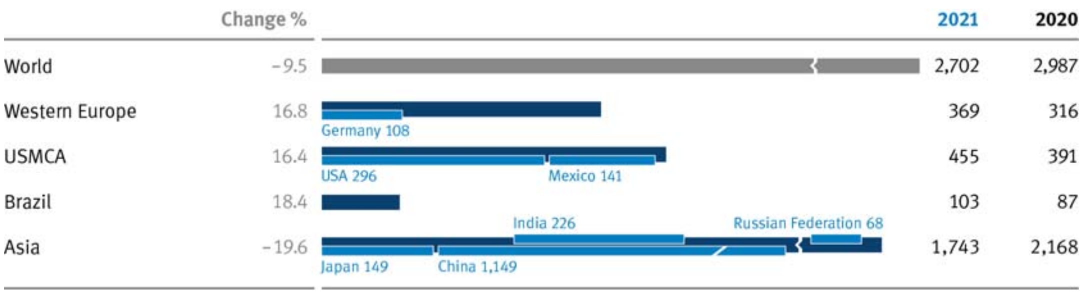
Mixed trends in truck production

According to the IHS Markit forecast, global truck production development will continue to be shaped by the coronavirus crisis in 2021. It projects that the global production volume of heavy-duty commercial vehicles weighing more than 6.0 t will decline by 9.5%. However, some major regional differences are taking shape. Whereas a robust recovery is anticipated for North America and Western Europe after the extremely weak previous year, the analysts are forecasting a fall in production of 19.6% in Asia. Developments on the world's largest truck market of China are the main reason for this. In 2020, the Chinese market continued to buck the global trend and report growth. For 2021, IHS Markit is now estimating a drop in production of 32.5% in China. In Japan, on the other hand, the decline is expected to be just 0.7%, while India (+76.6%), Indonesia (+39.5%) and Russia (+11.5%) are all expected to return to a growth trajectory after some difficult previous years.

After a lengthy dry spell, the Western European market is also expected to pick up in 2021 thanks to catch-up effects. Growth in production of 16.8% is anticipated. For Germany, IHS Markit is forecasting an increase in production volume of 22.7%.

The prospects for USMCA are equally positive. Growth of 16.4% is expected there, with projected increases of 21.8% in the US and 6.8% in Mexico. There are also signs of recovery on the South American market, where projected growth stands at 20.0%. This will also be roughly in line with the trend in Brazil (+18.4%).

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



Source: IHS Markit, January 2021

Rheinmetall Automotive well-positioned for industry changes

The trend toward electromobility is fully expected to intensify over the course of 2021. There is much evidence to support this in Germany, not least the German electric car subsidy program, which is being funded through taxpayers' money and manufacturer discounts and is available for a limited time until the end of 2021. In light of the dynamic growth in registration figures for electric and hybrid vehicles, the Association of the German Automotive Industry (VDA) has declared the "rapid ramp-up of electromobility between now and 2030" to be a "clear priority." A VDA press release said that this was particularly applicable to passenger cars and light-duty commercial vehicles. However, to meet the target of climate-neutral traffic by 2050, the VDA estimates that "alternative drives and fuels such as hydrogen and e-fuels will also be part of the solution."

Rheinmetall Automotive is well-prepared for the technological openness this will require. As well as successfully optimizing the combustion engine and achieving an increasing market presence in the field of electromobility, in January 2021 Rheinmetall Automotive also reported a further sales success as a strategic supplier for fuel cell components. Via our subsidiary, Pierburg GmbH, we will supply hydrogen recirculation blowers to Daimler Truck Fuel Cell GmbH & Co. KG, in which Daimler AG has pooled all its fuel cell technology activities. Rheinmetall Automotive estimates an eight-figure sales volume in this business area in the future.

Report on expected developments

Increasing expenditure on armed forces modernization worldwide

Global arms spending is continuing its upward trend. In December 2020, Lucie Béraud-Sudreau, Director of the Arms and Military Expenditure Program at the Stockholm International Peace Research Institute Sipri, said that this increase was a reflection of tensions in international politics, adding that this trend had been observed ever since Russia occupied the Crimean peninsula in 2014. Against the backdrop of Russia’s continuing armament program comprising conventional and nuclear missile systems in the direct vicinity of the European Union, in her second keynote speech in fall 2020 German defence minister Annegret Kramp-Karrenbauer spoke about a severe disruption to the strategic balance of power. Despite the negative impact of the COVID-19 pandemic, the German defence minister believes that future defence budgets are in need of "a healthy growth rate." This target is also reflected in the current budget planning, with the German defence budget expected to increase substantially in 2021 – to around €46.9 billion in total, compared with €45.2 billion in the year under review.

The trend toward increasing defence spending is also confirmed by the latest "Jane’s Defence Sector Budgets" analysis conducted by IHS Markit. It suggests that global defence budgets will increase again slightly overall to $1,841.5 billion in 2021, compared with $1,825.1 billion in the previous year. Some defence spending will increase significantly in many partner countries of the Federal Republic of Germany as well. The examples mentioned include Australia, France, Great Britain and Hungary. A somewhat different picture is currently emerging for the US, the country with the world’s largest defence budget: Following the upward trend in defence spending since 2016 under former US President Donald Trump, IHS Markit expects the US defence budget to remain at the previous year’s level in 2021. The planning for 2021 envisages spending of $736.6 billion, whereas the US defence budget totaled $746.0 billion in 2020.

Defence budgets of selected countries $ billion

	2021	2020
World	1,841.5	1,825.1
USA	736.6	746.0
China	236.4	228.5
India	62.2	63.1
UK	60.8	54.4
France	54.8	54.0
Germany	50.6	49.2
Saudi Arabia	45.8	48.5
Russian Federation	42.7	45.2
Australia	29.7	28.3
United Arab Emirates (UAE)	22.3	22.0
Canada	16.3	16.5
Poland	12.5	12.3
Netherlands	12.6	12.1
Algeria	8.6	9.4
Norway	5.9	5.6
South Africa	3.0	3.3
Hungary	2.4	1.9

Source: IHS Markit, January 2021

Rheinmetall Defence in demand as a partner

Being the biggest German armaments company and leading European systems manufacturer for defence technology makes Rheinmetall Defence a sought-after partner in security and defence for many partner countries of the Federal Republic of Germany. Yet even in 2021, the Federal Republic of Germany remains the biggest individual customer of Rheinmetall Defence.

We will continue to make substantial contributions in support of the German defence ministry's modernization effort, supplying high-tech solutions to protect our country's soldiers. This ambition is also underscored by two significant sales successes that Rheinmetall achieved at the start of 2021. The German customer placed an order for another 1,401 unarmored military transport vehicles with a total value of €543 million with Rheinmetall MAN Military Vehicles (RMMV). 1,000 of these vehicles are being procured using additional funds from the German government's stimulus package. The vehicles are due to be delivered in 2021 and 2022. With its plan to replace logistics vehicles, Rheinmetall Defence has a significant stake in the modernization of the German armed forces' truck fleet, which comprises thousands of vehicles. A new order for the navy illustrates the technological range that Rheinmetall covers: For the German naval forces, we are supplying simulation technology to train the NH90 NTH Sea Lion helicopter crews. The digital "Asterion classroom" will be delivered by the end of 2021. Asterion is a holistic concept that encompasses all phases of training. It faithfully simulates the behavior of all helicopter systems, from hydraulic systems, through electrical systems, all the way through to tactical systems.

Executive Board statement on expected development in fiscal 2021

In connection with Rheinmetall's strategic orientation and in order to strengthen our profile as an integrated technology group, at the start of the current 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. With respect to the small- and large-bore pistons business, in light of the anticipated technological transformation in the area of future drive technologies we are assessing strategic options for developing this business in a way that is viable for the future. These options range all the way up to a complete divestment of the piston business and its takeover by potential partners. For this reason, the former pistons product area has been managed as a non-core business since the start of the fiscal year. We report in detail on Rheinmetall's organizational realignment in the "Strategy" section starting on page 34.

For divisions whose reference figures for the previous year deviate from the reported figures, this report on expected developments contains relevant pro forma figures. This concerns the new Materials and Trade division, the non-core pistons business, and the Vehicle Systems and Electronic Solutions divisions, which now also include defence activities that were not previously allocated to any division.

Pandemic-related uncertainty over the development of general economic conditions

At the start of fiscal 2021, uncertainty over the continued course of the coronavirus pandemic, the economic consequences of potential further lockdown measures and the associated risks in sustaining production activities or supply chains are still increasing the forecast risk in terms of overall macroeconomic development and development of the markets we supply.

Report on expected developments

This is compounded by the still not completely determinable impact of Brexit, particularly with respect to the expected economic recovery in Europe, and by the economic risks of additional or continued trade disputes. The Rheinmetall Group too is facing greater forecast uncertainty regarding sales and earnings performance in fiscal 2021 as a result of these uncertainties.

General conditions for defence still positive, international automotive markets expected to recover

We still consider the framework conditions for our defence activities to be highly stable and positive. In many of the countries we supply, the modernization or replacement of military equipment is still ranked as a top priority, and this is being reflected in rising defence spending. Our expectations of a continued growth trajectory in the defence and security products business are based on this and on the historically high order backlog of around €13 billion in the Defence divisions.

The automotive markets that Rheinmetall supplies continue to face greater volatility risks at present. However, in line with expert forecasts, we expect international automotive production to pick up again in 2021, but not quite reach the pre-coronavirus level of 2019. In February 2021, the experts from IHS Markit are projecting annual production of light vehicles (passenger cars and light-duty commercial vehicles up to 6.0 t) of 84.7 million vehicles for 2021, which corresponds to an increase of around 14%.

Rheinmetall Group forecast for 2021 suggests sales growth and improved margins

Based on the current market outlooks, we anticipate growth in sales over fiscal 2021 and both an improved operating result and an improved operating margin. The Rheinmetall Group's annual sales are expected to increase against the previous year's level in fiscal 2021 – by between 7% and 9% (previous year: €5,875 million).

Based on this sales forecast and taking into account holding costs, in fiscal 2021 Rheinmetall is expecting to see an improvement in the Group operating result and an increase in the Group operating margin to between 8% and 9% (previous year: 7.3%).

Development of divisions and business areas in fiscal 2021

For the Vehicle Systems division, we anticipate a continued growth trajectory for sales, which in 2021 will be supported in particular by shipments of trucks and swap body systems to the German armed forces and by the Australian Boxer order (pro forma sales for the previous year: €1,846 million). In terms of margin development, on the basis of the planned product mix we expect the operating margin to reach the high level of the previous year (pro forma margin for the previous year: 8.1%).

In the Weapon and Ammunition division, the munitions procurement programs of the German armed forces, but also sales from international orders are contributing to the continued growth trajectory in fiscal 2021. We therefore expect to see significant growth in sales in the division in 2021 (previous year: €1,196 million) and an improved operating margin year-on-year (previous year: 15.5%).

For the Electronic Solutions division, we anticipate slight growth in sales in 2021, which will not start to pick up speed until subsequent years with the rise in unit figures for large-volume vehicle programs (pro forma sales for the previous year: €935 million). In terms of the operating margin, we are expecting the figure to be on a par with the previous year (pro forma margin for the previous year: 9.8%).

In light of the projected market recovery and the envisaged series launch of new products in fiscal 2021, the Sensors and Actuators division is anticipating significant growth in sales (previous year's sales: €1,202 million). On the basis of this higher sales forecast, the division is expecting to see a substantial increase in its operating margin (previous year: 3.0%).

Strong growth in sales is also expected for the Materials and Trade division in fiscal 2021 (pro forma sales for the previous year: €546 million). Based on this growth, the division is also anticipating a tangible improvement in its operating margin (pro forma margin for the previous year: 5.2%).

The non-core small- and large-bore pistons business is also expecting to see sales pick up, albeit with the growth momentum dampened by the continuing downturn on the large-bore pistons markets (pro forma sales for the previous year: €479 million). In terms of the operating result and the operating margin, a return to positive figures is expected after a loss in fiscal 2020 (pro forma margin for the previous year: -4.5%).

Development of other Group key figures and key performance indicators in fiscal 2021

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 considerably higher than the previous year's figure of €57 million.

On the basis of the planned business and earnings development, we expect to achieve a return on capital employed (ROCE) of around 14% in fiscal 2021 (previous year: 2.7%).

In terms of operating free cash flow (OFCF), in fiscal 2021 we again expect to achieve our current target corridor of between 2% and 4% of consolidated sales (previous year: 3.7%).

Positive net income of €100 million to €130 million is expected for the Rheinmetall AG management holding in fiscal 2021 (2020: €90 million).

Non-financial aspects of business activities

The general public's interest in corporate responsibility is growing. Over the past few years – at the United Nation's behest – 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 encompassing the entire value-added chain. But customers, 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 and the environment. The inquiries from all sections of society are thereby increasing, as are expectations for transparency and requirements for comparability. Investors are looking for sustainable investments. Employees want a secure job, but more and more frequently would also like to balance their professional goals better with their family life and private interests. Environmentally friendly products are attracting ever more consumers. Legislators, authorities and even non-state interest groups demand that increasingly strict regulations and limit values are complied with. People living next to locations used for industrial purposes fear that their quality of life is being adversely impacted. Municipalities, associations and charities in turn value the support that companies give their social, cultural and sports activities.

Management approach

We have consistently demonstrated our responsibility toward our employees and products and toward the environment and society – every single day for over 130 years. The international operations and production of the companies of the Rheinmetall Group mean that they are involved in the general economic, ecological and social conditions of various countries and regions. Rheinmetall is committed to fair competition and behavior that not only shows integrity but is also socially and ethically responsible. 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 and the corporate culture here in the Rheinmetall Group. If we know the needs, interests, attitudes, concerns and opinions of our key stakeholders, we can focus our commercial decisions more effectively in line with their expectations. With 198 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, shareholders and investors, employees, suppliers, the media, representatives of the worlds of science and research, society, politicians and authorities as well as associations and organizations. This allows us to establish and develop a trustful relationship as well as to receive inspiration and specific proposals at an early stage. 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.

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 international automotive supplier, through our Automotive sector we help to ensure that people all over the world can reduce their environmental impact when traveling from A to B. With its product and capability spectrum, Rheinmetall Defence offers 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 on pages 22 to 33.

Non-financial aspects of business activities
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 Automotive and Defence 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 technological and 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 are not directly derived from the existing portfolio or that promote the transfer of technologies between our divisions. 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 who support the transfer of knowledge from research into practice. The junior professorship endowed by Rheinmetall Automotive at RWTH Aachen also conducts research into virtual engine development and the development of hybrid drives. Furthermore, Rheinmetall Automotive 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.

We provide more information on our specific research and development activities in the past fiscal year and the expenses associated therewith in our comments on business performance.

Risks

We provide information on avoiding or reducing technology and development risks on page 92.

Non-financial aspects of business activities
Environmental protection and conservation

Management approach environmental protection and conservation

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 and to prevent the accumulation of hazardous substances. 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.

Certifications to international standards %

	2020	2019
According to quality management standards (ISO 9001, IAFT 16949, AQAP 2110/2210)	90.9	90.8
Certified according to ISO 14001 (environment)	86.6	85.3
Certified according to ISO 50001 (energy)	35.4	33.8

As a percentage of business activities measured against total workforce

Energy management *

We need a sufficient energy supply, which is associated with corresponding CO_2 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.

* Contents not reviewed by the auditor

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 7% 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.

The continual reduction of energy consumption is a challenge for the Rheinmetall Group companies as well. The measures implemented at our locations to date include switching to LED lighting, generating savings in compressed air and improving compressed air generation. We have also generated further savings through heat recovery from some of our production processes, such as for compressed air generation. Additional efficiency improvements have been achieved by replacing and upgrading outdated facilities and systems and modernizing how they are managed. Between 2016 and 2020, the Rheinmetall Group's energy consumption was lowered by 16%; energy intensity (MWh/€ million in sales) fell by 20% 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 22%.

In the year under review, the energy management officers at the Rheinmetall Group formulated a draft plan for ten potential energy saving projects that could be invested in and carried out over the next five years, including, for example, the erection of a wood chip CHP plant so that the Unterlüß site can generate its own energy supply. Furthermore, with a view to the Rheinmetall Group's target to achieve CO_2 neutrality by 2035, in August 2020 the members of the Executive Board were presented with potential measures to prevent, reduce, substitute and compensate for the CO_2 emissions produced by the Rheinmetall Group, including initial cost estimates.

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) covers 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 production and procurement of raw materials, production processes, and transport and logistics. We will prepare to expand our reporting of emissions under Scope 1 and Scope 3 in several phases over the next few years.

Rheinmetall Group's carbon footprint

	2020	2019
Total emissions	410,404	464,716
Scope 1 | Direct greenhouse gas emissions	128,128	134,687
Scope 2 | Indirect greenhouse gas emissions	282,276	330,029

A total of 80 out of the 160 subsidiaries were included in the figures recorded for fiscal 2020. Around 90% of CO_2e at the Rheinmetall Group can be attributed to the top 20 companies alone. In 2020, CO_2e from company car use of employees in Germany was included in Scope 1 and comparable figures for 2019 were determined. CO_2e for fiscal 2020 was calculated using the location-based method. The country-specific emissions factors were taken from the ecoinvent 3.7 database. The figures for fiscal 2019 were also converted to this system for 1:1 comparability.

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.

Non-financial aspects of business activities
Environmental protection and conservation

As we reported in 2019, Rheinmetall also sets itself ambitious CO_2 reduction targets for its business activities. We were originally striving to cut our production of climate-damaging CO_2 emissions to zero by 2040. We have now moved the date by which we aim to achieve this target forward to 2035.

The CDP (formerly Carbon Disclosure Project) is an independent, charitable organization that 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. In the past fiscal year, initial preparations were made for the Rheinmetall Group to participate in this project. There are currently still obstacles with regard to the scope, granularity and quality of the data to be reported. The Automotive sector has already been participating in the CDP for a number of years in order to meet customer demands. On behalf of 137 investors, in October 2020 the CDP also urged companies to join the Science Based Targets initiative (SBTi). This organization, a partnership project between the CDP, the UN Global Compact, the World Resources Institute and the WWF, provides companies with the means of setting science-based CO_2 reduction targets that help to limit global warming in line with the Paris Agreement to well below 2°C and, in the best-case scenario, to 1.5°C. The criteria give particular consideration to the different stages of a company's value-added chain. In fiscal 2020, we looked into the framework and the underlying methodology, and gradually took the initial steps to join this initiative.

Five years after the Paris Agreement, the past fiscal year has been one in a series of years in which we have seen very warm temperatures. A preliminary report by the World Meteorological Organization from December 2020 indicated that the global mean temperature from January to October 2020 was around 1.2°C (±0.1°) higher than pre-industrial levels (1850–1900). In light of record temperatures, severe droughts and rapidly warming oceans, the UN Secretary General Antonio Guterres is calling for climate neutrality. The Task Force on Climate-Related Financial Disclosures (TCFD) of the G20 has issued 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. In fiscal 2020, we began to look into these recommendations and identify the possibilities and challenges of implementing them. The physical risks of climate change are counted among general risks, and include severe storms (hurricanes, typhoons, cyclones, tornadoes), floods, forest fires, droughts and earthquakes. The first step we took was to analyze insurers' risk analysis reports of 60 production sites and generate a provisional risk profile. The next phase will involve determining the transitory risks of climate change, which particularly relate to changes to general legal and regulatory conditions. This also includes,for example, increasing CO_2 pricing.

Contents not reviewed by the auditor

Waste management

In all our production processes, we strive to be efficient in our use of materials. We prevent, reduce or recycle waste and 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 57,648 t, compared with 74,946 t the year before.

Water management

Responsible use of water is an integral part of our commitment to sustainability. The water consumption of the Rheinmetall locations was 3,246,497 m³ in fiscal 2020 (previous year: 3,689,791 m³). In the period from 2016 to 2020, water consumption was reduced by around 30%. For the next two years, we have set ourselves the target of reducing water use by a further 10%.

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. Nitrochemie Aschau GmbH in Germany sources the water required for production from the Inn River. After undergoing purification, the water is fed through a process water extraction plant into the water pipes of the production buildings. After it has been used, the wastewater is purified in a complex purification process, which neutralizes the wastewater and biodegrades the pollutants. The purified water is then returned to the Inn.

Nitrochemie Wimmis AG in Switzerland uses three groundwater wells for its water supply. The water is pumped through a pumping station and the reservoir to the buildings where it is required for production. The wastewater is drained away via two channels. Part of the wastewater is fed through a collecting pipe to the regional wastewater treatment plant for the local communities, where it is purified, and the rest of the wastewater remains at the company. It is purified in a multistage process before being discharged into the Kander River, which flows right by the company's premises. Just like with Nitrochemie Aschau, the quality of the returned water is so high thanks to the thorough purification that it does not alter the Kander River's composition.

The Rheinmetall Denel Munition (RDM) plant in Somerset West, South Africa, is located in a region that has suffered repeatedly from droughts in recent years. RDM takes urban wastewater and purifies it in a multistage process to produce water of drinking water quality. This happens at a water treatment plant, which uses reverse osmosis – where the wastewater is pressed through a membrane – to separate out even the finest impurities. Instead of procuring freshwater, RDM can use the water it has purified itself for production. The wastewater produced is then purified again, before being released into the nearby ocean in line with official permits.

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. Rheinmetall Defence has tested its products on heathland near Unterlüss in Lower Saxony for over a hundred years. 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. A total of 420 hectares are used for eco-friendly agriculture. 90% of the area is managed in keeping with the typical original character of the landscape and the fauna and flora maintained for hunting in accordance with the strict rules for integrated conservation. Active landscaping creates individual habitats for the unique animal and plant life. 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.

Non-financial aspects of business activities
Employees

Management approach

Rheinmetall's success depends to a great extent on the ideas, expertise, enthusiasm 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 18 countries in Europe, North and South America, Africa, Asia and Australia. Potential applicants can also read brief descriptions of the different companies.

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 40 sites throughout Germany and is responsible for end-to-end applicant management. 60,678 applications were registered on our TalentLink online platform in 2020 (previous year: 56,858). In 2020, 1,844 positions (previous year: 2,028) were vacant at the Rheinmetall companies, of which 1,111 were then filled (previous year: 1,268). In the past fiscal year, we recorded a total of 2,503 people joining and 2,770 people leaving the Rheinmetall Group (previous year: 3,803 and 2,532 respectively).

As they did in previous years, various institutes once again assessed the corporate image of German companies in 2020. Rheinmetall was again selected as one of the 100 most attractive employers. In the Engineering Students Edition of the trendence study, we were ranked in 43rd place (previous year: 41st), and in the categories of young professionals, mechanical engineering and automotive suppliers we came in 15th and 10th place, compared with 14th and 9th the year before. In the Universum rankings (Germany Top 100 Ideal Employers) in the category of engineering professionals, we were ranked in 34th place in the year under review, after reaching 23rd the year before.

Since March 2020, the Employer Branding team has been posting pictures, videos and interviews on our careers portal on the "Zoom in – people and projects" pages to give an insight into what defines us as an employer and what topics we are enthusiastically working on. This generates interest, breaks down preconceptions, strengthens the company's image and gives people a sense of the corporate culture.

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 2020, 746 young people (previous year: 767) in Rheinmetall companies in Germany and abroad received vocational training, 405 of whom were based in Germany (previous year: 420). Within the wide array of over 30 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, 83% of the young people in the Rheinmetall Group received training for industrial and technical occupations, and 17% received training for commercial occupations. The apprenticeship ratio was 3.6% of the workforce for the German locations (previous year: 3.8%) and 3.3% for the Rheinmetall Group as a whole, like in the previous year. The proportion of female trainees in the Rheinmetall Group was 13.5% (previous year: 16%), while the proportion in Germany reached 17% (previous year: 19%). In 2020, 270 people in the Rheinmetall Group (previous year: 328) and 125 people (previous year: 152) at the Rheinmetall companies in Germany started their training, while 112 trainees (previous year: 174) took up temporary or permanent employment after successfully completing their training. Rheinmetall invested €13.5 million in training at the sites in Germany in 2020, the same amount as the year before.

Further training for 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. It is vital to maintain and continuously raise the high skills level to ensure that the Group companies can achieve their business goals.

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 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.

Non-financial aspects of business activities
Employees

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, 1,236 employees (899 men, 337 women) attended 107 (previous year: 130) one-day or multi-day events at the Rheinmetall Academy, compared with 1,640 (1,353 men, 287 women) in the previous year. 65% of the participants came from the Defence sector and 24% from companies in the Automotive sector. The proportion of female participants was 27.3%, compared with 17.5% in the previous year. Around 61% of the participants completed an online training session, and around 39% a classroom seminar. In 2020, Rheinmetall invested €4.1 million (previous year: €6.4 million) in specialized, interdisciplinary and management-related training programs in Germany alone. A total of 12,646 male and 3,179 female participants (15,825 people; previous year: 18,473 employees) benefited from 3,145 training activities in 2020 (previous year: 4,653) over 18,264 days (previous year: 25,285).

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 in addition to this short-term component. This is geared towards long-term corporate success and includes payment of 40% of the long-term incentive amount in Rheinmetall shares, which are subject to a four-year lockup 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 achievement of ESG targets will account for 20% of the restructured long-term components for middle and senior management.

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 32 German companies of the Group in the year under review like last year, 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.

Diversity

In times of accelerated technological and economic change, we believe that equal opportunities and diversity are essential – not just for society, but for the company too. We value all people regardless of gender, age, sexual identity, health requirements, ethical or social background, skin color, religion, culture or ideology. The international nature of our business activities means that people from many different countries, cultures, religions and walks of life are employed in our company. They not only shape the profile, image and uniqueness of our company, but in our everyday business they also meet the wide range of requirements imposed by our customers, investors, suppliers and other stakeholders. We view the diversity of our employees as a strategic success factor. It makes us appeal to customers and applicants alike. This diversity holds tremendous potential for the continued growth of the Rheinmetall Group and is an opportunity to recruit and retain the best talent.

With locations on six continents, supply relationships in 137 countries in 2020, 12,454 employees abroad and 70 nationalities represented at Rheinmetall in Germany, internationality and diversity have long been part of everyday life in the Rheinmetall Group and are key factors – despite any dissimilarities – in why we remain successful together in our global business activities. At the end of fiscal 2020, 826 employees at our German companies were foreign nationals (previous year: 859). The management teams are made up of German and foreign managers. Multinational teams work together on projects. In addition, 61 German employees were posted to Rheinmetall Group locations outside Germany (previous year: 66) in 2020.

Around 21% of employees were female in the year under review (previous year: 21%). Rheinmetall Automotive employed 2,623 women (previous year: 2,807) and Rheinmetall Defence 2,475 women (previous year: 2,420). A total of 124 women worked in the Group holding company and service companies (previous year: 112). Generally, the Defence and Automotive sectors are preferred by men, who predominantly tend to choose technical or scientific subjects for study and professional training. For these reasons, the percentage of women occupying management positions in our technology group is lower than in other industries or branches of industry.

The German Act on Equal Participation of Women and Men in Executive Positions in the Private and the Public Sector, which was passed by the Bundestag on March 6, 2015, regulates the setting of targets for the share of women in governing bodies and at senior management levels.

Non-financial aspects of business activities
Employees

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." In the year under review, the Rheinmetall Group employed 2,805 managers in the first four levels below the Executive Board, 292 (10.4%) of whom were women.

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%), the Executive Development Program to 7% by 2021 (2018: 3%), the Manager Leadership Program (MLP) to 15% by 2020 (2018: 7%) and the Young Manager Program (YMP) to at least 15% by 2020 (2018: 11%). The proportion of women on the Talent Campus is to increase to 15% in 2021, and we are looking to achieve a level of 30% in fiscal 2020 with the induction programs for management trainees. While the ratio of women on the YMP was 17% in 2020, we got closer to the 2020 target on the MLP with 11%. We have still not reached the sufficient proportion of women at the relevant management level to achieve the planned target. In the year under review, fewer management trainee programs than originally planned were carried out, which means that the targeted quota of 30% was not met.

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 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, allowing the employees concerned to achieve work of the same quality as that of colleagues without disabilities. In the year under review, the German-based Rheinmetall Group companies employed 582 severely disabled people (previous year: 575), 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.

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 4.7% (previous year: 4.8%). The accident frequency rate (number of accidents per million hours worked) was calculated for the Rheinmetall Group for the first time in fiscal 2020, and was 5.9.

The global spread of coronavirus presented Rheinmetall too with challenges in how to handle the COVID-19 pandemic. In exceptional circumstances, taking clear-headed action and consistently doing the right thing really count. Since the start of the pandemic, the actions we have taken have centered around the protection and health of our employees. Following the first concerning signs that coronavirus was spreading rapidly, we systematically assessed the different situations on the ground, which varied greatly from one region to another. 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 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 was given regular updates on the situation at the company via various communication channels, including letters from the CEO and the Rheinmetall Inside app.

The prestigious Corporate Health Award, which entered its twelve year in December 2020, commends organizations with exceptional health management. The award is bestowed jointly by the Bonner Beratungs- und Marktforschungsinstitut, EuPD Research Sustainable Management and Handelsblatt. Among 352 participants from 15 industries, Rheinmetall was recognized for its extraordinary efforts in occupational health management with a special award in the "Mechanical Engineering/Heavy" industry segment in the "International" category.

Non-financial aspects of business activities
Employees

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 more healthy 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 2020, 136 employees (previous year: 128) were on parental leave in the German companies (96 female employees, 40 male employees; previous year: 95 female employees, 33 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.

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.

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.

Risks

Information about avoiding or reducing personnel risks can be found on page 95.

Non-financial aspects of business activities
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 137 countries in fiscal 2020, upholding environmental and human rights due diligence obligations is a major challenge and 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. In 2020, within the scope of a pilot project, the top 10 existing suppliers of each division in terms of purchase volume based in countries that are classed as critical were subjected to an internal business partner review using a recently implemented specific compliance inspection protocol. The result of the first screening was overwhelmingly positive, with around 92% of the 104 suppliers inspected (consolidated basis) presenting no anomalies. The findings for the few negative cases that were identified are being followed up by the purchasing officers in the relevant divisions.

We keep a close eye on regulatory developments in Germany and the European Union. In addition to the German government's draft bill for a German Due Diligence Law of March 2020, some other notable developments here include the proposal of the European Parliament's Legal Affairs Committee with recommendations to the European Commission on mandatory due diligence and accountability for companies in April 2020. The preliminary conclusion is that the methodical and objective evaluation of whether the respective sustainability standards – 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.

Non-financial aspects of business activities
Procurement and the supply chain

The methodical, objective and reliable assessment of supplier sustainability performance requires a Group-wide, standardized, system-supported process for recording and analyzing supplier information. In November 2020, the Executive Board of Rheinmetall AG approved the planned modules of measures for implementation of the "Supply chain transparency" project. In addition, in the past fiscal year the central departments of Purchasing, Compliance and Corporate Social Responsibility examined the assessment portals of established suppliers in the Supply Chain Assessment unit to get an initial idea of possible solutions.

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 will be validated in fiscal 2021 by a recognized external service provider, who will consider specific data.

The geographical distribution of suppliers was again determined for 2020: 46.9% (previous year: 48.6%) of our 40,015 suppliers (production and non-production material) (previous year: 42,475) are based (i.e. have their invoicing address) in Germany, 17.9% in other EU countries (previous year: 16.3%), 20.3% in OECD countries (excluding Germany and the EU) (previous year: 16.1%) and 14.9% in countries (excluding Germany and the EU) that are not members of the OECD (previous year: 19.0%).

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 2021. Desktop research, for example, was also carried out to evaluate the supplier codes of companies in the automotive and defence 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 of 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, Ford, Scania, Volkswagen Aktiengesellschaft, Volvo Group and Volvo Car Corporation as well as Honda, Jaguar, Land Rover, Toyota and Stellantis are either lead partners or partners of Drive Sustainability (as of February 12, 2021). 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 ESG/CSR-related issues is increasingly being taken into account as a mandatory element when contracts are awarded. Rheinmetall Automotive holds 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 Rheinmetall Automotive plants 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. No on-site checks took place at Rheinmetall companies in the year under review in light of the restrictions imposed in connection with the coronavirus crisis.

Within the "Automotive Sustainability Assessment" project group, the supply chain sustainability working group, formed by the Association of the German Automotive Industry and of which Rheinmetall Automotive is a member, formulated a comprehensive, 11-category evaluation sheet for assessing the sustainability performance of companies in the automotive supply chain and approved the organizational framework for rollout in fiscal 2020. The content focuses primarily on social sustainability as well as on issues relating to occupational safety, environmental protection and fire safety. This assessment can be integrated in existing corporate processes and acts as an aid in the design and implementation of corporate due diligence. The mutual recognition of the results, which the participating companies can share with each other on a web-based platform, is designed to prevent repeat audits and promote the targeted, structured further development of sustainability within the industry. The text label, which is issued by external, accredited certification companies, confirms that, in accordance with the standards of implementation, no indications of fundamental or critical violations were identified.

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 and sole-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 or, for example, even new shelling campaigns. 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 Defence sector.

Risks

Information on reducing or avoiding procurement risks can be found on page 94.

Non-financial aspects of business activities
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 corporate 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, guidelines and regulations, 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 our companies have to fulfill are therefore many and varied. With deliveries made to 137 countries around the globe in 2020, 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.

According to the 2020 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 75.3% of our sales in countries with a very low or low corruption risk in the year under review (previous year: 70.0%).

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, the 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, the company 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 level, the four areas of Prevention, Regulation Management, Investigation and Data Protection each have their own staff and are assigned to the Chief Compliance Officer, who is directly accountable to the Chairman of the Executive Board. In year under review, the Prevention area was broken down further into the sub-functions Due Diligence, Awareness and Projects & Risk. Also serving as the Sector Compliance Officer, the Chief Compliance Officer is simultaneously responsible for the Defence and Automotive sectors and in this function manages the compliance officers of the six divisions within the matrix organization, for whom the compliance officers from the sales regions of Europe, Brazil, India, China, Japan and USMCA (Automotive sector) and from the management companies and selected subsidiaries of the Defence sector in Germany and abroad undertake preliminary work.

The area structure that was introduced at corporate level in 2018 has been gradually expanded in recent years. Working on an independent or interdisciplinary basis, the Prevention, Regulation Management, Investigation and Data Protection areas 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 decentralized compliance departments to implement the corporate guidelines in a manner that is as efficient as possible and commensurate with the risk. These departments provide their 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, for example 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 to the members of the Automotive and Defence Executive Boards, 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, guidelines, instructions 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 guidelines. It also creates an organizational structure that allows the applicable standards to be publicized across the divisions. If binding legal regulations in individual countries deviate from the rules set out in the compliance management system, the stricter regulation shall apply.

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.

Non-financial aspects of business activities
Compliance

Implementation of the compliance management system is monitored by monthly reports prepared by the compliance officers for the Corporate Compliance Office 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 150 countries and regions. Moreover, the tender process in the Defence sector 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 and in some cases supported by IT tools.

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 the first-time performance of risk inventory recording measures to determine the compliance risks, derive response measures and plan regular repeat measures are defined for different applications. On this basis, a compliance risk assessment was performed for around 100 operational subsidiaries in 2019/2020; this assessment additionally contained questions in the analysis section relating to data protection, money laundering and corporate social responsibility.

As a shared service center, the central Compliance Assessment & Monitoring 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 and whether conflicts of interest are excluded, and determining the general capacity and integrity of the business partner. 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 existing guideline for selecting, checking and monitoring business partners was completely revised last year and now includes, for example, risk-based elements. In this connection, new check criteria from the area of Corporate Social Responsibility have also been included to reflect the growing importance of sustainability. 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 business partner database for selecting, managing and monitoring sales partners, which has been implemented in the Defence sector since 2014, the whole integrity due diligence process in both sectors can now be performed via a secure online platform as well. The rollout of this platform will continue into 2021. Around 1,000 business partners and people who applied for key positions at the Rheinmetall Group were subjected to a check at graded levels in the past fiscal year (previous year: around 870 companies/people).

The Group-wide rollout of the new Code of Conduct, which was published in 2018 and contains not only rules governing compliance and social standards but also requirements regarding the behavior of Rheinmetall employees, was continued in the year under review. An accompanying e-learning program was launched at the start of fiscal 2021.

Data protection compliance organization

The Executive Board is responsible for setting up a Group-wide data protection management system. It entrusted the Chief Compliance Officer with the task of creating the structures required within the compliance organization for the Group-wide implementation of legal data protection requirements and introducing an effective data protection management system (DPMS).

The position of Data Protection Compliance Officer was created within compliance at Group level. The holder of this position manages the data protection compliance officers at the six 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.

Data protection management system

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. Control processes for data-protection-related processes and documentation requirements for the findings of data-protection-related processes and controls are also being implemented.

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 antitrust and competition law. The content of the training is adjusted in accordance with the needs of the participants or supplemented with country-specific or regional peculiarities.

Non-financial aspects of business activities
Compliance

Our employees also 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 spheres of work. 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.

In fiscal 2020, around 4,200 Group employees attended classroom training programs on compliance (e.g. introductory or specialist training). In addition, around 10,600 employees completed compliance training via e-learning platforms in the year under review.

Handling information

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. Following the examination in 2018 of all the technical requirements for the introduction of a whistleblower platform for all companies in the Rheinmetall Group, in the year under review incident management was supported by the Group-wide electronic whistleblower platform "Integrity Line." 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. A new 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 22 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.

Risks

Information on reducing or avoiding compliance risks is provided on page 98.

Non-financial aspects of business activities
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 customers, employees and business partners live. 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 value added 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. We report on the creation and application of value added in 2020 on page 58.

Corporate citizenship

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 or on the Executive Board of Rheinmetall AG. In the year under review, the Rheinmetall Group spent approximately €716 thousand on sponsorship and donated funds of €131 thousand, less than in the previous year on account of the coronavirus pandemic (previous year: €876 thousand and €486 thousand).

We are protecting the people who are protecting us by supplying medical protective equipment. Right in the early stages of the COVID-19 threat, we made a substantial contribution to protecting the population. With our global structure and business locations in over 30 countries, including China, we have a stable industrial network and reliable supplier sources enabling us to support the federal government and other authorities during the coronavirus crisis. Under significant time pressure, we were able to procure large quantities of urgently needed, high-quality personal protective equipment (PPE) such as various types of face masks, protective suits/gowns, protective goggles and protective gloves for medical and nursing staff, ensuring the necessary certification and reliably handling complex logistical processes.

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 the Automotive sector are subjected to extensive testing in accordance with the regulations prescribed by automotive quality and development standards. The Mechatronics division, for example, uses a database-supported process for product safety management, which maps out the entire product lifecycle. The Hardparts 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. Effective September 1, 2020, the Corporate Research & Technology Defence area introduced a new guideline for implementing product safety that applies to the three Defence divisions. It sets out the basic requirements for ensuring the safety of Defence products in line with common standards and methods.

Non-financial aspects of business activities
Social responsibility

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 IndustrieAll 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. In the year under review, in the interests of further developing human rights compliance, key topics were formulated in the categories employment rights, tolerance, protection and safety, which can be used to systematically structure further measures.

Six minimum standards for respecting human rights were also defined for the Rheinmetall Group: no forced labor, no child labor, freedom of association, occupational safety, no discrimination and fair remuneration. In the second half of 2020, the Human Resources departments analyzed the remuneration structures in place at the relevant national companies. The analysis of the results found that the remuneration of production and office workers was above the applicable minimum wage levels in the countries that were analyzed.

Furthermore, an initial draft of a Modern Slavery Statement was formulated for the Rheinmetall Group in the year under review. The Chairman of the Executive Board also gave his approval to Rheinmetall joining the UN Global Compact in 2021. In fiscal 2020, Corporate Compliance expanded the e-learning module on the Code of Conduct, adding a section entitled "Human rights and anti-discrimination." This is a mandatory module that all Rheinmetall employees are required to complete.

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, which started its work in the year under review.

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 page 133 for more information. At the same time, we follow regulatory developments in these areas in our non-EU customer countries, including Switzerland, Great Britain, Australia, Japan and Canada.

In fiscal 2020, we evaluated vulnerable groups of people who might be affected by our business activities. 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.

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.

In the year under review, Dr. Rolf Giebeler, MPA (Harvard), Bonn, General Counsel and Representative Director Law, acted as Representative Director for the company.

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, 2020. The Executive Board and Supervisory Board issued a declaration of conformity in accordance with section 161 of the German Stock Corporation Act, the contents of which were unchanged and which can be found – together with older versions – on the company's website in the section "Group – Corporate Governance."

> "The Executive Board and Supervisory Board of Rheinmetall AG hereby declare that since it issued its last declaration of conformity dated August 21, 2019, until the revised Code as published in the official section of the Federal Gazette on March 20, 2020, came into force on March 20, 2020, Rheinmetall AG has complied with the recommendations of the Government Commission on the German Corporate Governance Code as amended on February 7, 2017, and officially published in the electronic Federal Gazette on April 24, 2017, with one exception, namely the regulatory limit on membership of the Supervisory Board:
>
> The Supervisory Board of Rheinmetall AG has decided not to stipulate any regulatory limit on membership of the Supervisory Board beyond the existing age limit for Supervisory Board members. It is convinced that a rigid regulatory limit on membership of the Supervisory Board, without looking at the respective individual Supervisory Board members, is not a suitable means of ensuring the further improvement and professionalization of the work of the Supervisory Board.
>
> Instead, it is hoped that a flexible composition for the Supervisory Board, including members who have belonged to the Board for different periods and have different experience, and a practical focus on a mixed age structure when searching for candidates will better serve the company's interests. Finally, the company has for some time published information on the length of time that the respective members have belonged to the Supervisory Board, thus enabling shareholders to decide for themselves whether individual Supervisory Board members are suitable for reelection.

* Contents not reviewed by the auditor

Corporate governance
Corporate governance statement

> The Executive Board and Supervisory Board further declare that Rheinmetall AG has complied with and will continue to comply with the recommendations of the Government Commission on the German Corporate Governance Code as amended on December 16, 2019, where applicable, since they were published in the official section of the Federal Gazette on March 20, 2020.
>
> Düsseldorf, August 2020
> Rheinmetall Aktiengesellschaft
> The Supervisory Board The Executive Board"

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 2020.

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.

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 (since October 1, 2020) 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 Born 1963 Nationality | German	Chairman Defence	January 1, 2012, to December 31, 2016 January 1, 2017, to December 31, 2021	Rheinmetall Automotive AG*) Chairman HASCO KSPG Nonferrous Components (Shanghai) Co., Ltd.*) Chairman of the Board of Directors (up to December 1, 2020) Kolbenschmidt Huayu Piston Co., Ltd.*) Vice Chairman of the Board of Directors (up to December 1, 2020) KS HUAYU AluTech GmbH*) Vice Chairman (up to December 10, 2020) Pierburg Huayu Pump Technology Co., Ltd.*) Chairman of the Board of Directors (up to December 1, 2020) Nitrochemie Aschau GmbH*) Chairman (up to March 12, 2020) Nitrochemie Wimmis AG*) President (up to March 12, 2020) Rheinmetall Denel Munition (Pty) Ltd*) Chairman Rheinmetall MAN Military Vehicles GmbH*) Chairman The Dynamic Engineering Solution Pty Ltd Deputy Chairman of the Supervisory Board
Helmut P. Merch Business graduate Born 1956 Nationality | German	CFO Finance and Controlling	January 1, 2013, to December 31, 2017 January 1, 2017, to December 31, 2021	Rheinmetall Automotive AG*) Nitrochemie Aschau GmbH*) (up to March 12, 2020) Nitrochemie Wimmis AG*) (up to March 12, 2020) Rheinmetall Denel Munition (Pty) Ltd*) ElringKlinger AG (since July 7, 2020)
Peter Sebastian Krause Lawyer Born 1960 Nationality | German	Director of Industrial Relations Human Resources	January 1, 2017, to December 31, 2019 January 1, 2020, to December 31, 2024	Rheinmetall Electronics GmbH*) Rheinmetall Landsysteme GmbH*) Chairman Rheinmetall Waffe Munition GmbH*)
Jörg Grotendorst Engineering graduate Born 1970 Nationality | German	Automotive	October 1, 2020, to September 30, 2023	HASCO KSPG Nonferrous Components (Shanghai) Co., Ltd.*) Chairman of the Board of Directors (since December 1, 2020) Kolbenschmidt Huayu Piston Co., Ltd.*) Vice Chairman of the Board of Directors (since December 1, 2020) KS HUAYU AluTech GmbH*) Vice Chairman (since December 10, 2020) Pierburg Huayu Pump Technology Co., Ltd.*) Chairman of the Board of Directors (since December 1, 2020)

December 31, 2020

*) Internal mandates

Corporate governance
Corporate governance statement

In accordance with Article 6(4) of the Articles of Association as amended on May 8, 2018, the Executive Board issues Rules of Procedure. In accordance with the Rules of Procedure dated December 18, 2020, and adopted by the Executive Board, the responsibilities are defined as follows:

Responsibilities of members of the Executive Board of Rheinmetall AG

Armin Papperger	Helmut P. Merch	Jörg Grotendorst	Peter Sebastian Krause
			Director of Industrial Relations
DIVISIONS			
Vehicle Systems Weapon and Ammunition Electronic Solutions		Mechatronics Hardparts Aftermarket	
AREAS			
Business Excellence	Accounting	New Technologies	HR Policies
Compliance	Controlling | Risk Management		HR Strategy
Corporate Social Responsibility	Finance | Treasury		Labour Relations and Labour Law
Corporate Strategy and Development	Tax		Management Development | Rheinmetall Academy
External Communications	Mergers & Acquisitions		Payroll
Internal Communications	Offset Management		Projects
Internal Audit	Purchasing Non-Production Material		Recruiting
Investor Relations	Insurance		
Legal and IP	Information Technology		
Real Estate			
Security			
New Technologies			

December 31, 2020

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.

Until Jörg Grotendorst took up his position on October 1, 2020, according to the resolution of the Executive Board of Rheinmetall AG of December 18, 2019, the Chairman of the Executive Board, Armin Papperger, temporarily assumed responsibility for the Automotive sector on the Executive Board of Rheinmetall AG for the period from January 1, 2020, to September 30, 2020.

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.

Contents not reviewed by the auditor

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.

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.

Corporate governance
Corporate governance statement

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 on page 148. 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 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.

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, Professor Susanne Hannemann and Detlef Moog formerly held management positions in the Rheinmetall Group (1993–2001, 2003–2007 and 1980–2009 respectively), on the shareholder side the Supervisory Board considers these three Supervisory Board members to be independent due to their now many years of work outside the Group or, in the case of Detlef Moog, his retirement in 2010. 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 on page 2 of this annual report.

Contents not reviewed by the auditor

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.

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.

Corporate governance
Corporate governance statement

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 corporate sectors and 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, 2020, the following people were members of the Strategy Committee: Ulrich Grillo (Chair), Dr. Klaus Draeger, Detlef Moog, Dr. Daniel Hay, Dagmar Muth and Markus Schaubel.

Audit Committee – It is the job of the Audit Committee to support 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. Through 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.

As of December 31, 2020, 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, 2020, the Personnel Committee comprised the following members: Ulrich Grillo (Chair), Professor Andreas Georgi, Dr. Daniel Hay and Reinhard Müller.

Contents not reviewed by the auditor

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, 2020, 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, 2020, the Mediation Committee comprised the following members: Ulrich Grillo (Chairman), Professor Dr. Marion A. Weissenberger-Eibl, Dr. Rudolf Luz 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 on page 2 and page 145.

Diversity in the Supervisory Board and Executive Board

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 of the 1976 German Codetermination Act, 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.

Corporate governance
Corporate governance statement

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. In each case, three employee representatives are elected to the Supervisory Board from the Automotive and Defence sectors.

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.

The Supervisory Board has decided not to stipulate any regulatory limit on membership of the Supervisory Board. It is convinced that a rigid regulatory limit on membership of the Supervisory Board, without looking at the respective individual Supervisory Board members, is not a suitable means of ensuring the further improvement and professionalization of the work of the Supervisory Board. Details of the length of time the individual members have belonged to the Supervisory Board can be found on page 2.

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 41 and 72 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 2021 and 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.

Contents not reviewed by the auditor

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, between January 1and September 30, 2020, the Executive Board of Rheinmetall AG consisted of three members and from October 1, 2020, with Jörg Grotendorst taking up his position, of four members as in the previous year. The current responsibilities of the members are shown on page 146.

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 automotive and defence sectors – 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, Peter Sebastian Krause and Jörg Grotendorst 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 automotive and defence industry, 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 50 to 64, with an average age of approximately 58.

Corporate governance
Corporate governance statement

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.

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 on page 207.

On the basis of the Act to Mitigate the Consequences of the COVID-19 Pandemic under Civil, Insolvency and Criminal Procedure Law dated March 27, 2020, the Executive Board, with the approval of the Supervisory Board, resolved on April 3, 2020, to hold the company's Annual General Meeting not on May 5, 2020, in Berlin, but on May 19, 2020, 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, 22,443,290 shares (previous year: 30,433,018), accounting for 51.52% of the share capital (previous year: 69.87%), were represented. With the exception of agenda item 6 (resolution on the approval of the remuneration system for Executive Board members in accordance with section 120a AktG), shareholders and shareholder representatives voted with significant majorities of between 97.59% and 99.98% in favor of the five resolutions on the agenda that were proposed by 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.

Contents not reviewed by the auditor

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 – MMVO)) were published by the company in the prescribed manner immediately after notification of the transaction was received, including on the company's website.

Managers' transactions 2020 €

Publication	Name	Status	Transaction	Shares	Price	Platform
3/18/2020	Professor Dr. Andreas Georgi	Member of the Supervisory Board	Purchase	1,000	46.07	Xetra
3/18/2020	Helmut P. Merch	Member of the Executive Board	Purchase	1,000	44.65	Tradegate
3/19/2020	Ulrich Grillo	Chairman of the Supervisory Board	Purchase	400	47.99	Xetra
3/19/2020	Dr. Jutta Roosen-Grillo	Related party of Ulrich Grillo, Chairman of the Supervisory Board	Purchase	200	44.60	Xetra
3/19/2020	Theresa Marie Grillo	Related party of Ulrich Grillo, Chairman of the Supervisory Board	Purchase	60	45.07	Xetra
3/19/2020	Paulina Karin Grillo	Related party of Ulrich Grillo, Chairman of the Supervisory Board	Purchase	60	45.29	Xetra
3/19/2020	Armin Papperger	Chairman of the Executive Board	Purchase	3,400	44.60	Tradegate
3/24/2020	Detlef Moog	Member of the Supervisory Board	Purchase	1,000	59.43	Xetra
3/27/2020	Dr. Michael Mielke Allocation of shares as a remuneration component as part of the long-term incentive program for managerial staff of the Rheinmetall Group 2019	Member of the Supervisory Board	Allocation	352	68.14	Off-exchange
3/27/2020	Armin Papperger Allocation of shares as a remuneration component as part of the Executive Board remuneration 2019	Chairman of the Executive Board	Allocation	8,804	85.18	Off-exchange
3/27/2020	Helmut P. Merch Allocation of shares as a remuneration component as part of the Executive Board remuneration 2019	Member of the Executive Board	Allocation	4,402	85.18	Off-exchange
3/27/2020	Peter Sebastian Krause Allocation of shares as a remuneration component as part of the Executive Board remuneration 2019	Member of the Executive Board	Allocation	3,081	85.18	Off-exchange

Contents not reviewed by the auditor

Corporate governance
Corporate governance statement

Managers' transactions 2020 €

Publication	Name	Status	Trans-action	Shares	Price	Platform
12/7/2020	Armin Papperger	Chairman of the Executive Board	Purchase	13,000	78.24	Tradegate
12/11/2020	Armin Papperger	Chairman of the Executive Board	Purchase	13,000	78.69	Tradegate
12/11/2020	Helmut P. Merch	Member of the Executive Board	Purchase	1,500	78.61	Tradegate
12/11/2020	Jörg Grotendorst	Member of the Executive Board	Purchase	1,300	78.96	Tradegate
12/14/2020	Peter Sebastian Krause	Member of the Executive Board	Purchase	3,850	78.01	Xetra
12/16/2020	Dr. Michael Mielke	Member of the Supervisory Board	Employee participation program	Not quantifiable		Off-exchange
12/17/2020	Helmut P. Merch	Member of the Executive Board	Purchase	1,500	83.93	Tradegate
12/21/2020	Armin Papperger	Member of the Executive Board	Purchase	12,200	83.08	Tradegate

Transactions involving related third parties are listed in the notes to the consolidated financial statements on page 234.

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 on pages 136 to 140.

Contents not reviewed by the auditor

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 19, 2020, to audit the single-entity and consolidated financial statements for 2020. 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 July 27, 2020, we provided information on the fact that in the second quarter of fiscal 2020 non-cash impairment charges of €300 million were recognized for the Automotive sector. The impairment relates almost entirely to the Automotive Hardparts division. The impairment charges are primarily due to dramatically reduced production volumes in the international automotive industry for 2020 in the wake of the COVID-19 pandemic and to current expert assessments, which – compared with pre-coronavirus forecasts and planning assumptions – anticipate significantly lower growth for passenger cars and light-duty commercial vehicles, even over the medium term. They forecast a global production downturn of over 20% on 2019 levels for the current year. Expert projections suggest that production will not return to pre-crisis levels before 2024.

In addition, on July 27, 2020, we announced that strategic options were being considered in respect of the Automotive sector. In this connection, restructuring provisions of €40 million are anticipated in the third quarter of 2020 that are not recognized as impairment and that will become cash-effective in the period from 2020 to 2022. They mainly include costs for capacity adjustments and production relocations undertaken to optimize the global network of locations in the Hardparts division (€24 million), as well as costs for the realignment and the new structural orientation undertaken to prepare entry into new markets in the Mechatronics division (€16 million).

Rheinmetall AG publishes securities transactions subject to reporting requirements in the media required by law and on its website.

Corporate governance
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, 2020.

Composition of the subscribed capital

The subscribed capital (share capital) of Rheinmetall AG amounted to €111,510,656 as of December 31, 2020 (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 March 25, 2020, the invitation to the Annual General Meeting of Rheinmetall AG on May 5, 2020, in Berlin was published in the electronic Federal Gazette. This invitation already included corresponding information that the Annual General Meeting might have to be canceled or postponed as a result of public health measures of the City of Berlin in connection with the coronavirus pandemic.

On March 27, 2020, the Act to Mitigate the Consequences of the COVID-19 Pandemic under Civil, Insolvency and Criminal Procedure Law was announced. Its Article 2 (Act Concerning Measures Under the Law of Companies, Cooperative Societies, Associations, Foundations and Commonhold Property to Combat the Effects of the COVID-19 Pandemic) made it possible to hold the general meetings of stock corporations as a virtual general meeting in 2020, even without authority being granted under the respective bylaws, without the physical presence of shareholders.

At this point in time, there was considerable uncertainty as to whether and when an Annual General Meeting for 2020 could be held with the shareholders physically in attendance, as it was not possible to foresee the further development of the pandemic and the government-ordered restrictions, e.g. for public meetings. For the company and its shareholders, it was thus uncertain whether the planned Annual General Meeting would take place at all and as a consequence whether a dividend would be paid for fiscal 2019.

The Executive Board resolved on April 3, 2020, with the approval of the Supervisory Board, to hold the company's Annual General Meeting not on May 5, 2020, in Berlin, but on May 19, 2020, 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. 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. Between April 28, 2020, and May 17, 2020 (24:00), using electronic communication via the Rheinmetall AG shareholder portal, shareholders were given the opportunity to direct questions to the Supervisory Board and Executive Board about fiscal 2019.

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, 2020. 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 lockup period. However, this does not apply to retired members of the Executive Board. Eligible staff in Germany were offered Rheinmetall AG shares to purchase on preferential terms as part of the employee participation program during the period under review. A two-year lockup period 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.

Corporate governance
Disclosures required by takeover law

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 and employee participation program, these shares are directly transferred to these individuals subject to a resale lockup period of four or two years. In the case of retired members of the Executive Board, the four-year lockup period does not apply.

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 and 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 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.

Issuing new shares and repurchasing 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. By way of resolution of the Annual General Meeting of May 10, 2016, the Executive Board was authorized, with the approval of the Supervisory Board, to increase the share capital of the company up to May 9, 2021, by issuing, once or several times, new no-par shares in return for contributions in cash and/or in kind up to a total of €50,000,000 (authorized capital). The new shares can also be issued to employees of Rheinmetall AG or any subsidiary it controls. The disapplication of preemption 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 on page 207.

For the purpose of granting shares when options and/or conversion rights are exercised and when option and/or conversion obligations are fulfilled for the holders of bonds with warrants and/or convertible bonds issued on the basis of the authorization, a contingent increase of up to €20 million was carried out on the company's share capital by way of a resolution of the Annual General Meeting on May 10, 2016 (contingent capital). Furthermore, the Executive Board of the company was authorized by resolution of the Annual General Meeting of May 10, 2016, to issue interest-bearing bearer bonds with warrants and/or convertible bonds with a total nominal value of €800 million with a term of up to 20 years on one or several occasions up to May 9, 2021, and to grant the holders of the respective bonds, which carry the same rights, options and conversion rights on new shares of the company up to a total of 7,812,500 shares, in accordance with the more detailed provisions of the conditions for bonds with warrants and/or convertible bonds.

Furthermore, the Executive Board of the company was authorized by resolution of the Annual General Meeting of May 10, 2016, in accordance with section 71(1) no. 8 of the German Stock Corporation Act canceling the previous authorization to acquire treasury shares, to repurchase treasury bearer shares of Rheinmetall AG not to exceed 10% of the current share capital of €111,510,656.00, up to May 9, 2021. Such treasury shares may be acquired via the stock exchange or by public bid directed at all shareholders or by public invitation to submit a purchase bid.

Agreements terminable upon a change of control

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 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.

The contracts relating to the promissory note loans totaling €403 million outstanding as of December 31, 2020, which mature between 2021 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

No compensation arrangements have been made with members of the Executive Board or employees.

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 for fiscal 2020. The report is based on the requirements of the German Commercial Code (HGB) and International Financial Reporting Standards (IFRS) and the German Accountancy Standard (GAS) 17.

Remuneration of the Executive Board

In accordance with the act on the transposition of the Second Shareholder Rights Directive and the new recommendations of the German Corporate Governance Code, the Supervisory Board had reviewed the current remuneration system and approved a series of amendments effective from January 1, 2020.

The current remuneration system already applies for fiscal 2020 to Peter Sebastian Krause (Personnel) and Executive Board member Jörg Grotendorst. For the Chairman of the Executive Board, Armin Papperger, and CFO, Helmut P. Merch, the old remuneration system still applies due to the ongoing contracts.

The Supervisory Board intends to present an overhauled remuneration system, applying to all Executive Board members, for approval to the Annual General Meeting in May 2021.

1. Main features of the current remuneration system for members of the Executive Board of Rheinmetall AG

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. The system offers incentives for the value-creating and long-term development of the company.

The remuneration system aims to ensure that 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 remuneration system is designed to ensure that it is competitive on a national and international scale and thus offer an incentive for dedicated and successful work.

The remuneration system at Rheinmetall AG envisages basic remuneration not linked to performance with fringe benefits and pension benefits on the one hand and, on the other hand, performance-related variable remuneration comprising two components: the one-year short-term incentive (STI) and the long-term incentive (LTI).

This 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.

1.1 Description of the procedure for defining, implementing and reviewing the remuneration system

The remuneration system is defined by the Supervisory Board, which is supported here by the Personnel Committee. The Personnel Committee formulates the structure and individual components of the remuneration system and informs the plenary assembly of the Supervisory Board so that preparations can be made to discuss the remuneration system and pass a resolution. Both the Personnel Committee and Supervisory Board can consult external remuneration experts; care is taken to ensure that external consultants are independent. External legal consultants can also be consulted.

The remuneration system is reviewed by the Personnel Committee every two years and every time an Executive Board remuneration agreement is determined. If necessary, the Personnel Committee then prepares for the benefit of the Supervisory Board any suggestions for adjusting the remuneration system.

The Annual General Meeting passes a resolution on the remuneration system every time it is changed significantly, but at least every four years. If the Annual General Meeting does not authorize the remuneration system, a revised remuneration system is submitted for approval at the latest at the next Annual General Meeting.

When the current remuneration system was being formulated, the Supervisory Board – with the support of the Personnel Committee – also reviewed the appropriateness of the Executive Board remuneration, with the Supervisory Board being supported by a leading 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, the Supervisory Board performed a vertical remuneration comparison, which analyzed the ratio of remuneration levels between the CEO, the ordinary Executive Board members, three levels of management and salaried employees, not only during the current fiscal year but also over time.

No conflicts of interest have been identified among any of the Supervisory Board members in relation to decisions concerning the remuneration system for the Executive Board. In the event that any such conflict of interest should arise when the remuneration system is defined, implemented and reviewed, the Supervisory Board will handle this in the same way as it does any other conflict of interest relating to a member of the Supervisory Board and ensure that the Supervisory Board member in question does not take part in the passing of a resolution or, in the event of a serious conflict of interest, does not even attend the relevant meeting. In the event of a long-term and unresolvable conflict of interest, the Supervisory Board member in question must step down from their position. The early disclosure of conflicts of interest ensures that the decisions of the Supervisory Board and Personnel Committee are not inappropriately influenced.

Remuneration report
Remuneration of the Executive Board

1.2 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.

1.3 Remuneration components

The current remuneration system provides for fixed and variable remuneration components. The fixed remuneration components are the basic remuneration, fringe and pension benefits. The variable, performance-related remuneration comprises the short-term incentive (STI) and the long-term incentive (LTI).

1.3.1 Basic remuneration

Each Executive Board member receives a basic remuneration not linked to performance, which is paid every month in twelve equal parts.

1.3.2 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. Additional 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.

1.3.3 Pension benefits

For persons appointed to the Executive Board for the first time as of January 1, 2014, and who had not previously sat on the Executive Board of Rheinmetall Automotive AG (a transitional provision for the old system applied here), the current remuneration system provides pension benefits 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 value 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. With the new remuneration system, the retirement age is 65.

There is a translational regulation for Executive Board members who acquired claims in the old system. The average defined benefit is 27.5% of the respective basic remuneration and the respective 100% target figure 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 2020 are shown below:

Executive Board pensions in accordance with German Commercial Code ("HGB")

	Expenses in fiscal year				Settlement amount of pension obligation as of December 31	
	Total		Of which interest payable			
€ thousand	2020	2019	2020	2019	2020	2019
Armin Papperger from January 1, 2013 [1]	2,045	1,895	962	920	9,742	7,697
Helmut P. Merch from January 1, 2013 [1]	848	1,341	579	599	7,728	6,879
Peter Sebastian Krause from January 1, 2017	890	693	301	279	3,654	2,764
Jörg Grotendorst from October 1, 2020	357	0	37	0	357	0
Total	**4,140**	**3,929**	**1,879**	**1,798**	**21,481**	**17,340**

[1] Member of the Executive Board since January 1, 2012

Executive Board pensions in accordance with IFRS

	Expenses in fiscal year				Net present value of pension obligations as of December 31	
	Gesamt		Of which interest payable			
€ thousand	2020	2019	2020	2019	2020	2019
Armin Papperger from January 1, 2013 [1]	1,586	1,330	117	141	13,435	10,898
Helmut P. Merch from January 1, 2013 [1]	92	912	92	120	9,742	8,613
Peter Sebastian Krause from January 1, 2017	783	530	39	48	4,787	3,663
Jörg Grotendorst from October 1, 2020	533	0	0	0	533	0
Summe	**2,994**	**2,772**	**248**	**309**	**28,497**	**23,174**

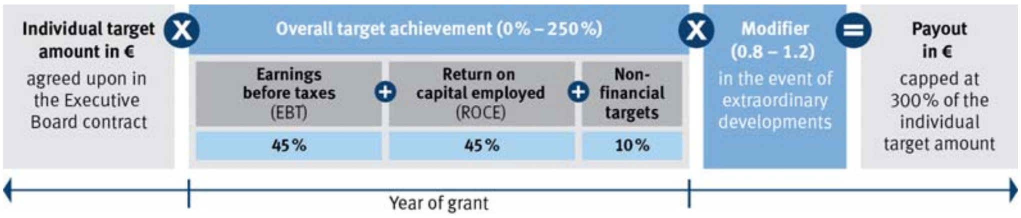
[1] Member of the Executive Board since January 1, 2012

1.3.4 STI

The current remuneration system provides for a one-year STI the level of which depends on the individual target amount in euro agreed in the Executive Board member's employment contract and previously defined financial and non-financial targets. 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 45%. The non-financial targets have a weighting of 10% and include topics such as the implementation of the corporate strategy and sustainability-related aspects. The weighted total of the target achievements across the financial and non-financial targets results in the overall target achievement. In the current remuneration that applies to Peter Sebastian Krause and Jörg Grotendorst, 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.

Remuneration report
Remuneration of the Executive Board

Short-term incentive (STI) – current 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 in the table below.

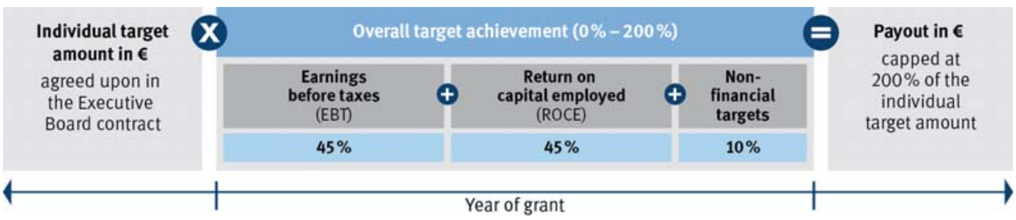
Target achievement is capped at 2.5 times the target value, with this figure being achieved in the current remuneration system with a +20% target overachievement (maximal target fulfillment). If the target achievement is -20% or lower (minimal target achievement), the STI for the fiscal year in question is €0.

Degree of achievement of agreed annual targets			STI payment
≥	20%	under agreed targets	0%
	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%

Following approval of the financial statements by the Supervisory Board, the resulting STI amount is transferred to the relevant Executive Board member with the next salary statement.

Due to the remuneration system that was previously 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 is set to -30%/+10%.

Short-term incentive (STI) – previous remuneration system



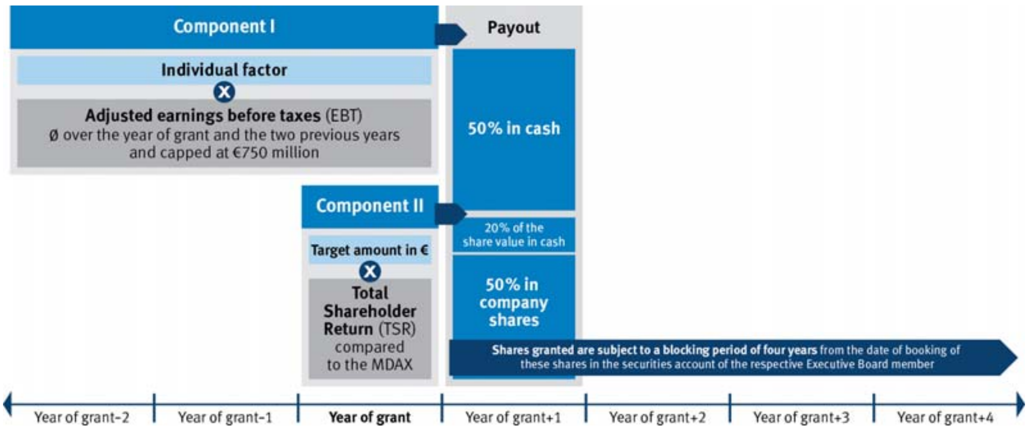
1.3.5 LTI

To achieve an even stronger alignment of Executive Board remuneration to sustainable and long-term corporate development and factor in shareholder interests, the remuneration system envisages the Executive Board members taking part in the company's LTI program.

In the current remuneration system, the LTI is based on two equal components with an equal weighting and is granted in yearly tranches. What is decisive for Component I is a contractually determined individual factor multiplied by the average adjusted EBT for the year for which remuneration is granted, as well as for the two years prior to this year, with the average adjusted EBT being capped at €750 million. The decisive factor for Component II is the average monthly total shareholder return (TSR) of the company's grant year as a proportion of the average monthly TSR of the MDAX. For Component II, an individual target amount has been agreed in the Executive Board employment agreements, which corresponds to a target achievement of 100%.

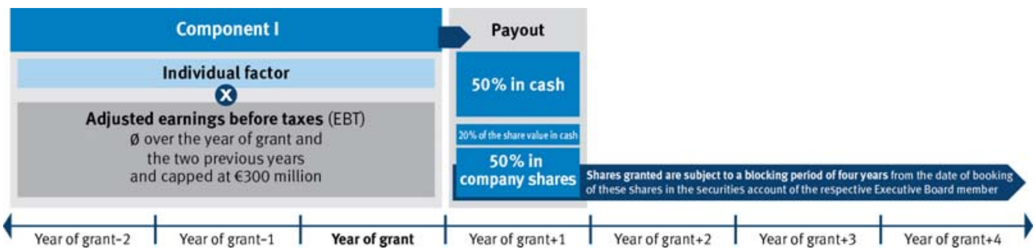
After the grant year, a distribution amount is determined for each of these components, 50% of which is granted in company shares and 50% of which is paid in cash. The shares are subject to a lockup period of four years as of the point at which these shares are posted to the securities account of the 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.

Long-term incentive (LTI) – current remuneration system



Due to the remuneration system that was previously in place, the LTI is designed differently for Armin Papperger and Helmut P. Merch. Thus only Component I is used, with the average EBT over the decisive three years being capped at €300 million.

Long-term incentive (LTI) – previous remuneration system



Remuneration report
Remuneration of the Executive Board

Component I (earnings before tax)
The EBT-oriented component of the LTI is based on the average adjusted EBT of the company in the year for which the remuneration is paid 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 adjusted EBIT is shown on page 171. 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 2020 LTI is calculated on the basis of the average adjusted EBT of the Rheinmetall Group in the years 2018–2020.

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. Deviating from this, for the Chairman of the Executive Board and the CFO, in calculating the distribution amount the decisive adjusted three-year EBIT is capped at €300 million. If the average adjusted three-year EBT is €0.00 or lower, this remuneration component ceases to apply.

Component II (total shareholder return)
The TSR-oriented component of the LTI is based on the monthly average 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 year in question):

Initially 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%).

Information on determining the number of shares and cash payment amount

Both for the remuneration component based on EBT and TSR, 50% of the provisional payment amount is divided by an average Rheinmetall AG share price. Decisive here is the average price from XETRA closing prices on the Frankfurt Stock Exchange over the past five trading days in February on the year following the grant year. The figure is rounded up to the whole share, with the remaining, disregarded fraction converted to euro and added to the cash distribution amount. 20% of the share value is added to the cash distribution amount. Taxes and social security contributions incurred as a result of the granting of the shares and the cash distribution will be withheld from the cash distribution amount before payment. During conversion and additions, the figures are rounded to two decimal places.

Lockup period for the shares granted under LTI

The shares granted under the LTI are subject to a lockup 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 lockup period, the shares granted are exposed to all the opportunities and risks that prevail on the capital market. The four-year lockup 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 lockup 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.

1.4 Possibilities for the company to reclaim variable remuneration components

In accordance with the 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 2020, there were no claims for clawing back variable remuneration components.

1.5 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. Automatic termination is also stipulated in the event that the Executive Board member becomes permanently unable to work during the term of their contract.

Remuneration report
Remuneration of the Executive Board

If the Executive Board contract is terminated during the year, the basic compensation 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 on the day on which the contract ends, although the remuneration system provides for the agreement of an alternative arrangement in the Executive Board contract.

The remuneration system also stipulates a severance payment cap, whereby 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 (including fringe benefits) do not exceed the equivalent of two annual remuneration payments and do not remunerate more than the remaining term of the Executive Board contract. The remuneration system does not allow any special arrangements for a severance payment in the event of a change of control.

2. Executive Board compensation for fiscal 2020

Effective October 1, 2020, Jörg Grotendorst was appointed member of the Executive Board. His appointment as member of the Executive Board of Rheinmetall AG took place for the period from October 1, 2020, to September 30, 2023. When appointing Jörg Grotendorst, compensation was made for lapsing claims at his previous employer, with him receiving a one-time capital payment of €500 thousand in the context of his pension benefits.

2.1 Variable, performance-related remuneration for fiscal 2020

For the Chairman of the Executive Board, Armin Papperger, the STI target amount for fiscal 2020 was €864 thousand, for Helmut P. Merch €475.2 thousand, for Peter Sebastian Krause €360 thousand and for Jörg Grotendorst pro rata €100 thousand.

At the beginning of the fiscal year, in line with the resolved planning, the Supervisory Board had set target values for EBT of €439.0 million and for ROCE of 13.0%. These figures represented a target achievement of 100%. When the planning had been resolved, it was already evident that Group business, but particularly the Automotive sector, would be strongly dependent on the development of the COVID-19 pandemic. For this reason, when the targets were agreed, the Supervisory Board defined a method in line with criteria that can be determined objectively and that cannot be influenced by the Executive Board so as to neutralize the purely COVID-19-related impact on the Automotive sector in terms of EBT and ROCE (COVID-19 mechanism). For fiscal 2020, the application and impact of this COVID-19 mechanism was assessed by the Supervisory Board, following which the auditor carried out the agreed examinations. After application of this mechanism, the EBT target figure was €266.1 million and the ROCE target figure was 8.7%.

For fiscal 2020, the EBT actually achieved was €381.8 million, with the actually achieved ROCE totaling 12.3%. Thus for Armin Papperger and Helmut P. Merch, who are subject to the previous remuneration system, the target achievement for the key financial figures was 200% for the EBT component and 200% for the ROCE component. For Peter Sebastian Krause and Jörg Grotendorst, for whom the current remuneration system applies, the target achievement was 250% for the EBT component and 250% for the ROCE component.

The non-financial targets set for fiscal 2020 were occupational and health protection measures to reduce infection risk in relation to COVID-19 and a communication concept for internal and external communication as a result of the COVID-19 pandemic. The target achievement for the non-financial targets was 100% for Armin Papperger and Helmut P. Merch (previous remuneration system) and 125% for Peter Sebastian Krause and Jörg Grotendorst (current remuneration system). Thus the total target achievement for Armin Papperger is 190%, for Helmut P. Merch 190%, for Peter Sebastian Krause 237.5% and for Jörg Grotendorst 237.5%. In fiscal 2020, no use was made of the modifier and no margin of discretion was exercised.

To calculate the distribution amount in the context of the LTI, the decisive factor is the average adjusted EBT of the last three fiscal years (Component I) and the TSR of Rheinmetall as a ratio of the MDAX (Component II). The personal EBT factor is 0.00067 for Peter Sebastian Krause and 0.00075 for Jörg Grotendorst. As described, for the LTI relating to the Chairman of the Executive Board and the CFO only the EBT component (limited to €300 million) is decisive. Armin Papperger has a personal EBT factor of 0.005 and Helmut P. Merch one of 0.0025. For fiscal years 2018 to 2020, the Rheinmetall Group generated an average adjusted EBT of €458 million:

Adjusted EBT € million

	2020	2019
EBIT	**89**	**512**
One-off expenses and income in connection with:		
Equity investements	78	(2)
Properties	23	(2)
Restructuring	55	24
Other	199	24
EBIT (adjusted)	444	533
Net interest	(33)	(35)
EBT (adjusted)	**411**	498

In comparison to the MDAX companies, the average TSR at Rheinmetall during the grant year was on the 23rd percentile. This represents target achievement of 46.154%.

On the basis of the reference share price of €85.18 for the end of February 2020, in the context of the LTI for fiscal 2019 a total of 20,689 shares were transferred to the Executive Board of Rheinmetall AG on March 27, 2020. The CEO Armin Papperger received 8,804 shares, while Helmut P. Merch and Horst Binnig each received 4,402 shares and Peter Sebastian Krause received 3,081 shares. The transfer of shares for the LTI for fiscal 2020 will take place on March 26, 2021, based on the reference share price as of the end of February 2021.

Remuneration report
Remuneration of the Executive Board

2.2 Itemized total remuneration for fiscal 2020

Itemized details of the remuneration of the Executive Board for fiscal 2020 can be found in the following table, in addition to the respective values for the previous year:

	Armin Papperger Chairman of the Executive Board from January 1, 2013 [1]					
	2020				**2019**	
€ thousand	Benefits granted			Benefits received	Benefits granted (target)	Benefits received
	Target	Min.	Max.			
Basic remuneration	1,296	1,296	1,296	1,296	1,200	1,200
Fringe benefits	34	34	34	34	32	32
Total	**1,330**	**1,330**	**1,330**	**1,330**	**1,232**	**1,232**
Short-term variable remuneration (STI)	864	-	1,728	1,642	800	1,424
Long-term variable remuneration (LTI)						
*of which cash component**	900	-	900	900	900	900
of which share component	750	-	750	750	750	750
Total**	**3,844**	**1,330**	**4,708**	**4,621**	**3,682**	**4,306**
Pension expenses	1,469	1,469	1,469	1,469	1,189	1,189
Total remuneration	**5,312**	**2,798**	**6,176**	**6,090**	**4,872**	**5,495**

[1] Member of the Executive Board since January 1, 2012

* Also contains the additional payment equivalent to 20% of the share value

**The subtotal corresponds to the total remuneration in accordance with section 314(1) no. 6 German Commercial Code ("HGB") in conjunction with GAS 17

	Helmut P. Merch Member of the Executive Board from January 1, 2013					
	2020				**2019**	
€ thousand	Benefits granted			Benefits received	Benefits granted (target)	Benefits received
	Target	Min.	Max.			
Basic remuneration	713	713	713	713	660	660
Fringe benefits	26	26	26	26	26	26
Total	**739**	**739**	**739**	**739**	**686**	**686**
Short-term variable remuneration (STI)	475	-	950	903	440	783
Long-term variable remuneration (LTI)						
*of which cash component**	450	-	450	450	450	450
of which share component	375	-	375	375	375	375
Total**	**2,039**	**739**	**2,515**	**2,467**	**1,951**	**2,294**
Pension expenses	-	-	-	-	792	792
Total remuneration	**2,039**	**739**	**2,515**	**2,467**	**2,743**	**3,086**

* Also contains the additional payment equivalent to 20% of the share value

** The subtotal corresponds to the total remuneration in accordance with section 314(1) no. 6 German Commercial Code ("HGB") in conjunction with GAS 17

€ thousand	Peter Sebastian Krause Member of the Executive Board from January 1, 2017					
	2020				2019	
	Benefits granted			Benefits received	Benefits granted (target)	Benefits received
	Target	Min.	Max.			
Basic remuneration	540	540	540	540	443	443
Fringe benefits	36	36	36	36	35	35
Total	**576**	**576**	**576**	**576**	**478**	**478**
Short-term variable remuneration (STI)	360	-	900	855	308	596
Long-term variable remuneration (LTI)						
*of which cash component**	302	-	603	277	315	315
of which share component	251	-	503	231	263	263
Total**	**1,488**	**576**	**2,581**	**1,938**	**1,364**	**1,652**
Pension expenses	744	744	744	744	476	476
Total remuneration	**2,233**	**1,320**	**3,325**	**2,683**	**1,840**	**2,128**

* Also contains the additional payment equivalent to 20% of the share value

** The subtotal corresponds to the total remuneration in accordance with section 314(1) no. 6 German Commercial Code ("HGB") in conjunction with GAS 17

€ thousand	Jörg Grotendorst Member of the Executive Board from October 1, 2020					
	2020				2019	
	Benefits granted			Benefits received	Benefits granted (target)	Benefits received
	Target	Min.	Max.			
Basic remuneration	150	150	150	150	-	-
Fringe benefits	3	3	3	3	-	-
Total	**153**	**153**	**153**	**153**	**-**	**-**
Short-term variable remuneration (STI)	100	-	250	238	-	-
Long-term variable remuneration (LTI)						
*of which cash component**	84	-	169	77	-	-
of which share component	70	-	141	65	-	-
Total**	**408**	**153**	**712**	**532**	**-**	**-**
Pension expenses	533	533	533	533	-	-
Total remuneration	**940**	**686**	**1,245**	**1,065**	**-**	**-**

* Also contains the additional payment equivalent to 20% of the share value

** The subtotal corresponds to the total remuneration in accordance with section 314(1) no. 6 German Commercial Code ("HGB") in conjunction with GAS 17

In fiscal 2020, Rheinmetall AG and its subsidiaries did not grant Executive Board members any advance payments or loans, nor were any contingent liabilities entered into in their favor.

Remuneration report
Remuneration of the Executive Board

3. Planned overhaul of Executive Board remuneration and say on pay at the Annual General Meeting in 2021

In the context of the resolution on approving Executive Board remuneration at the Annual General Meeting in 2020, in consultation with the Personnel Committee, the Supervisory Board is comprehensively overhauling the current remuneration system.

By embedding and mapping relevant key indicators in an even more comprehensive fashion, the overhauled remuneration system is to be aligned even more closely to Rheinmetall's strategy and the sustainable success of the company. In the process, the Supervisory Board is also taking account of investor feedback and the relevant recommendations of voting rights consultants made in the context of the say on pay 2020.

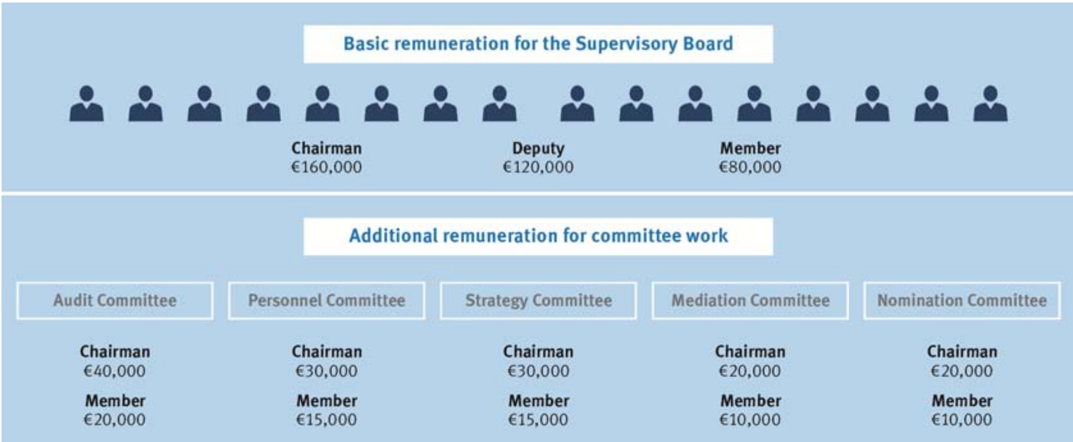
The Supervisory Board intends to present the overhauled remuneration system to the Annual General Meeting for approval in May 2021. More detailed information on the key adjustments to the remuneration system will be presented and explained before the Annual General Meeting in 2021.

Remuneration report
Remuneration of the Supervisory Board

Remuneration of the Supervisory Board

The current remuneration regulations for the Supervisory Board 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. The remuneration of the Supervisory Board consists of fixed remuneration only. It takes account of the responsibilities and scope of activities of the Supervisory Board members.

Remuneration of the members of the Supervisory Board and its committees



The shareholder representatives on the Supervisory Board received the following remuneration for fiscal 2020:

€		Fixed remuneration	Remuneration for committee work	2020	2019
Ulrich Grillo	Chairman of the Supervisory Board and Chairman of the Strategy, Personnel, Mediation and Nomination Committees and member of the Audit Committee	160,000	120,000	280,000	280,000
Dr.-Ing. Dr.-Ing. E. h. Klaus Draeger	Member of the Supervisory Board and member of the Strategy Committee	80,000	15,000	95,000	95,000
Professor Dr. Andreas Georgi	Member of the Supervisory Board and Personnel Committee and Chairman of the Audit Committee	80,000	55,000	135,000	135,000
Professor Dr. Susanne Hannemann	Member of the Supervisory Board and member of the Audit Committee	80,000	20,000	100,000	100,000
Dr. Franz Josef Jung	Member of the Supervisory Board and Nomination Committee	80,000	10,000	90,000	90,000
Detlef Moog	Member of the Supervisory Board and member of the Strategy Committee	80,000	15,000	95,000	95,000
Klaus-Günter Vennemann	Member of the Supervisory Board and Nomination Committee	80,000	10,000	90,000	90,000
Univ.-Prof. Dr. Marion A. Weissenberger-Eibl	Member of the Supervisory Board and member of the Mediation Committee	80,000	10,000	90,000	90,000
Total for shareholder representatives		720,000	255,000	**975,000**	**975,000**

Figures exclude value-added tax

Remuneration report
Remuneration of the Supervisory Board

The employee representatives in the Supervisory Board who are members of the trade union and forward their Supervisory Board remuneration to the Hans Böckler Foundation in accordance with the guidelines of the Federation of German Trade Unions received the following remuneration for fiscal 2020:

€		Fixed remuneration	Remuneration for committee work	2020	2019
Dr. Rudolf Luz (up to June 30, 2020)	Deputy Chairman of the Supervisory Board and member of the Strategy, Personnel, Audit and Mediation Committees	59,672	29,836	89,508	180,000
Dr. Daniel Hay	Up to June 30, 2020 Member of the Supervisory Board and member of the Personnel Committee From July 13, 2020 Deputy Chairman of the Supervisory Board Deputy Chairman of the Personnel Committee Member of the Audit Committee Member of the Strategy Committee	98,798	36,147	134,945	95,000
Roswitha Armbruster (up to June 30, 2020)	Member of the Supervisory Board and member of the Audit Committee	39,781	9,945	49,727	100,000
Ralf Bolm (from July 1, 2020)	Member of the Supervisory Board From July 13, 2020 Member of the Audit Committee	40,219	9,399	49,618	0
Dr. Michael Mielke	Member of the Supervisory Board	80,000	0	80,000	80,000
Reinhard Muller	Member of the Supervisory Board and member of the Mediation Committee From July 13, 2020 Member of the Personnel Committee	80,000	17,049	97,049	90,000
Dagmar Muth	Member of the Supervisory Board and Member of the Strategy Committee	80,000	15,000	95,000	95,000
Barbara Resch (from July 1, 2020)	Member of the Supervisory Board	40,219	0	40,219	0
Markus Schaubel	Member of the Supervisory Board and member of the Strategy Committee	80,000	15,000	95,000	95,000
Sven Schmidt	Member of the Supervisory Board and member of the Audit Committee	80,000	20,000	100,000	100,000
Total for employee representatives		678,689	152,377	**831,066**	**835,000**
Total for Supervisory Board		**1,398,689**	**407,377**	**1,806,066**	**1,810,000**

Figures exclude value-added tax

In addition, Rheinmetall refunds VAT on Supervisory Board remuneration to the members of the Supervisory Board upon request.

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.

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.

In the year under review, the members of the Supervisory Board did not receive any further remuneration or benefits for personal services, especially consultancy and mediation services.

As in previous years, the Supervisory Board members did not receive any advance payments or loans, nor were any contingent liabilities entered into in their favor.

Düsseldorf, March 1, 2021

Rheinmetall Aktiengesellschaft
The Executive Board

Armin Papperger   Helmut P. Merch   Peter Sebastian Krause   Jörg Grotendorst

179
CONSOLIDATED FINANCIAL STATEMENTS 2020

Rheinmetall Group
Balance sheet as of December 31, 2020

€ million	Notes	12/31/2020	12/31/2019
Assets			
Goodwill	(8)	476	567
Other intangible assets	(8)	240	233
Right-of-use asset	(9)	233	204
Property, plant and equipment	(10)	1,132	1,361
Investment property	(11)	39	42
Investments accounted for using the equity method	(12)	288	309
Other non-current assets	(15)	272	255
Deferred taxes	(29)	249	224
Non-current assets		**2,928**	**3,195**
Inventories	(13)	1,573	1,463
Contract asset	(22)	352	388
Trade receivables	(22)	1,170	1,147
Other current assets	(15)	192	242
Income tax receivables		24	41
Liquid financial assets	(14)	-	20
Cash and cash equivalents	(16)	1,027	920
Current assets		**4,339**	**4,220**
Total assets		**7,267**	**7,415**
Equity and liabilities			
Share capital		112	112
Capital reserves		556	553
Retained earnings		1,233	1,478
Treasury shares		(13)	(17)
Rheinmetall AG shareholders' equity		**1,888**	**2,125**
Non-controlling interests		165	146
Equity	(17)	**2,053**	**2,272**
Provisions for pensions and similar obligations	(18)	1,177	1,169
Other non-current provisions	(19)	191	214
Non-current financial debt	(20)	873	880
Other non-current liabilities	(21)	82	86
Deferred taxes	(29)	4	16
Non-current liabilities		**2,326**	**2,365**
Other current provisions	(19)	796	709
Current financial debt	(20)	150	112
Contract liability	(22)	968	948
Trade liabilities		700	695
Other current liabilities	(21)	198	215
Income tax liabilities		76	99
Current liabilities		**2,888**	**2,779**
Total equity and liabilities		**7,267**	**7,415**

Rheinmetall Group
Income statement for fiscal 2020

€ million	Notes	2020	2019
Sales	(22)	**5,875**	**6,255**
Changes in inventories and work performed by the enterprise and capitalized	(23)	129	236
Total operating performance		**6,004**	**6,491**
Other operating income	(24)	123	186
Cost of materials	(25)	3,058	3,444
Staff costs	(26)	1,723	1,678
Amortization, depreciation and impairment	(27)	557	280
Other operating expenses	(28)	693	781
Income from investments carried at equity		20	37
Other net financial income		(26)	(20)
Earnings before interest and taxes (EBIT)		**89**	**512**
Interest income		9	11
Interest expenses		(42)	(46)
Earnings before taxes (EBT)		**57**	**477**
Income taxes	(29)	(56)	(123)
Earnings after taxes		**1**	**354**
Of which:			
Non-controlling interests		*27*	*19*
Rheinmetall AG shareholders		*(27)*	*335*
Earnings per share	(30)	€(0.62)	€7.77

Statement of comprehensive income for fiscal 2020

€ million	2020	2019
Earnings after taxes	1	354
Remeasurement of net defined benefit liability from pensions	(34)	(97)
Other comprehensive income from investments accounted for using the equity method	-	(3)
Amounts not reclassified to the income statement	**(34)**	**(100)**
Change in value of derivative financial instruments (cash flow hedge)	(4)	13
Currency translation difference	(73)	32
Other comprehensive income from investments accounted for using the equity method	(10)	1
Amounts reclassified to the income statement	**(87)**	**46**
Other comprehensive income (after taxes)	**(120)**	**(54)**
Total comprehensive income	**(120)**	**299**
Of which:		
Non-controlling interests	*21*	*21*
Rheinmetall AG shareholders	*(140)*	*279*

Rheinmetall Group
Cash flow statement for fiscal 2020

€ million	2020	2019
Earnings after taxes	1	354
Amortization, depreciation and impairment	557	280
Allocation of CTA assets to secure pension and partial retirement obligations	(42)	(20)
Changes in pension provisions	(4)	(2)
Income from disposals of non-current assets	(6)	-
Changes in other provisions	88	23
Changes in working capital	(119)	31
Changes in receivables, liabilities (without financial debt) and prepaid & deferred items	(28)	(68)
Pro rata income from investments accounted for using the equity method	(10)	(37)
Dividends received from investments accounted for using the equity method	21	17
Other non-cash expenses and income	(5)	24
Cash flows from operating activities [1)]	**453**	**602**
Investments in property, plant and equipment, intangible assets and investment property	(237)	(288)
Cash receipts from the disposal of property, plant and equipment, intangible assets and investment property	20	8
Cash receipts from disinvestments in subsidiaries and financial assets	1	-
Payments for investments in subsidiaries and financial assets	(3)	(56)
Cash receipts from subsequent purchase price adjustment	10	-
Cash receipts from the disposal of current (liquid) financial assets	21	329
Payments for the purchase of current (liquid) financial assets	-	(245)
Cash flows from investing activities	**(188)**	**(252)**
Increases in shares in subsidiaries	-	(136)
Dividends paid out by Rheinmetall AG	(104)	(90)
Other profit distributions	(2)	(2)
Borrowing of financial debt	444	236
Repayment of financial debt	(487)	(166)
Cash flows from financing activities	**(148)**	**(158)**
Changes in cash and cash equivalents	**117**	**191**
Changes in cash and cash equivalents due to exchange rates	(10)	4
Total change in cash and cash equivalents	**108**	**195**
Opening cash and cash equivalents January 1	**920**	**724**
Cash and cash equivalents Dec. 31	**1,027**	**920**

[1)] *Of which:*

Net interest of €-16 million (previous year: €-19 million), net income taxes of €-85 million (previous year: €-144 million)

Rheinmetall Group
Statement of changes in equity

€ million	Share capital	Capital reserves	Total retained earnings	Treasury shares	Rheinmetall AG shareholders' equity	Non-controlling interests	Equity
As of 1/1/2019	**112**	**547**	**1,384**	**(21)**	**2,022**	**151**	**2,173**
Earnings after taxes	-	-	335	-	335	19	354
Other comprehensive income	-	-	(56)	-	(56)	2	(54)
Total comprehensive income	-	-	279	-	279	21	299
Dividend payout	-	-	(90)	-	(90)	(2)	(92)
Disposal of treasury shares	-	-	-	4	4	-	4
Changes in shares in subsidiaries	-	-	(92)	-	(92)	(43)	(136)
Change/Adjustment of circle of consolidation	-	-	-	-	-	18	18
Other changes	-	6	(2)	-	4	2	6
As of 12/31/2019	**112**	**553**	**1,478**	**(17)**	**2,125**	**146**	**2,272**
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**

Composition of retained earnings:

€ million	Currency translation difference	Remeasurement of net defined benefit liability from pensions	Hedges	Other comprehensive income from investments accounted for using the equity method	Other reserves	Total retained earnings
As of 1/1/2019	(14)	(432)	7	(5)	1,828	**1,384**
Earnings after taxes	-	-	-	-	335	335
Other comprehensive income	28	(92)	10	(3)	-	(56)
Total comprehensive income	28	(92)	10	(3)	335	279
Dividend payout	-	-	-	-	(90)	(90)
Changes in shares in subsidiaries	-	-	-	-	(92)	(92)
Other changes	-	(3)	-	-	1	(2)
As of 12/31/2019	13	(527)	17	(8)	1,981	**1,478**
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)
Other changes	-	-	-	-	-	-
As of 12/31/2020	(53)	(559)	11	(17)	1,850	**1,233**

Notes to the consolidated financial statements
Segment report

€ million		Automotive		Defence		Others/ Consolidation		Group	
		2020	**2019**	**2020**	**2019**	**2020**	**2019**	**2020**	**2019**
Income statement									
External sales		2,150	2,736	3,722	3,519	3	-	5,875	6,255
Internal sales		1	1	1	3	(2)	(3)	-	-
Segment sales		2,151	2,736	3,723	3,522	-	(3)	5,875	6,255
Operating result		33	184	414	343	(21)	(22)	426	505
Special items		(340)	2	3	(2)	-	7	(337)	7
EBIT	(1)	(307)	186	417	341	(21)	(15)	89	512
of which:									
At equity income		19	29	19	8	-	-	38	37
Impairment of at equity investments		(18)	-	-	-	-	-	(18)	-
Income from subsequent purchase price payment		-	-	10	-	-	-	10	-
Amortization and depreciation		146	160	118	109	7	8	271	278
Impairment		*283*	*1*	*3*	-	-	-	286	*2*
Interest income		2	4	4	12	3	(5)	9	11
Interest expenses		(22)	(22)	(34)	(36)	15	11	(42)	(46)
EBT		(328)	169	387	317	(2)	(9)	57	477
Other data									
Operating free cash flow		18	73	174	266	24	(26)	217	314
Order intake		2,130	2,705	6,387	5,186	(2)	(3)	8,516	7,889
Order backlog Dec. 31		426	447	12,942	10,399	(1)	-	13,367	10,846
Employees Dec. 31 (FTE)		10,631	11,405	12,344	12,100	293	275	23,268	23,780
Net financial debt (-)/Net liquidity (+)	(2)	(25)	52	313	240	(284)	(345)	4	(52)
Pension provisions	(3)	390	401	728	702	59	65	1,177	1,169
Equity	(4)	784	1,113	1,507	1,384	(237)	(225)	2,053	2,272
Capital employed	-(2)+(3)+(4)	1,199	1,462	1,922	1,846	105	185	3,226	3,493
Average capital employed	(5)	1,330	1,423	1,884	1,746	145	165	3,359	3,334
ROCE (in %)	(1) / (5)	(23.1)	13.1	22.2	19.6	-	-	2.7	15.4

Disclosures according to region

€ million	Germany		Other Europe		Americas		Asia		Miscellaneous		Group	
	2020	**2019**	**2020**	**2019**	**2020**	**2019**	**2020**	**2019**	**2020**	**2019**	**2020**	**2019**
Segment sales Defence	1,631	1,434	748	693	164	113	606	594	574	688	3,723	3,522
Segment sales Automotive	387	515	908	1,173	443	542	395	486	19	20	2,151	2,736
Others/Consolidation	-	(3)	-	-	-	-	-	-	-	-	-	(3)
Group sales	2,019	1,946	1,656	1,866	607	655	1,001	1,080	592	708	5,875	6,255
in % of Group sales	34	31	28	30	10	10	17	17	10	11	-	-
Assets	1,239	1,379	507	588	117	216	116	144	140	79	2,119	2,406

(1) General disclosures

Rheinmetall AG is the parent 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 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 were prepared by the Executive Board on March 1, 2021.

The Rheinmetall Group is an international group for leading technologies in the mobility and security segments. 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.

(2) Effects of the coronavirus pandemic on accounting

In fiscal 2020, the Rheinmetall Group's business performance was considerably influenced by the effects of the corona crisis. There were moderating effects both as a result of measures introduced by governments worldwide and also by company measures initiated by the management. The impact of Covid-19 varied considerably depending on the segment. While the Defence sector increased both sales and operating result year-on-year despite the difficult general economic situation, the Automotive sector posted sales declines and a deterioration in operating result. The effects of the coronavirus pandemic and the measures immediately taken by the management to secure the Rheinmetall Group's earnings and liquidity situation are described in detail in the combined management report.

The developments in connection with the coronavirus pandemic made it necessary in the fiscal year to review the assumptions and estimates used to measure assets, liabilities, income, and expenses. Particularly relevant for the Rheinmetall Group was impairment testing of assets.

The substantial sales declines in the first half of 2020 and the significantly lowered growth forecasts for the international automotive industry on account of the corona crisis necessitated an impairment test on the carrying amounts recognized in the Automotive sector as of June 30, 2020. For this purpose, the latest corporate planning approved by the Supervisory Board, on which measurement as of December 31, 2019 was based, was adjusted on the basis of the data available at the time and the management's expectations. In light of the updated assumptions and estimates, the total impairment in the Automotive sector on recognized goodwill, other intangible assets and property, plant and equipment, investments accounted for using the equity method, and to a minor extent inventories, amounted to €300 million as of June 30, 2020. The impairment relates almost entirely to the Hardparts division. It resulted primarily from the international automotive industry's drastically reduced production volume on account of the coronavirus pandemic in the half-year of 2020 and from significantly lower – compared with pre-corona crisis forecasts and planning assumptions – growth forecasts for passenger cars and light commercial vehicles even over the medium term.

Notes to the consolidated financial statements
Accounting principles

(3) New and amended accounting standards

Accounting standards, amendments to standards and interpretations applied for the first time in fiscal 2020:

Standard	Name	Effective date
Amendments relating to the Conceptual Framework	Amendments to References to the Conceptual Framework in IFRS Standards	1/1/2020
Amendments to IAS 1 and IAS 8	Definition of Material	1/1/2020
Amendments to IFRS 9, IAS 39 and IFRS 7	Interest Rate Benchmark Reform (Phase 1)	1/1/2020
Amendments to IFRS 3	Definition of a Business	1/1/2020
Amendments to IFRS 16	COVID-19-Related Rent Concessions	6/1/2020

Together with the revised Conceptual Framework which was published on March 29, 2018, the IASB also issued amendments to references to the Conceptual Framework which update the corresponding references in various IFRSs and clarify which version of the Conceptual Framework applies in which case.

The amendments to IAS 1 and IAS 8 are intended to standardize the definitional of material in all IFRSs and the Conceptual Framework. In addition, the amended requirements are intended to prevent material information from being obscured by immaterial information.

The amendments to IFRS 9, IAS 39, and IAS 7 provide certain expedients in connection with the IBOR reform. The expedients relate to the application of hedge accounting and mean that the IBOR reform will not generally result in the discontinuation of hedge accounting.

The amendments to IFRS 3 provide clarifications on the definition of a business. The more precise information aims to simplify the definition of the acquisition of a business and a group of assets.

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. Rheinmetall did not use the expedient in fiscal 2020.

The application of the new and amended standards and interpretations had no material effect on the presentation of the Rheinmetall Group's net assets, financial position and results of operations.

Accounting standards, amendments to standards and interpretations published but not yet applied in fiscal 2020:

Standard	Name	Effective date
Endorsed by the EU		
Amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16	Interest Rate Benchmark Reform (Phase 2)	1/1/2021
Endorsement by the EU pending [1)]		
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	Classification of Liabilities as Current or Non-Current	1/1/2023
IFRS 17 including Amendments to IFRS 17	Insurance Contracts	1/1/2023
Amendments to IAS 1	Disclosure of Accounting Policies	1/1/2023
Amendments to IAS 8	Definition of Accounting Estimates	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 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 in 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 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

Notes to the consolidated financial statements
Accounting principles

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.

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 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.

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.

(4) Basis of consolidation

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. Jointly controlled entities in which Rheinmetall AG has rights to the net assets of the investee are included in the consolidated financial statements using the equity method. Entities over which Rheinmetall AG can exert significant influence (associates) are also recognized using the equity method.

Scope of consolidation – companies included

	12/31/2019	Additions	Disposals	12/31/2020
Fully consolidated subsidiaries				
Germany	48	5	1	52
Foreign	108	3	3	108
	156	**8**	**4**	**160**
Joint Operations				
Germany	-	3	-	3
	-	**3**	**-**	**3**
Investments accounted for using the equity method				
Germany	18	-	1	17
Foreign	19	-	2	17
	37	**-**	**3**	**34**

In fiscal 2020, a total of four companies were added to the group of consolidated subsidiaries through being founded and four through being acquired. One company was merged with other Group companies; three companies left the consolidated group due to liquidation.

(5) Consolidation principles

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.

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.

With joint operations the assets and liabilities as well as the expenses and income are included in the consolidated financial statements on a pro rata basis. Investments in associates and joint ventures are recognized using the equity method. 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 associate or joint venture 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 associate / joint venture, these are corrected on a pro rata basis.

Notes to the consolidated financial statements
Accounting principles

(6) 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).

(7) 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 attributed to the purchase (with the exception of company acquisitions as defined by IFRS 3 and financial instruments measured at fair value). 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 also comprise material and production overheads including production-related depreciation and social security expenses. 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 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 by straight-line charges from the date of first use over the economic lives.

The measurement is subject to the following useful lives:

	Years
Concessions and industrial property rights	3–15
Development costs	5–10
Customer relations	5–15
Technology	5–15

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.

	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.

Notes to the consolidated financial statements
Accounting principles

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 and in the case of one financial asset not measured at fair value with changes in fair value recognized in profit or loss, plus incidental costs. 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 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.

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.

Notes to the consolidated financial statements
Accounting principles

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 such as 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 obligations	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

Notes to the consolidated financial statements
Accounting principles

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 €476 million as of December 31, 2020 (previous year: €567 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 (8).

The carrying amounts of other intangible assets of €240 million (previous year: €233 million), right-of-use assets of €233 million (previous year: €204 million), property, plant and equipment of €1,132 million (previous year: €1,361 million) and investment property of €39 million (previous year: €42 million) are assessed as of December 31, 2020 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.

The measurement of pension provisions and similar obligations of €1,177 million as of December 31, 2020 (previous year: €1,169 million), is 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 (18). 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 directly in equity.

The recognition of sales over time in the amount of €1,988 million in fiscal 2020 (previous year: €1,968 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 €249 million as of December 31, 2020 (previous year: €224 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 represent 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 accordingly in the periods in question.

Judgements – 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 Defence segment 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.

Notes to the consolidated financial statements
Other explanatory information

(8) Goodwill, other intangible assets

€ million	Goodwill	Development costs	Sundry other intangible assets	Total
Cost				
As of 1/1/2019	550	360	391	1,301
Additions	-	41	14	55
Disposals	-	(116)	(20)	(136)
Book transfers	-	12	1	13
Adjustment in scope of consolidation	16	-	32	48
Currency differences	1	2	3	6
As of 12/31/2019 / 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	**562**	**332**	**424**	**1,318**

€ million	Goodwill	Development costs	Sundry other intangible assets	Total
Amortization and depreciation/impairment				
As of 1/1/2019	-	274	305	579
Current period (27)	-	16	25	41
Disposals	-	(116)	(20)	(136)
Currency differences	-	1	2	3
As of 12/31/2019 / 1/1/2020	**-**	**175**	**312**	**487**
Current period (27)	88	21	28	137
Reversal	-	(5)	-	(5)
Disposals	-	(7)	(4)	(11)
Currency differences	(1)	(1)	(5)	(7)
As of 12/31/2020	**86**	**185**	**331**	**602**
Carrying amount as of Dec. 31, 2019	567	123	110	799
Carrying amount as of Dec. 31, 2020	**476**	**147**	**93**	**716**

Goodwill is managed at the level of the Automotive and Defence sectors and regularly tested for impairment.

The substantial sales declines in the first half of 2020 and the significantly lowered growth forecasts for the international automotive industry on account of the corona crisis necessitated an impairment test on the carrying amounts recognized in the Hardparts division as early as of June 30, 2020. In light of the updated assumptions and estimates, as of June 30, 2020 total impairment in the Automotive sector amounted to €300 million. The discount rate after taxes used in the DCF measurement was 7.4% (WACC before taxes: 8.3%). Goodwill of €88 million at the Hard Parts division was written off in full. Any additional impairment was allocated to the total carrying amount of the cash-generating unit on the basis of the share of the carrying amount of the individual asset, taking account of minimum value thresholds for individual assets. The impairment relates almost entirely to the Hard Parts division. For the division the recoverable amount was €215 million.

Goodwill recognized for the other divisions was tested for impairment as of December 31, 2020. 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. For periods after the detailed planning phase, cash flows are extrapolated from the last planning period, taking into account growth rates based on the long-term inflation forecast.

In the Rheinmetall Group, the corporate plan is prepared on the basis of empirical and current forecast data. Within the Defence sector, 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 by Automotive 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.

The discount rates for each sector and the carrying amounts of the goodwill of the divisions are shown below.

€ million	12/31/2020			12/31/2019		
	Carrying amount	WACC before taxes	WACC after taxes	Carrying amount	WACC before taxes	WACC after taxes
Defence divisions						
Weapon and Ammunition	179	9.4%	6.9%	179	8.2%	6.1%
Electronic Solution	118	9.8%	7.2%	120	9.0%	6.7%
Vehicle Systems	97	9.5%	6.9%	98	8.5%	6.3%
Automotive divisions						
Mechatronics	67	9.7%	7.3%	67	9.7%	7.3%
Hardparts	-	-	-	88	8.0%	7.1%
Aftermarket	15	11.2%	8.3%	15	10.8%	8.0%

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 €47 million (previous year: €41 million), €251 million was recognized as expenses for research and development costs in 2020 (previous year: €238 million).

Notes to the consolidated financial statements
Other explanatory information

(9) 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.

€ million	Property – land	Property – buildings	Passenger cars	Other right-of-use assets	Total
Cost					
As of 1/1/2019	22	164	18	7	210
Additions	-	57	7	8	72
Disposals	-	(3)	(1)	-	(4)
Book transfers	-	-	-	-	-
Currency differences	-	2	-	-	2
As of 12/31/2019 / 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	**33**	**271**	**28**	**15**	**349**

€ million	Property – land	Property – buildings	Passenger cars	Other right-of-use assets	Total
Amortization and depreciation/impairment					
As of 1/1/2019	1	31	6	2	40
Current period	1	28	8	3	39
Disposals	-	(2)	(1)	-	(4)
Book transfers	-	-	-	-	-
Currency differences	-	1	-	-	1
As of 12/31/2019 / 1/1/2020	2	58	13	5	77
Current period (27)	1	35	7	4	47
Disposals	-	(1)	(3)	(2)	(7)
Book transfers	-	-	-	-	-
Currency differences	-	(1)	-	-	(2)
As of 12/31/2020	**3**	**90**	**17**	**6**	**116**
Carrying amount as of Dec. 31, 2019	21	162	11	10	204
Carrying amount as of Dec. 31, 2020	**31**	**181**	**11**	**9**	**233**

Besides the amortization of right-of-use assets indicated above, the expenses and payments below were also incurred in connection with leases:

€ million	2020	2019
Expenses from short-term leases	5	5
Expenses for low-value leased assets	4	4
Interest expenses from lease liabilities	7	6
Repayment of lease liabilities	39	36
Total lease payments	55	51

As of the end of the reporting period, nominal future lease payments amounted to €279 million (previous year: €233 million). On the recognition of lease liabilities of €249 million (previous year: €208 million), interest rates of appropriate terms and currencies were used to calculate the present values. Lease liabilities have the following maturity structure:

€ million	2020				2019			
	2021	2022–2025	from 2026	Total	2020	2021–2024	from 2025	Total
Right-of-use property – land	1	4	25	30	1	3	16	19
Right-of-use property – buildings	32	111	53	197	27	94	47	167
Right-of-use – passenger cars	6	6	-	12	6	5	-	11
Right-of-use – other	2	6	2	10	3	6	2	10
	42	**126**	**80**	**249**	**36**	**107**	**65**	**208**

(10) Property, plant and equipment

€ million	Land, land rights, and buildings	Production plant and machinery	Other plant, factory and office equipment[1]	Prepayments made and construction in progress	Total
Cost					
As of 1/1/2019	1,039	2,111	772	214	4,136
Additions	13	46	48	125	232
Disposals	(2)	(34)	(109)	(6)	(150)
Book transfers	7	92	22	(135)	(13)
Adjustment in scope of consolidation	18	5	1	1	25
Currency differences	16	22	3	2	42
As of 12/31/2019 / 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
Adjustment in scope of consolidation	-	-	-	-	1
Currency differences	(15)	(66)	(14)	(9)	(103)
As of 12/31/2020	**1,093**	**2,259**	**770**	**184**	**4,306**

[1] *Opening balance of gross carrying amounts in previous year adjusted.*

Notes to the consolidated financial statements
Other explanatory information

€ million	Land, land rights, and buildings	Production plant and machinery	Other plant, factory and office equipment[1]	Prepayments made and construction in progress	Total
Amortization and depreciation/impairment					
As of 1/1/2019	613	1,628	580	6	2,827
Current period	20	110	66	-	197
Disposals	(1)	(33)	(109)	-	(143)
Book transfers	-	1	(1)	-	-
Currency differences	11	17	2	-	30
As of 12/31/2019 / 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	**682**	**1,885**	**595**	**13**	**3,174**
Carrying amount as of Dec. 31, 2019	449	520	198	195	1,361
Carrying amount as of Dec. 31, 2020	**411**	**374**	**175**	**172**	**1,132**

1) *Opening balance of gross carrying amounts in previous year adjusted.*

(11) Investment property

€ million		2020	2019
Cost			
As of Jan. 1		54	54
Book transfer		(2)	-
As of Dec. 31		**52**	**54**
Amortization and depreciation/impairment			
As of Jan. 1		12	11
Current period	(27)	1	1
Book transfer		-	-
As of Dec. 31		**14**	**12**
Carrying amount as of Dec. 31		**39**	**42**

Investment property has a fair value of €70 million (previous year: €54 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.

(12) Investments accounted for using the equity method

The major investments accounted for using the equity method are firstly the joint ventures Kolbenschmidt Huayu Piston Co., Ltd., HASCO KSPG Nonferrous Components (Shanghai) Co., Ltd., Pierburg Yinlun Emission Technology (Shanghai) Co. Ltd. and Pierburg Huayu Pump Technology Co. Ltd. (together China Joint Ventures), which are based in Shanghai and operated with the Chinese SAIC Group, and with which the Automotive sector is strengthening its position on the Chinese market for pistons, pumps for automotive applications and other engine parts. Secondly, the joint venture KS HUAYU AluTech GmbH (KS HUAYU), Neckarsulm, likewise conducted with the SAIC Group and operating in aluminum technology, is also significant.

Financial information (100% basis) on the major investments accounted for using the equity method

€ million	China joint ventures		KS HUAYU	
	2020	2019	2020	2019
Assets (Dec. 31)				
Non-current	448	431	120	130
Cash and cash equivalents	107	87	14	-
Other current	374	487	62	69
Financial debts (Dec. 31)				
Non-current	66	91	21	23
Current	158	190	25	11
Other liabilities (Dec. 31)				
Non-current	10	12	65	62
Current	352	377	48	55
Sales	926	1,010	203	256
Amortization and depreciation	75	76	16	16
Net interest	(11)	(13)	(1)	(2)
Income taxes	12	9	-	-
Earnings after taxes	42	51	(9)	(2)

Development of the major investments accounted for using the equity method

€ million	China joint ventures		KS HUAYU	
	2020	2019	2020	2019
Net assets Jan. 1	336	295	47	57
Total comprehensive income	33	52	(10)	(9)
Earnings after taxes	*42*	*51*	*(9)*	*(2)*
Other comprehensive income	*(9)*	*1*	*(1)*	*(8)*
Capital increase	-	1	-	-
Dividend	(26)	(12)	-	-
Net assets Dec. 31	**343**	**336**	**38**	**47**
Investment in %	50	50	50	50
Carrying amount of investment Dec. 31	172	168	-	24
Dividend received	13	6	-	-

Notes to the consolidated financial statements
Other explanatory information

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:

€ million	2020		2019	
	Joint ventures	Associated companies	Joint ventures	Associated companies
Carrying amount of shares	36	81	38	81
Earnings after taxes	4	8	6	7
Other comprehensive income	(1)	(4)	1	-
Total comprehensive income	3	4	7	7

(13) Inventories

€ million	12/31/2020	12/31/2019
Raw materials and supplies	512	506
Work in process	712	633
Finished products	143	165
Merchandise	104	93
Prepayments made	101	67
	1,573	**1,463**

Additions to write-downs totaled €13 million (previous year: €13 million).

(14) Liquid financial assets

Liquid financial assets comprise commercial papers with a maturity between three and eleven months issued by companies with short-term investment grade ratings (at least A3 (S&P) or P3 (Moody' s) or alternative ratings from Euler Hermes with grade 4).

(15) Other assets

€ million	12/31/2020	Of which current	Of which non-current	12/31/2019	Of which current	Of which non-current
Derivatives	47	34	13	44	34	10
Receivables from contracts with customers	12	12	-	25	25	-
Receivables from sales of real estate	-	-	-	19	19	-
Receivables from finance leases	14	1	14	8	-	8
Bonds	4	-	4	4	-	4
Other	18	16	2	20	19	1
Financial assets	**94**	**62**	**32**	**119**	**96**	**23**
Other taxes	64	50	15	91	61	29
Contract acquisition costs	101	-	101	81	-	81
Contract costs	3	-	3	8	-	8
Subsidies/grants receivable	32	21	11	27	16	11
Deferred income	32	27	5	36	28	8
Pension reimbursement claim	88	-	88	81	-	81
Reimbursement claims from insurances	12	12	-	10	10	-
Other	36	20	16	44	30	14
Non-financial assets	**369**	**129**	**240**	**378**	**146**	**232**
Other assets	**464**	**192**	**272**	**497**	**242**	**255**

As of the end of the reporting period, there were individual loss allowances of €35 million (previous year: €22 million) for receivables from contracts with customers.

The receivables from the sale of real estate resulted from sales of developed plots in Hamburg in the previous year.

The finance lease receivables relate to letting property to the joint venture KS HUAYU. The following table provides information on the minimum lease payments in relation to the leases:

€ million	12/31/2020			12/31/2019		
	2021	2022–2025	from 2026	2020	2021–2024	from 2025
Minimum lease payments	1	4	14	-	2	10
Present value of minimum lease payments	1	5	10	-	2	6

The unearned financial income amounted to €6 million as of December 31, 2020 (previous year: €5 million).

Notes to the consolidated financial statements
Other explanatory information

The contract acquisition costs are described in note(22).

The subsidies/grants receivable essentially relate to grants paid by public administrative bodies to subsidize the in-house development of new technologies.

Prepaid expenses relate primarily to advance payments for insurance and other services.

The pension reimbursement claim is described in note (18).

The other non-financial assets primarily comprise advance payments to suppliers, receivables from employees from travel expense accounts, and operating costs not yet invoiced.

(16) Cash and cash equivalents

€ million	12/31/2020	12/31/2019
Bank balances in credit institutions, checks, cash in hand	870	770
Short term investments (up to 3 months to maturity)	157	150
	1,027	**920**

(17) 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).

Authorized capital – By way of resolution of the Annual General Meeting on May 10, 2016, the Executive Board was authorized, with the approval of the Supervisory Board, to increase the share capital of the company by up to €50,000,000 in total by May 9, 2021, by issuing new no-par shares in return for contributions in cash or in kind. Shareholder subscription rights for up to 10% of the current share capital of the company can be disapplied at an issue price not significantly below the stock market price. The Executive Board is granted the option of carrying out capital increases in return for contributions in kind for the granting of shares for the purpose of acquiring companies, parts of companies or investments, or of issuing a limited number of employee shares without subscription rights.

Contingent capital – By way of resolution of the Annual General Meeting on May 10, 2016, the Executive Board was authorized to issue bonds with warrants or convertible bonds with a total nominal value of up to €800,000,000 and to create the associated contingent capital of up to €20,000,000.

With the approval of the Supervisory Board, the Executive Board can issue interest-bearing bonds with warrants or convertible bonds on one or several occasions until May 9, 2021, and attach options or conversion rights to the respective bonds entitling the acquirer to subscribe to a total of up to 7,812,500 shares of Rheinmetall AG. This does not affect shareholders' statutory pre-emptive rights. The Executive Board is also authorized to disapply the statutory right of shareholders to subscribe to bonds within certain limits. The subscription right is to be disapplied to the extent necessary to be able to offset any fractional amounts that may arise when determining the subscription ratio or to be able to grant subscription rights to bearers of bonds with warrants and/or convertible bonds that have already been issued. Subscription rights are also disapplied for up to 4,355,885 new shares, corresponding to €11,151,056.60 or 10% of the current share capital. The disapplication of pre-emptive subscription rights is limited to a maximum of 20% of share capital.

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 10, 2016, the Executive Board of the company is authorized to acquire treasury bearer shares equivalent to a maximum of 10% of the share capital existing on this date of €111,510,656. The acquisition may be via the stock exchange or by public bid directed at all shareholders or by public invitation to submit a purchase bid. In this case, the purchase price per share in the event of an acquisition via the stock exchange must not be more than 10% higher or lower than the average closing price of the shares in Xetra trading on the Frankfurt Stock Exchange on the three preceding trading days. In the event of a public bid or an invitation to submit such a bid, the purchase price offered and paid must not be more than 10% higher or lower than the average closing price of the shares in Xetra trading on the Frankfurt Stock Exchange on the fifth to third trading day prior to publication of the purchase bid.

The Executive Board is authorized to retire or resell the treasury shares acquired on the basis of this authorization or earlier authorizations without further Annual General Meeting resolutions.

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 (35). Sales proceeds from the disposals are used for general financing purposes. As of December 31, 2020, the portfolio of treasury shares amounted to 361,392 shares with acquisition costs of €13 million. The amount of subscribed capital attributable to treasury shares totaled €925 thousand. This represents a share in subscribed capital of 0.8%.

Other comprehensive income

€ million	2020			2019		
	Gross amount	Tax effect	Net amount	Gross amount	Tax effect	Net amount
Remeasurement of net defined benefit liability from pensions	(50)	16	(34)	(133)	36	(97)
Other comprehensive income from investments accounted for using the equity method	-	-	-	(3)	-	(3)
Amounts not reclassified to the income statement	**(50)**	**16**	**(34)**	**(136)**	**36**	**(100)**
Change in value of derivatives (Cash flow hedges)	(1)	(2)	(4)	18	(5)	13
Currency translation difference	(73)	-	(73)	32	-	32
Other comprehensive income from investments accounted for using the equity method	(10)	-	(10)	1	-	1
Amounts reclassified to the income statement	**(85)**	**(2)**	**(87)**	**50**	**(5)**	**46**
Other comprehensive income	**(135)**	**14**	**(120)**	**(86)**	**31**	**(54)**

In fiscal 2020, Rheinmetall AG paid a dividend of €104 million or €2.40 per share (previous year: €90 million or €2.10 per share) to its shareholders from its retained earnings.

Notes to the consolidated financial statements
Other explanatory information

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.

€ million	2020	2019
Non-controlling interests included in equity (Dec. 31)	56	32
Assets (Dec. 31)	523	470
Of which non-current	*118*	*109*
Of which inventories	*198*	*184*
Liabilities (Dec. 31)	409	406
Of which non-current	*84*	*86*
External sales	758	743
Internal sales	82	3
Earnings after taxes	50	36
Of which from minority interests	*25*	*17*
Total comprehensive income	49	32
Of which from minority interests	*24*	*16*
Cash flows from operating activities	106	7

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. As a result of the spin-off of the tactical activities and the purchase of shares in the subgroup of Rheinmetall MAN Military Vehicles GmbH in fiscal 2019, the non-controlling interests in net income for the year are shown separately in the previous year. The non-controlling interests in Rheinmetall Military Vehicles GmbH in 2019 result from the period up to the spin-off. Netted profits and losses of the non-controlling interests amount to zero.

€ million	Non-controlling interests	2020	2019
Subgroup of Rheinmetall MAN Military Vehicles GmbH	49%	25	17
Rheinmetall Military Vehicles GmbH (non-controlling interests before spin-off)	49%	-	4
Rheinmetall Denel Munition Pty. Ltd.	49%	(1)	(5)
Nitrochemie Aschau GmbH	45%	4	2
Other		-	-
		27	19

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 the equity ratio and the ratio of net financial debts to equity (gearing).

€ million	12/31/2020	12/31/2019
Cash and cash equivalents	1,027	920
Liquid financial assets	-	20
Financial debts	(1,023)	(992)
Net financial debt (-)/Net liquidity (+)	4	(52)
Equity	2,053	2,272
Equity ratio	28.2%	30.6%
Net gearing	(0.2%)	2.3%

Further information on the financing strategy and on the asset and capital structure is contained in the combined management report.

(18) 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.

Personnel expenses of €76 million (previous year: €77 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.

Notes to the consolidated financial statements
Other explanatory information

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. Since 2016, a total of €162 million has been paid into a fund managed by a trustee, of which €140 million was allocated to pension obligations and €22 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 pension provisions developed as follows:

€ million	2020			2019		
	Present value of DBO	Plan assets	Pension provision	Present value of DBO	Plan assets	Pension provision
As of Jan. 1	**2,877**	**(1,708)**	**1,169**	**2,155**	**(1,182)**	**972**
Current service cost	42	-	42	34	-	34
Past service cost	-	-	-	1	-	1
Interest cost	22	-	22	29	-	29
Interest income	-	(11)	(11)	-	(13)	(13)
Settlement	-	-	-	-	-	-
Income from disposal of pension obligation	-	-	-	-	-	-
Entry benefits/leaving benefits [1]	-	-	-	(1)	-	-
Amounts recognized in the income statement	**64**	**(11)**	**53**	**64**	**(13)**	**51**
Income from plan assets excluding interest income	-	(96)	(96)	-	(72)	(72)
Actuarial gains (-) and losses (+)						
Change in financial assumptions	137	-	137	240	-	240
Change in demographic assumptions	9	-	9	(6)	-	(6)
Empirical adjustments	7	-	7	(1)	-	(1)
Other comprehensive income from remeasurement of net defined benefit	**153**	**(96)**	**57**	**234**	**(72)**	**162**
Employer contributions	-	(57)	(57)	-	(28)	(28)
Employee contributions	10	(9)	1	9	(9)	1
Pension payments	(130)	89	(42)	(113)	72	(41)
Adjustment in scope of consolidation	-	-	-	465	(420)	45
Currency differences/Other	(24)	20	(4)	63	(57)	6
As of Dec. 31	**2,949**	**(1,772)**	**1,177**	**2,877**	**(1,708)**	**1,169**
Of which Switzerland	*1,222*	*(1,114)*	*109*	*1,240*	*(1,108)*	*131*
Of which Germany	*1,108*	*(173)*	*935*	*1,033*	*(121)*	*911*
Of which United Kingdom	*537*	*(449)*	*88*	*520*	*(438)*	*81*
Of which others	*82*	*(37)*	*45*	*85*	*(40)*	*44*

[1] *Results from employees at the Swiss subsidiaries changing employer.*

The service cost and the balance of entry/leaving benefits are reported under personnel expenses.

Net interest expense is included in net interest.

Employers and employees made total payments of €66 million to plan assets (previous year: €37 million). €40 million (previous year: €15 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.

Notes to the consolidated financial statements
Other explanatory information

The pension plans relate to the following beneficiaries:

Number of people

	12/31/2020		12/31/2019	
	Germany	Switzerland	Germany	Switzerland
Active employees	11,082	1,144	10,718	1,118
Vested rights of former employees not subject to expiration	2,073	-	2,072	-
Pensioners	11,024	1,722	11,050	1,791
Total	**24,179**	**2,866**	**23,840**	**2,909**

In the current year, there are 177 (previous year: 186) 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, 18 years at the companies in the United Kingdom (previous year: 17 years) and 12 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. Previously the discount rate for Germany was determined using a standard procedure specified by the Group actuary on the basis of market data as of the end of the reporting period, and the duration for a mixture of active employees and retirees. As of this year a more detailed granular approach is being 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, 2020 reporting date. The following table presents the key underlying actuarial parameters:

Parameters in %

	12/31/2020			12/31/2019		
	Germany	Switzerland	United Kingdom	Germany	Switzerland	United Kingdom
Discount rate	0.68	0.14	1.40	1.07	0.27	2.10
Pension development	1.75	0.00	2.70	1.75	0.00	2.80
Life expectancy	2018G mortality tables by Heubeck	BVG2015 Generation tables	CMI 2019 projection tables	2018G mortality tables by Heubeck	BVG2015 Generation tables	CMI 2018 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	12/31/2020			12/31/2019		
	Germany	Switzerland	United Kingdom	Germany	Switzerland	United Kingdom
Discount rate - 0.25%	46	38	23	43	33	22
Discount rate + 0.25%	(43)	(37)	(22)	(40)	(12)	(21)
Pension development - 0.50%	(34)	-	(26)	(33)	-	(28)
Pension development + 0.50%	37	-	30	36	-	31
Increase in life expectancy by 1 year	62	61	23	58	62	22

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.

Fair value of the plan assets in %

	12/31/2020	12/31/2019
Properties	32	33
Equities, funds	40	36
Corporate bonds	14	15
Other	14	16
Total	**100**	**100**

The fair values of shares, funds, 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 for contributions to plan assets are shown below.

€ million	2021
Employer contributions to plan assets	65
Employee contributions to plan assets	8

Notes to the consolidated financial statements
Other explanatory information

The forecast cash outflows for the payment of pensions from the pension plans are as follows for the following periods:

€ million	Payments from plan assets	Payments from companies
2021	60	43
2022	61	41
2023	63	42
2024	65	40
2025	64	42
2026–2030	329	205

(19) Other provisions

€ million	Human Resources	Structural measures	Guaran-tees	Identifi-able losses	Contract-related costs	Other provisions	**Total**
As of 1/1/2020	**187**	**44**	**115**	**55**	**283**	**239**	**923**
Utilization	136	19	29	28	95	60	367
Reversal	10	5	10	-	5	17	47
Added/provided for	165	70	47	16	77	112	487
Currency differences/Other	(5)	(1)	(2)	-	6	(7)	(9)
As of 12/31/2020	**202**	**89**	**122**	**43**	**265**	**267**	**987**
Of which current	*178*	*42*	*81*	*40*	*234*	*221*	*796*
Of which non-current	*24*	*46*	*41*	*3*	*31*	*45*	*191*

Personnel provisions essentially relate to variable remuneration of €105 million (previous year: €92 million) and obligations from vacation/overtime/flexitime accounts of €56 million (previous year: €55 million).

Provisions for restructuring mainly relate to termination settlements and expenses for partial retirement obligations.

Provisions for contract-related costs comprise offset obligations, contractual penalties, price review risks and other contract costs.

Miscellaneous provisions relate to commissions at €86 million (previous year: €58 million), environmental risks at €26 million (previous year: €27 million), and rebates and bonuses at €13 million (previous year: €10 million).

(20) Financial debts

€ million	12/31/2020	Of which current	Of which non-current	12/31/2019	Of which current	Of which non-current
Promissory notes	402	28	374	402	-	402
Bank liabilities	360	69	291	378	74	305
Leases	249	42	207	208	36	172
Other	11	11	1	3	3	1
	1,023	**150**	**873**	**992**	**112**	**880**

Promissory note loans – As of the end of the reporting period, there are various promissory note loans with a nominal value totaling €403 million that serve the Group's general corporate financing. Promissory note loans of €53 million fell due and were repaid in 2019.

€ million					
Interest terms	Year concluded	Currency	Nominal value	Maturity	Average weighted nominal interest rate (in %)
Fixed rate			**270**		
	2014	€	44	2021–2024	2.72
	2017	€	117	2022	1.15
	2018	€	42	2025	1.67
	2019	€	68	2024–2029	0.97
6-month EURIBOR + spread			**133**		
	2014	€	9	2021	6-month EURIBOR + 1.65
	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
			403		

Bank liabilities

€ million			12/31/2020	12/31/2019
Maturing in	Type of loan	Interest terms	Nominal value	Nominal value
August 2023	EIB loan	0.962%	250	250
2025	Construction loan DZ HYP	1.90%	20	23
2022–2026	KfW loan	∅ 2.56%	11	16
2021–2025	Various – medium-term	∅ 4.80%	21	28
2021 / 2020	Various – short-term		58	62
			360	**378**

The loan from the European Investment Bank (EIB), Luxembourg, is a project-related loan granted to finance research and development activities in the Automotive sector. In particular, it is intended improve the financing of projects for the reduction of emissions from combustion engines and for alternative drive technologies.

The liabilities to banks of €41 million (previous year: €58 million) are secured by land charges and similar rights.

Notes to the consolidated financial statements
Other explanatory information

The cash and non-cash changes in financial debts are shown below.

€ million	Promissory notes ‹ 1 year	Promissory notes › 1 year	Bank liabilities ‹ 1 year	Bank liabilities › 1 year	Leasing	Other	Total
As of 1/1/2019	53	**247**	**57**	**317**	**172**	**9**	**854**
Cash changes	(53)	156	2	3	(32)	(5)	70
Borrowing of financial debts	-	155	43	8	-	30	236
Repayment of financial debts	(53)	-	(41)	(5)	(32)	(36)	(166)
Non-cash changes	-	-	15	(15)	68	-	68
Currency differences	-	-	-	-	2	-	1
Adjustment in scope of consolidation	-	-	-	-	-	-	-
Interest	-	-	-	-	-	-	-
Addition of right of use	-	-	-	-	67	-	67
Book transfer	-	-	15	(15)	(1)	-	(1)
As of 12/31/2019	**-**	**402**	**74**	**305**	**208**	**3**	**992**

€ million	Promissory notes ‹ 1 year	Promissory notes › 1 year	Bank liabilities ‹ 1 year	Bank liabilities › 1 year	Leasing	Other	Total
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	-	-	-	-	-	-	-
Interest	-	-	-	-	-	-	-
Addition/disposal right of use	-	-	-	-	83	-	83
Book transfer	28	(28)	8	(8)	(1)	-	(1)
As of 12/31/2020	**28**	**374**	**69**	**291**	**249**	**11**	**1,023**

(21) Other liabilities

€ million	12/31/2020	Of which current	Of which non-current	12/31/2019	Of which current	Of which non-current
Monies in transit from debt collection (ABS program)	32	32	-	53	53	-
Derivatives	21	14	7	13	12	2
Other	32	28	5	34	29	5
Financial liabilities	**86**	**74**	**12**	**101**	**94**	**6**
Liabilities from other taxes	76	76	-	68	68	-
Liabilities from social security	12	12	-	12	12	-
Other	106	36	70	121	41	80
Non-financial liabilities	**194**	**124**	**69**	**201**	**121**	**80**
Other liabilities	**280**	**198**	**82**	**302**	**215**	**86**

(22) Sales

The Group generates sales from the transfer of goods and services in the areas of automotive supply and armed forces technology. In the table below, the sales are broken down by area of activity in the two sectors of the Group.

€ million	2020			2019		
	At a point in time	Over time	Total	At a point in time	Over time	Total
Mechatronics	1,202	-	1,202	1,525	-	1,525
Hardparts	688	-	688	937	-	937
Aftermarket	345	-	345	361	-	361
Others/Consolidation	(84)	-	(84)	(87)		(87)
Automotive sector	**2,151**	**-**	**2,151**	**2,736**	**-**	**2,736**
Weapon and Ammunition	1,126	70	1,196	951	68	1,018
Electronic Solutions	414	517	931	459	489	948
Vehicle Systems	367	1,456	1,823	339	1,448	1,787
Others/Consolidation	(169)	(58)	(227)	(195)	(37)	(231)
Defence sector	**1,738**	**1,985**	**3,723**	**1,554**	**1,968**	**3,522**
Others/Consolidation	(2)	3	-	(3)	-	(3)
Group total	**3,887**	**1,988**	**5,875**	**4,287**	**1,968**	**6,255**

The sales for 2020 include €3 million (previous year: €5 million), which resulted from the inclusion of a financing component.

In the Automotive sector, contracts with customers relate almost exclusively to serial deliveries of modules and systems for engine technology. Customers are predominantly large automotive manufacturers. The Aftermarket division is purely a spare parts trading business aimed at wholesalers and workshops. As a rule, sales are recognized at the time of delivery.

Notes to the consolidated financial statements
Other explanatory information

In the Defence sector, there are both customer contracts for the manufacture and supply of goods and service contracts for service and maintenance activities and for 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 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 following contract balances result from contracts with customers:

€ million	12/31/2020	12/31/2019
Trade receivables	1,170	1,147
Contract assets	352	388
Contract liability	968	948

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 declined by €36 million to €352 million (previous year: €388 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 2020. Contract liabilities increased by €20 million to €968 million (previous year: €948 million).

In addition, there are assets from contract acquisition in connection with contracts with customers, which are as follows:

€ million	2020	2019
As of Jan. 1	81	67
Addition	37	37
Write-down	(12)	(24)
Reversal	(6)	-
As of Dec. 31	101	81

The assets from contract acquisition relate to contracts with customers in the Defence sector and 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, 2020 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:

€ million	Order backlog	Expected sales		
	12/31/2020	2021	2022	from 2023
Automotive	426	426	-	-
Defence	12,942	2,949	2,370	7,624
	13,368	**3,375**	**2,370**	**7,624**

(23) Changes in inventories and work performed by the enterprise and capitalized

€ million	2020	2019
Increase/decrease in inventory of finished and unfinished products	69	169
Other work performed by the enterprise and capitalized	59	67
	129	**236**

(24) Other operating income

€ million	2020	2019
Reversal of provisions	41	58
Disposal of assets/divestments	1	2
Sundry rental agreements and leases	6	11
Refunds	3	34
Other secondary income	73	81
	123	**186**

(25) Cost of materials

€ million	2020	2019
Cost of raw materials, supplies, and merchandise purchased	2,328	2,794
Cost of services purchased	730	650
	3,058	**3,444**

Notes to the consolidated financial statements
Other explanatory information

(26) Staff costs

€ million	2020	2019
Wages and salaries	1,371	1,366
Social security and related employee benefits	168	176
Pension expenses	113	109
Expenses for redundancy plans, termination indemnities, partial retirement	71	28
	1,723	**1,678**

While personnel expense in the Defence sector rose by €72 million due to a further increase in headcount, personnel expense in the Automotive sector declined by €27 million despite higher restructuring expenses. Alongside the lower employee number, this reduction was driven by savings of €33 million due to drawing short-time working allowance as a result of the corona pandemic.

Annual average head count (capacity)

	2020	2019
Automotive sector	10,976	11,619
Defence sector	12,184	11,522
Rheinmetall AG/Other	268	264
	23,428	**23,405**

(27) Amortization, depreciation and impairment

€ million	2020	2019
Goodwill	88	-
Other intangible assets	49	41
Right-of-use assets	47	39
Property, plant and equipment	372	198
Investment property	1	1
	557	**280**

The impairment losses of €286 million (previous year: €2 million) included in amortization, depreciation and impairment break down as follows:

€ million	Automotive		Defence	
	2020	2019	2020	2019
Goodwill	88	-	-	-
Other intangible assets	5	-	1	-
Right-of-use assets	8	-	-	-
Property, plant and equipment	182	1	1	-
	283	**1**	**3**	**-**

(28) Other operating expenses

€ million	2020	2019
Repairs and maintenance	94	103
Distribution and advertising costs	81	99
IT costs	107	96
Incidental staff costs	51	64
Travel expenses	23	57
Audit, legal and consultancy fees	49	48
Insurances	33	31
Warranty	42	31
Rents, leases and ancillary costs	23	22
Other	190	231
	693	**781**

The "Other" item primarily contains building operating expenses, research and development costs, licensing costs, other taxes and various individual items.

(29) Income taxes

€ million	2020	2019
Current income tax expense	77	99
Earlier-period income taxes	5	4
Deferred taxes	(27)	20
	56	**123**

As in the previous year, a tax rate of 30% is used to calculate deferred income taxes for Germany. This includes corporate income tax, the solidarity surcharge and trade tax. The tax rates in other countries range from 16% to 34% (previous year: 16% to 34%).

The table below presents a reconciliation of expected tax expense to reported actual tax expense. A 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.

Notes to the consolidated financial statements
Other explanatory information

€ million	2020	2019
Extraordinary expenses	57	477
Expected income tax expense (tax rate of 30%; previous year: 30%)	**17**	**143**
Foreign tax rate differentials	-	(10)
Effects of unrecognized loss carryforwards and temporary differences	25	3
Reduction of tax expense due to previously unrecognized loss carryovers and temporary differences	(11)	(14)
Tax-exempt income	(10)	(5)
Non-deductible expenses	8	9
Earlier-period income taxes	5	4
Taxes on entities carried at equity	(6)	(11)
Taxes on dividend and other withholding taxes	5	3
Goodwill impairment	26	-
Other	(3)	1
Actual income tax expense	**56**	**123**

Allocation of deferred taxes to items in the statement of financial position

€ million	12/31/2020		12/31/2019	
	Deferred tax assets	Deferred tax liabilities	Deferred tax assets	Deferred tax liabilities
Loss carryforwards and tax credits	54	-	55	-
Fixed assets	21	106	19	115
Inventories and receivables	30	58	27	78
Pension provisions	194	-	193	-
Other provisions	62	2	70	2
Liabilities	66	20	53	11
Other	16	13	2	4
	443	**199**	**419**	**211**
Set off	(195)	(195)	(195)	(195)
	249	**4**	**224**	**16**

In addition to capitalized deferred tax assets from loss carryovers and tax credits, further tax loss carryovers and tax credits exist in Germany and abroad totaling €339 million (previous year: €348 million), which cannot be utilized or whose deferred tax assets were adjusted by value adjustments. €166 million (previous year: €159 million) of this relates to German loss carryovers, €172 million (previous year: €188 million) to foreign loss carryovers and €1 million to tax credits (previous year: €1 million). The German loss carryovers, and €118 million of the foreign loss carryovers (previous year: €123 million), are not subject to expiration. Most of the limited foreign loss carryforwards can still be utilized for up to eight years (previous year: up to eight years). Within the Group, €21 million (previous year: €18 million) in deferred tax assets were recognized at companies with ongoing tax losses due to positive corporate planning. These relate particularly to project 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, 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 (previous year: €0 million) to the extent that taxation is incurred within the Group.

(30) 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, 2020, or December 31, 2019, basic and diluted earnings per share are identical. Treasury shares reduce the weighted number of shares.

	2020	2019
Weighted number of shares in millions	43.17	43.06
Consolidated net profit for the year for shareholders of Rheinmetall AG in € million	(27)	335
Earnings per share	**€(0.62)**	**7.77 EUR**

(31) Statement of cash flows

€9 million (previous year: €11 million) of the net interest income included in the cash flow from operating activities related to interest payments received and €25 million (previous year: €30 million) to interest payments made.

Payments for investments in subsidiaries and other financial assets amounted to €3 million. In the previous year, in this position €56 million was reported, largely for acquiring 55% of the shares in Rheinmetall BAE Systems Land Ltd. Telford / United Kingdom, and the acquisition of the operating business of IBD Deisenroth Engineering Group, Lohmar.

Cash receipts from subsequent purchase price adjustment result from the sale of the unmanned aircraft systems product area which was initiated in 2012 and which was concluded with the sale of the remaining shares in July 2017.

In the previous year the increase in shares in consolidated subsidiaries included €111 million for the repurchase of the non-controlling interests in Rheinmetall Military Vehicles GmbH (RMV) from MAN Trucks & BUS SE after the spin-off of Rheinmetall MAN Military Vehicles GmbH. In addition, €26 million was attributable to the acquisition of the non-controlling interests in Rheinmetall Chempro GmbH, Bonn (49%), and Rheinmetall Active Protection GmbH, Bonn (26%).

Notes to the consolidated financial statements
Other explanatory information

(32) Segment report

The Group bundles its operations in two sectors, Defence and Automotive, which are organized and run as independent segments where the respective products, services and customer profiles are grouped accordingly. Reporting on these reportable segments is in accordance with the Rheinmetall Group's internal organizational and reporting structures.

The Automotive sector is the mobility segment of the Rheinmetall Group. As a global automotive supplier, Rheinmetall Automotive operates in the areas of air management, emissions reduction and pumps and in the development, production and supply of replacement parts for pistons, engine blocks and plain bearings. As well as supplying automotive manufacturers, the Automotive sector operates in the aftermarket business, supplying wholesalers, engine repair shops and independent garages with replacement parts through a global distribution network.

The Defence sector brings together all activities for the defence and security industry. The service range covers development, manufacturing and service provision and is aimed at German and international armed forces. The product portfolio comprises system and partial system solutions and covers capability in the areas of mobility, reconnaissance, management, effectiveness and protection. Specifically, the product range includes vehicle, protection and weapon systems, air defence systems, function sequence networking, simulation hardware and software, and infantry equipment.

In addition to the Group holding company (Rheinmetall AG), "Other/Consolidation" includes Group service companies and other non-operating companies, plus consolidation transactions. Transactions between the Defence and Automotive sectors are of minor significance and are made at arm's length.

The sectors of the Rheinmetall Group are controlled by means of sales, operating result (EBIT before special items), EBIT and EBT.

Profitability is also assessed for management purposes on the basis of ROCE calculated on an annual basis, which represents the ratio of EBIT to average capital employed (average of values as of December 31 of the previous year and December 31 of the year under review). Capital employed is calculated as the total of equity, pension provisions and net financial debts. Net financial debts are calculated as financial debts less cash and cash equivalents and liquid financial assets. Intersegment loans within the Group are assigned to cash and cash equivalents.

Operating free cash flow is included in target agreements with managers as an additional control and management indicator. 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 indicators for internal controlling and reporting purposes are based on the accounting principles described under note (7).

The reconciliation of segment net financial debts to Group financial debts and of segment EBIT to consolidated EBT is shown below:

€ million	12/31/2020	12/31/2019
Net financial debt (-)/Net liquidity (+)		
Net liquidity of sectors	288	292
Others	(284)	(345)
Consolidation	-	-
Net financial debts of Group	**4**	**(52)**

	2020	2019
EBIT		
EBIT of segments	110	527
Others	54	198
Consolidation	(75)	(213)
Group EBIT	**89**	**512**
Group net interest	(33)	(35)
Group EBT	**57**	**477**

When presenting segment information by geographical region, foreign sales in the Defence sector are reported based on the country of destination, while those of the Automotive sector are reported according to where the customer is based. Segment assets include intangible assets, right-of-use assets, property, plant and equipment and investment property according to the respective location of the company.

(33) 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 to 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	12/31/2020	12/31/2019
Letters of comfort	583	893
Credit enhancement	-	15
Other	11	12
	594	**921**

There are also obligations in connection with service agreements and other purchase commitments of €184 million (previous year: €232 million). The purchase commitment from firm capital expenditure contracts totals €15 million (previous year: €25 million).

Notes to the consolidated financial statements
Other explanatory information

(34) Additional information on financial instruments

Financial instruments according to the measurement categories of IFRS 9

€ million	12/31/2019				
	Measurement category in accordance with IFRS 9				
	Amortized cost	Fair value/OCI	Fair value/PL	No category	Total
Trade receivables	549	597	-	-	1,147
Cash and cash equivalents	920	-	-	-	920
Liquid financial assets	20	-	-	-	20
Derivatives without hedge accounting	-	-	17	-	17
Derivatives with cash flow hedge	-	-	-	27	27
Other financial assets	61	4	-	2	67
Financial assets	**1,550**	**601**	**17**	**29**	**2,197**
Promissory notes	402	-	-	-	402
Financial debts	382	-	-	-	382
Trade liabilities	695	-	-	-	695
Derivatives without hedge accounting	-	-	8	-	8
Derivatives with cash flow hedge	-	-	-	6	6
Other financial liabilities	87	-	-	-	87
Financial liabilities	**1,566**	**-**	**8**	**6**	**1,580**

€ million	12/31/2020				
	Measurement category in accordance with IFRS 9				
	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
Liquid financial assets	-	-	-	-	-
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
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**

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 (electricity and gas derivatives). The net result from financial assets, recognized at fair value through profit or loss, was a loss of €4 million (previous year: loss of €2 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.

€ million		12/31/2020		12/31/2019	
		Carrying amount	Fair value	Carrying amount	Fair value
Promissory notes	Level 2	402	415	402	422
Other financial debts	Level 2	372	381	382	409

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 sells customer receivables to a financial service provider each month on a revolving basis. The customer receivables sold are recognized as disposals. In 2020, the maximum volume of the program was €127 million (previous year: €169 million). The nominal value of receivables was €73 million as of December 31, 2020 (previous year: €130 million).

The retained risks are insignificant for the Group. An asset item of €1 million has been reported for the maximum continuing involvement (previous year: €2 million), together with a liability item of the same amount for the associated liabilities.

Notes to the consolidated financial statements
Other explanatory information

Net result from financial instruments

€ million	2020	2019
Interest income	9	11
Interest expenses	(20)	(24)
Guarantee commission	(9)	(9)
Currency result	1	-
Loss allowances on trade receivables	(12)	(12)
Amortization of other financial assets	(13)	(12)
Other	(1)	1
	(46)	**(45)**

€4 million of the loss allowances on trade receivables (previous year: €1 million) is attributable to financial instruments of the measurement at fair value through other comprehensive income category. Interest expenses of €1 million (previous year: €1 million) are attributable to the same category. All other items relate to financial instruments measured at amortized cost.

Finance market 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.

€ million	12/31/2020		12/31/2019	
	Assets	Equity and liabilities	Assets	Equity and liabilities
Currency hedges	18	(10)	17	(7)
Interest rate hedges	-	-	-	-
Commodity hedges	-	(1)	-	-
Electricity price hedges	-	-	-	-
Without hedge accounting	**18**	**(10)**	**17**	**(8)**
Currency hedges	24	(10)	25	(5)
Interest rate hedges	-	-	-	-
Commodity hedges	5	(1)	1	(1)
Electricity price hedges	-	-	-	-
With hedge accounting	**29**	**(11)**	**27**	**(6)**

In the year under review, negative changes in the fair value of derivatives of €6 million before the deduction of deferred taxes (previous year: total positive changes in fair value of €21 million) were recognized in the hedge reserve. In the year under review, €1 million of the reserve was reclassified to expenses (previous year: revenue €8 million) and €1 million (previous year: €1 million) was reclassified to the cost of materials.

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.

	12/31/2020			12/31/2019		
	2021	2022	from 2023	2020	2021	from 2022
Currency hedges						
Nominal volumes (gross, in € million)	2,134	310	171	774	137	145
Average hedging rate						
Average rate CHF/EUR	1.08	1.07	1.07	1.10	-	1.08
Average rate AUD/EUR	1.61	1.67	1.66	1.66	0.59	1.77
Average rate USD/EUR	1.21	1.20	1.21	1.18	1.23	1.21
Average rate USD/ZAR	0.06	0.05	0.05	0.07	0.06	-
Average rate CZK/EUR	26.60	27.08	-	26.36	26.71	26.93
Commodity hedges						
Nominal volumes (gross, in € million)	25	13	3	28	17	3
Average hedging rate						
Average rate aluminum (EUR/ton)	1,627	1,660	1,725	1,668	1,681	1,712
Average rate copper (EUR/ton)	5,051	5,222	4,978	5,225	5,071	5,160

Notes to the consolidated financial statements
Other explanatory information

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, as well as currency 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, Australian dollar and Czech koruna 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.

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 Automotive sector (where most of these risks exist) has also used derivative financial instruments for risk management, mainly commodity futures and swaps maturing by 2023 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.

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.

€ million		Other net financial income		Cash flow hedge reserve	
		12/31/2020	12/31/2019	12/31/2020	12/31/2019
Currency	Exchange rates (total) -10%/+10%	48 / -48	-7 / 7	-54 / 54	-74 / 74
Interest rate	Yield curve -100 BP/+100 BP	- / -	- / -	- / -	- / -
Commodity	Price curve for material prices -10%/+10%	- / -	- / -	-4 / +4	-5 / +5
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 2020, the risk provision for general default risk calculated according to the simplified approach for the measurement of trade receivables amounted to €14 million (previous year: €7 million). €3 million of these related to receivables more than 180 days past due (previous year: €1 million). As in the previous year, the risk calculated using business model-specific default rates for receivables up to 30 days past due is less than 1.5% (previous year: less than 1%). 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 and other receivables, amount before loss allowance

€ million	12/31/2020	12/31/2019
Not past due and less than 30 days past due	917	974
Up to 180 days past due	83	82
More than 180 days past due	182	95
	1,182	**1,151**

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 basis, a commercial paper (CP) program and an asset-backed securities program. 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.

Notes to the consolidated financial statements
Other explanatory information

Cash outflows

€ million	12/31/2020			12/31/2019		
	2021	2022–2025	from 2026	2020	2021–2024	from 2025
Promissory notes	33	343	44	5	279	146
Other bank liabilities	73	297	-	79	309	6
Other financial debts	10	-	-	2	-	-
	117	**640**	**45**	**87**	**588**	**152**
Derivatives with positive fair value						
Cash outflow	1,193	201	-	1,205	267	-
Cash inflow	1,254	226	-	1,239	282	-
Derivatives with negative fair value						
Cash outflow	943	276	3	709	152	5
Cash inflow	927	271	3	712	152	6

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 and cash equivalents, 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.

(35) 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.

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: €18 million) was recognized for the LTI program in fiscal 2020.

The reference price in March 2020 was €60.32. For fiscal 2019, a total of 112,216 shares were transferred to the entitled participants of the LTI program on March 27, 2020 (previous year: a total of 101,290 shares were transferred for fiscal 2018 on April 2, 2019). In addition, there was a further transfer of a total of 2,000 shares on October 8, 2020; in October 2020 the reference price was €75.60 (previous year: transfer of 158 shares on July 10, 2019).

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 2020, employees acquired a total of 95,219 shares (previous year: 55,742 shares) under this share purchase program. The employer contribution amounted to €2 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.

Notes to the consolidated financial statements
Other explanatory information

(36) 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 sales proceeds recognized in respect of project companies of the Defence sector from the sale of finished and unfinished goods and from construction contracts. 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.

€ million	Joint ventures		Associated companies	
	2020	2019	2020	2019
Products/services provided	428	445	121	64
Products/services received	11	6	21	22
Receivables Dec. 31	96	122	87	48
Liabilities Dec. 31	11	4	3	2
Receivables from finance leases Dec. 31	14	8	-	-

Please see note (15) for information on the finance lease receivable.

Please see the comments under note (33) "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, a member 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 2020, the volume of products/services received amounted to €3 million (previous year: €1 million).

Remuneration of the Executive Board and the Supervisory Board – The reportable remuneration of senior management within the Group comprises that paid to active Executive Board and Supervisory Board members.

The expenses for compensation paid or payable to active members of the Executive Board break down as follows:

€ thousand	2020	2019
Fixed remuneration incl. fringe benefits	2,797	3,022
Performance based remuneration	3,637	2,923
LTI	3,125	3,878
	9,559	**9,823**
Pension expenses (service cost)	2,746	3,160
Total	**12,305**	**12,983**

The net present value of pension commitments, which corresponds to the amount of provisions, totals €28,497 thousand for members of the Executive Board active at year-end (previous year: €29,225 thousand). There are provisions of €6,764 thousand (previous year: €6,801 thousand) for variable remuneration of the Executive Board.

Supervisory Board remuneration including attendance fees amounted to €1,941 thousand (previous year: €1,909 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 €677 thousand in total from such activities (previous year: €817 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.

€1,887 thousand (previous year: €1,992 thousand) was paid to former members of the Executive Board or their surviving dependents. Pension provisions for these persons totaled €26,300 thousand (previous year: €26,924 thousand). €614 thousand (previous year: €582 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 €8,428 thousand (previous year: €8,074 thousand).

(37) Auditor's fees

The following fees for the Deloitte GmbH Wirtschaftsprüfungsgesellschaft were recognized:

€ million	**Fees Germany**
	2020
Audit services	2.1
Other attestation services	0.2
Tax services	0.4
Other services	0.7
	3.4

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. The other attestation services relate primarily to statutorily required verification services and agreed examination of financial information 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.

Notes to the consolidated financial statements
Other explanatory information

(38) Exercise of exemption provisions under German Commercial Code (“HGB”)

Based on the provisions of section 264(3) German Commercial Code (“HGB”) governing corporations and section 264b German Commercial Code (“HGB”) governing partnerships, the following German enterprises have elected not to prepare notes or management reports or to disclose their 2020 financial statements:

Amprio GmbH
BF Germany GmbH
EMG EuroMarine Electronics GmbH
GVG Grundstücksverwaltung Gleitlager GmbH & Co. KG
GVMS Grundstücksverwaltung Service GmbH & Co. KG
GVN Grundstücksverwaltung Neckarsulm GmbH & Co. KG
Kolbenschmidt Liegenschaftsverwaltung GmbH Berlin
Kolbenschmidt Pierburg Innovations GmbH
KS ATAG Beteiligungsgesellschaft mbH
KS Gleitlager GmbH
KS Grundstücksverwaltung Beteiligungs-GmbH
KS Grundstücksverwaltung GmbH & Co. KG
KS Kolbenschmidt GmbH
MEG Marine Electronics Holding GmbH
MS Motorservice Deutschland GmbH
MS Motorservice International GmbH
Pierburg GmbH
Pierburg Grundstücksverwaltung GmbH & Co. KG
Pierburg Pump Technology GmbH
Rheinmetall Automotive AG
Rheinmetall Aviation Services GmbH
Rheinmetall Berlin Verwaltungsgesellschaft mbH
Rheinmetall Brandt GmbH
Rheinmetall Cyber Solutions GmbH
Rheinmetall Dienstleistungszentrum Altmark GmbH
Rheinmetall Electronics GmbH
Rheinmetall Eastern Markets GmbH
Rheinmetall Financial Services GmbH
Rheinmetall Immobilien GmbH
Rheinmetall Immobilien Hamburg GmbH
Rheinmetall Immobilien Hamburg Friedensallee GmbH
Rheinmetall Immobilien Neuss GmbH
Rheinmetall Industrietechnik GmbH
Rheinmetall Insurance Services GmbH
Rheinmetall Landsysteme GmbH
Rheinmetall Maschinenbau GmbH
Rheinmetall Project Solutions GmbH
Rheinmetall Protection Systems GmbH
Rheinmetall Soldier Electronics GmbH
Rheinmetall Technical Assistance GmbH
Rheinmetall Technical Publications GmbH
Rheinmetall Technology Center GmbH
Rheinmetall Verwaltungsgesellschaft mbH
Rheinmetall Waffe Munition GmbH
SUPRENUM Gesellschaft für numerische Superrechner mbH

(39) Corporate governance

In August 2020, 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“Group – Corporate Governance", thus making it available to shareholders.

(40) Events after the end of the reporting period

No events that could have materially affected the company's net assets, financial position and results of operations occurred at Rheinmetall AG between the end of the reporting period on December 31, 2020, and March 1, 2021.

As a result of the strategic realignment of the Group, in February 2021 the Rheinmetall AG Executive Board announced a new Group structure. In this connection, the organizational separation into the Automotive and Defence sectors will be discontinued. In the future, the new structure is made up of five divisions and 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 five divisions are Weapon & Ammunition, Electronic Solutions, Vehicle Systems, Sensors & Actuators and Materials & Trade.

The former Pistons unit will be continued as a non-core business. In the context of aligning the product portfolio, Rheinmetall is currently examining the possibility of it being assumed by potential partners. Rheinmetall has mandated Goldman Sachs to accompany this process. The initial results are to be submitted in the first half of 2021 for review by the Rheinmetall Executive Board.

Düsseldorf, March 1, 2021

Rheinmetall Aktiengesellschaft
The Executive Board

Armin Papperger   Helmut P. Merch   Peter Sebastian Krause   Jörg Grotendorst

Notes to the consolidated financial statements
Shareholdings

Company		Direct share of capital in %	Indirect share of capital in %	Equity in € '000	Net income for the year after PLTA in € '000
Fully consolidated subsidiaries					
Holding companies/service companies/other					
EMG EuroMarine Electronics GmbH, Neckarsulm			100	61,964	772
MEG Marine Electronics Holding GmbH, Düsseldorf			100	226,249	2,259
Rheinmetall Berlin Verwaltungsgesellschaft mbH, Berlin	(1)	100		213,750	-
Rheinmetall Financial Services GmbH, Düsseldorf	(1)	100		336,961	-
Rheinmetall Immobilien GmbH, Düsseldorf		100		173,568	738
Rheinmetall Immobilien Hamburg Friedensallee GmbH, Düsseldorf	(1)		100	22,727	(61)
Rheinmetall Immobilien Neuss GmbH, Düsseldorf	(1)		100	25	-
Rheinmetall Immobilien Hamburg GmbH, Düsseldorf		100		1,687	-
Rheinmetall Industrietechnik GmbH, Düsseldorf	(1)	100		26	-
Rheinmetall Technology Center GmbH, Düsseldorf	(1)		100	23	5
Rheinmetall Insurance Services GmbH, Düsseldorf	(1)	100		285	45
Rheinmetall Maschinenbau GmbH, Düsseldorf			100	62,898	587
Rheinmetall Verwaltungsgesellschaft mbH, Düsseldorf	(1)		100	733,843	-
SUPRENUM Gesellschaft für numerische Superrechner mbH, Bremen			100	(1,397)	-
Unternehmerstadt GmbH, Düsseldorf	(7)		100	24	(3)
Unternehmerstadt Verwaltungsges. mbH, Düsseldorf	(7)		100	32	(5)
Defence sector					
American Rheinmetall Defense, Inc., Biddeford, Maine/USA		100		20,630	227
American Rheinmetall Munition Inc., Stafford, Virginia/USA			100	(11,702)	1,462
American Rheinmetall Systems, LLC, Biddeford, Maine/USA			100	31,928	1,384
American Rheinmetall Vehicles LLC, Dover, Delaware/USA			100	(4,794)	(4,889)
Benntec Systemtechnik GmbH, Bremen	(2)		49	3,118	678
BIL Industriemetalle GmbH & Co. 886 KG, Grünwald	(3)	94		(874)	331
Cyber Works AG, Zurich/Switzerland			100	(3,893)	(37)
EOD TEKNOLOJILERI LIMITED SIRKETI, Istanbul/Turkey			100	82	11
Eurometaal N.V., Hengelo/Netherlands			100	(43)	(28)
IBD Engineering France, Paris/France			100	(4)	(13)
Logistic Solutions Australasia Pty. Ltd., Melbourne/Australia			100	2,664	635
Nitrochemie Aschau GmbH, Aschau			55	34,291	8,789
Nitrochemie South Africa (Pty) Ltd., Somerset West/South Africa			55	635	49
Nitrochemie Wimmis AG, Wimmis/Switzerland			55	50,928	4,273
Oerlikon Contraves GmbH, Zurich/Switzerland		100		20	-
Provectus Robotics Solutions Inc., Ottawa, Ontario/Canada			100	2,967	30
RD Investment AG, Zurich/Switzerland			69	100	(19)
RFEL LTD, Newport, Isle of Wight/Great Britain			100	2,554	327
RH Mexico Simulation and Training S.A. de C.V., Mexico City/Mexico			100	4,492	(86)
Rheinmetall Air Defence AG, Zurich/Switzerland		100		96,224	27,477
Rheinmetall Aviation Services GmbH, Bremen	(1)		100	21	-
Rheinmetall BAE Systems Land Limited, Telford/Great Britain			55	38,726	3,110
Rheinmetall Canada Inc., St.-Jean-sur-Richelieu/Canada		100		83,725	9,724

Company		Direct share of capital in %	Indirect share of capital in %	Equity in € '000	Net income for the year after PLTA in € 'ooo
Rheinmetall Ceska republika s.r.o., Trmice/Czech Republic			100	-	9
Rheinmetall Combat Platforms North America Inc, Wilmington, Delaware/USA			100	(177)	(28)
Rheinmetall Communication and Simulation Technology Pte. Ltd., Singapore/Singapore			100	455	(1,298)
Rheinmetall Cyber Solutions GmbH, Bremen	(1)		100	23	(2)
Rheinmetall Defence Australia Pty. Ltd., Melbourne/Australia		100		(9,051)	(3,082)
Rheinmetall Defence Lietuva, UAB, Vilnius/Lithuania			100	106	(51)
Rheinmetall Defence Polska sp. z.o.o., Warsaw/Poland			100	228	120
Rheinmetall Defence UK Limited, London/Great Britain		100		32,395	1,368
Rheinmetall Denel Munition Pty. Ltd., Somerset West/South Africa			51	92,359	(1,845)
Rheinmetall IT Solutions GmbH, Düsseldorf	(1)	100		25	(3)
Rheinmetall Eastern Markets GmbH, Düsseldorf	(1)	100		1,362	6
Rheinmetall Electronic Solutions AG, Zurich/Switzerland			100	-	-
Rheinmetall Electronics GmbH, Bremen	(1)	100		59,538	(6,757)
Rheinmetall Electronics Pty. Ltd., Adelaide/Australia			100	-	13
Rheinmetall Fraen Fuzes, LLC, Wilmington, Delaware/USA			51	-	-
Rheinmetall Hungary Zrt., Budapest/Hungary			51	595	-
Rheinmetall International Defence and Security Ltd., Riyadh/Saudi Arabia			100	122	(1,421)
Rheinmetall International Services Limited, Masdar City/UAE			100	(5,387)	(2,158)
Rheinmetall Italia S.p.A., Rome/Italy			100	108,678	4,909
Rheinmetall Laingsdale (Pty) Ltd., Cape Town/South Africa			76	7,658	115
Rheinmetall Landsysteme GmbH, Südheide	(1)	100		147,657	31,198
Rheinmetall MAN Military Vehicles Australia Pty Ltd., Melbourne/Australia			51	25,499	(23)
Rheinmetall MAN Military Vehicles Canada Ltd., Ottawa/Canada			51	512	(4)
Rheinmetall MAN Military Vehicles GmbH, Munich		51		55,785	3,555
Rheinmetall Defence Nederland B.V., Ede/Netherlands			100	(26,821)	1,236
Rheinmetall MAN Military Vehicles Österreich GesmbH, Vienna/Austria			51	118,161	44,522
Rheinmetall MAN Military Vehicles Österreich Holding GesmbH, Vienna/Austria			51	100,040	(18)
Rheinmetall MAN Military Vehicles UK Ltd., Swindon/Great Britain			51	2,033	3,360
Rheinmetall Netherlands B.V., Hengelo/Netherlands			100	860	(60)
Rheinmetall NIOA Munitions Pty Ltd, Bundaberg/Australia			51	562	(868)
Rheinmetall Norway AS, Nøtterøy/Norway		100		17,723	484
Rheinmetall Project Solutions GmbH, Düsseldorf	(1)		100	25	-
Rheinmetall Projects Development Consultancy LLC, Abu Dhabi/UAE	(2)	49		441	83
Rheinmetall Protection Systems GmbH, Bonn			100	79,805	5,479
Rheinmetall Protection Systems Gulf (FZE), SAIF-Zone, Sharjah/UAE			100	(1,159)	61
Rheinmetall Protection Systems Nederland B.V., Ede/Netherlands			100	1,491	(379)
Rheinmetall Savunma Sanayi Anonim Sirketi, Ankara/Turkey			90	2,673	2,777
Rheinmetall Singapore Pte. Ltd., Singapore/Singapore			100	4,823	1,245
Rheinmetall Soldier Electronics GmbH, Stockach	(1)	100		3,806	968
Rheinmetall Technical Assistance GmbH, Kassel	(1)		100	25	-
Rheinmetall Technical Publications GmbH, Bremen	(1)	100		4,547	1,103
Rheinmetall Technical Publications Schweiz AG, Zurich/Switzerland			100	214	55
Rheinmetall VIRE (Nanjing) Technologies Co., Ltd., Beijing/China			51	214	(74)
Rheinmetall Waffe Munition ARGES GmbH, Schwanenstadt/Austria			100	1,969	62

Notes to the consolidated financial statements
Shareholdings

Company		Direct share of capital in %	Indirect share of capital in %	Equity in € '000	Net income for the year after PLTA in € '000
Rheinmetall Waffe Munition GmbH, Südheide	(1)	100		139,179	8,556
Rheinmetall Waffe Munition South Africa (Pty) Ltd., Somerset West/South Africa			100	3	(6)
RM Euro B.V., Hengelo/Netherlands		100		56,587	650
RRS - MITCOS Rheinmetall Rohde&Schwarz Military IT and Communications Solutions GmbH, Berlin		75		106	3
RTP-UK Ltd., Bristol/Great Britain			100	7,442	(262)
RWM Beteiligungsverwaltung Austria GmbH, Schwanenstadt/Austria			100	21,023	2,227
RWM Italia S.p.A., Ghedi/Italy			100	100,975	6,860
RWM Schweiz AG, Zurich/Switzerland			100	60,727	19,903
RWM Zaugg AG, Lohn-Ammannsegg/Switzerland			100	14,942	3,917
Automotive sector					
Amprio GmbH, Neuss	(1)		100	221	32
BF Engine Parts LLC, Istanbul/Turkey			100	415	375
BF Germany GmbH, Tamm	(1)		100	3,223	-
GVG Grundstücksverwaltung Gleitlager GmbH & Co. KG, Neckarsulm			100	6,582	273
GVMS Grundstücksverwaltung Service GmbH & Co. KG, Neckarsulm			100	40	(1)
GVN Grundstücksverwaltung Neckarsulm GmbH & Co. KG, Neckarsulm			100	6,430	725
H.Brandt Cauciuc & Mase Plastice S.R.L., Sibiu/Romania	(7)		99	957	137
Intec France SAS, Meyzieu/France			100	890	(154)
Karl Schmidt Trading Company S. de R.L. de C.V., Celaya/Mexico			100	44	(66)
Karl Schmidt Unisia Michigan LLC, Southfield/USA			100	-	-
Kolbenschmidt de México, S. de R.L. de C.V., Celaya/Mexico			100	11,849	1,136
Kolbenschmidt K.K., Hiroshima/Japan			100	39,597	1,481
Kolbenschmidt Liegenschaftsverwaltung GmbH Berlin, Neckarsulm	(1)		100	7,179	-
Kolbenschmidt Pierburg Innovations GmbH, Neckarsulm	(1)		100	25	-
Kolbenschmidt USA Inc., Marinette/USA			100	-	-
KS ATAG Beteiligungsgesellschaft m.b.H., Neckarsulm	(1)		100	10,263	-
KS ATAG Romania S.R.L., Bucharest/Romania			100	2,667	(32)
KS CZ Motorservice s.r.o., Usti/Czech Republic			100	1,977	(7,773)
KS France SAS, Basse-Ham (Thionville)/France			100	16,693	26
KS Gleitlager de México S. de R.L. de C.V., Celaya/Mexico			100	13,940	2,389
KS Gleitlager GmbH, St. Leon-Rot	(1)		100	17,186	3,160
KS Gleitlager North America LLC, Marinette/USA			100	2,989	(592)
KS Grundstücksverwaltung Beteiligungs GmbH, Neckarsulm			100	149	7
KS Grundstücksverwaltung GmbH & Co. KG, Neckarsulm			100	24,186	868
KS Kolbenschmidt Czech Rebublic a.s., Usti/Czech Republic			100	(4,169)	(49,614)
KS Kolbenschmidt France SAS, Basse-Ham (Thionville)/France			100	8,841	(6)
KS Kolbenschmidt GmbH, Neckarsulm	(1)		100	73,651	5,494
KS Kolbenschmidt US Inc., Marinette/USA			100	(45,680)	(33,621)

Company		Direct share of capital in %	Indirect share of capital in %	Equity in € '000	Net income for the year after PLTA in € '000
KS Large Bore Pistons LLC, Marinette/USA			100	32,625	227
KSG Pistons, Inc., South Haven/USA			100	-	-
KSLP (China) Co., Ltd., Kunshan/China			100	(11,141)	(13,118)
KSPG (China) Investment Co., Ltd., Shanghai/China			100	56,424	(131)
KSPG Automotive Brazil Ltda., Nova Odessa/Brazil			100	(13,928)	(36,714)
KSPG Automotive India Private Ltd., Pune Maharashtra/India			100	29,205	(5,725)
KSPG Holding USA Inc., Delaware/USA			100	269,385	1,837
KSPG Netherlands Holding B.V., Amsterdam/Netherlands			100	83,942	(22)
KSPG Services Ltd., St. Julians/Malta			100	7,986	-
KSUS International LLC, Marinette/USA			100	41,769	(15,855)
Mechadyne International Ltd., Kirtlington/Great Britain			100	3,315	13
MS Motorservice Aftermarket Iberica S.L., Abadiano/Spain			100	12,520	1,729
MS Motorservice Asia Pacific Co. Ltd., Shanghai/China			100	3,211	759
MS Motorservice Deutschland GmbH, Tamm	(1)		100	3,327	81
MS Motorservice France SAS, Villepinte/France			100	24,303	1,269
MS Motorservice International GmbH, Neuenstadt	(1)		100	51,612	232
MS Motorservice Istanbul Dis Ticaret ve Pazarlama A.S., Istanbul/Turkey			51	2,267	555
MS Motorservice Trading (Asia) Pte. Ltd., Singapore/Singapore			100	371	96
ORR Training Systems LLC, Moscow/Russian Federation	(7)		100	80	35
Pierburg China Ltd., Kunshan City/China			100	25,216	1,692
Pierburg Gestion S.L., Abadiano/Spain			100	13,390	75
Pierburg GmbH, Neuss	(1)		100	88,728	2,391
Pierburg Grundstücksverwaltung GmbH & Co. KG, Neuss			100	6,163	218
Pierburg Korea, Ltd., Seoul/South Korea			100	107	10
Pierburg Mikuni Pump Technology (Shanghai) Corp., Shanghai/China			51	1,688	(4,334)
Pierburg Mikuni Pump Technology Corporation, Odawara/Japan			51	1,314	(42)
Pierburg Pump Technology France SARL, Basse-Ham (Thionville)/France			100	42,461	(743)
Pierburg Pump Technology GmbH, Neuss	(1)		100	92,269	517
Pierburg Pump Technology Italy S.p.A., Lanciano/Italy			100	35,331	(7,081)
Pierburg Pump Technology México S.A.de C.V., Mexico City/Mexico			100	10,061	1,753
Pierburg Pump Technology US LLC, Marinette/USA			100	45,834	6,045
Pierburg S.A., Abadiano/Spain			100	54,950	5,681
Pierburg s.r.o., Usti/Czech Republic			100	47,431	6,881
Pierburg Systems S.L., Abadiano/Spain			100	310	145
Pierburg US LLC, Fountain Inn (Greenville)/USA			100	42,655	1,401
Rheinmetall Automotive AG, Neckarsulm	(1)		100	320,971	1,180
Rheinmetall Automotive Malta Holding Ltd., St. Julians/Malta		21	79	60,558	14
Rheinmetall Brandt GmbH, Neuss	(1)		100	257	(54)
Rheinmetall Ltd., Moscow/Russian Federation			100	444	(9)
Société Mosellane de Services SCI, Basse-Ham (Thionville)/France			100	10,182	(14)

Notes to the consolidated financial statements
Shareholdings

Company		Direct share of capital in %	Indirect share of capital in %	Equity in € '000	Net income for the year after PLTA in € '000
Investments carried at equity					
Holding companies/service companies/other					
casa altra development GmbH, Düsseldorf			35	(124)	12
KOLBENHÖFE GmbH & Co. KG, Hamburg	(5)		50	18,598	(47)
LIGHTHOUSE Development GmbH, Düsseldorf	(4)		10	205	2
Defence sector					
Advanced Pyrotechnic Materials Pte. Ltd., Singapore/Singapore	(5)		49	3,330	224
AIM Infrarot-Module GmbH, Heilbronn			50	12,830	3,572
ARGE RDE/CAE (GbR), Bremen	(5)		50	66	720
ARGE TATM, Bremen	(5)		50	(3)	(2)
ARTEC GmbH, Munich	(5)		64	4,096	2,567
BHIC Systems Integration Sdn Bhd, Kuala Lumpur/Malaysia			49	(63)	-
Contraves Advanced Devices Sdn Bhd, Malaka/Malaysia	(5)		49	22,155	(2,562)
Defense Munitions International, LLC, Wilmington, Delaware/USA	(5)		50	8	-
DynITEC GmbH, Troisdorf			35	3,350	4,475
EuroSpike GmbH, Röthenbach an der Pegnitz	(5)		40	5,025	234
GIWS Gesellschaft für Intelligente Wirksysteme mbH, Nuremberg	(5), (6)		50	1,239	-
Hartchrom Defense Technology AG, Steinach/Switzerland	(6)		38	1,804	-
HFTS Helicopter Flight Training Services GmbH, Hallbergmoos	(5)		25	64,585	10,342
HIL Industrie-Holding GmbH, Bonn	(5)		33	52	(1)
LOG GmbH, Bonn	(6)		25	-	-
Oy Finnish Defence Powersystems Ab, Helsinki/Finland			30	60	(4)
PSM Projekt System & Management GmbH, Kassel	(5)		50	1,577	679
RDZM, LLC, Wilmington, Delaware/USA	(5)		50	775	375
Rheinmetall Arabia Simulation and Training LLC, Riyadh/Saudi Arabia	(5)		40	4,673	3,056
Rheinmetall Barzan Advanced Technologies QSTP-LLC, Doha/Qatar			49	1,980	1,612
Rheinmetall BMC Savunma Sanayi Ve Ticaret A.S., Ankara/Turkey	(6)		40	-	-
The Dynamic Engineering Solution Pty Ltd, Magill/Australia			49	4,139	587
Werk Aschau Lagerverwaltungsgesellschaft mbH, Aschau	(5)		50	24	(1)
Automotive sector					
Advanced Bearing Materials LLC, Greensburg/USA	(6)		25	2,778	-
Carbon Truck & Trailer GmbH, Stade			25	305	(877)
HASCO KSPG Nonferrous Components (Shanghai) Co., Ltd., Shanghai/China	(5)		50	223,838	29,732
Kolbenschmidt Huayu Piston Co., Ltd., Shanghai/China	(5)		50	80,719	6,042
KS HUAYU AluTech GmbH, Neckarsulm	(5)		50	37,596	(8,510)
Pierburg Huayu Pump Technology Co., Ltd., Shanghai/China	(5)		50	37,764	6,078
Riken Automobile Parts (Wuhan) Co., Ltd., Wuhan/China			40	41,803	5,717
Shriram Pistons & Rings Ltd., New Delhi/India			20	123,209	5,748

Company		Direct share of capital in %	Indirect share of capital in %	Equity in € '000	Net income for the year after PLTA in € '000
Joint Operations					
Defence sector					
ARGE Franco-German C-130J GbR, Bremen			50	-	-
ARGE Hochenergie-Laser Marinedemonstrator GbR, Südheide			50	-	-
MGCS SADS 1 ARGE GbR, 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

Auditor's report and opinion

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, 2020, the statement of profit or loss, the statement of comprehensive income, the statement of changes in equity and the statement of cash flows for the financial year from January 1 to December 31, 2020, and the notes to the consolidated financial statements, including a summary of significant accounting policies. In addition, we have audited the combined management report for the parent and the group of Rheinmetall Aktiengesellschaft, Düsseldorf/Germany, for the financial year from January 1 to December 31, 2020. 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 German Commercial Code (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 chapter "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, 2020 and of its financial performance for the financial year from January 1 to December 31, 2020, 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 stated above nor the content of the subsection "Energy Management" stated above.

Pursuant to Section 322 (3) sentence 1 HGB, we declare that our audit has not led to any reservations relating to the legal compliance of the 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, 2020. 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 from customer-specific contracts

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 476 is recognized as goodwill under the corresponding balance sheet item (6.5% of the 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.

Auditor’s report and opinion

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 value in use. In assessing value in use, 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 period of three years valid at the time the impairment test is carried out, with expectations on future market developments and country-specific assumptions being also taken into account. The cash flows are discounted using the weighted average cost of capital of the respective cash-generating unit.

As a result of the coronavirus pandemic, major revenue losses were incurred in the Automotive segment, which has been primarily affected, in the first half of the financial year 2020. Moreover, the medium-term growth perspectives for the automotive industry are much lower than before the pandemic, on which occasion the executive board carried out an impairment test for goodwill in the heavily affected Hardparts division on June 30, 2020. This test resulted in an impairment totaling mEUR 300, which related to goodwill in the amount of mEUR 88 and, additionally, to intangible assets, property, plant and equipment, long-term equity investments accounted for using the equity method and inventories.

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. This is particularly true against a backdrop of an unclear future development in the automotive industry and in respect of the consequential effects of the coronavirus pandemic. 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 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 macroeconomic 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 properly considered in the impairment testing of the respective cash-generating units.

As relatively small variations of the used discount rate may already have material effects on the value of the recoverable amount thus 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 material assumptions concerning the valuation parameters.

In connection with auditing the recoverability of goodwill in the Hardparts division, in addition to our work described above, we obtained an understanding of the effects of the coronavirus pandemic that the executive board took into account for planning and critically assessed the associated assumptions made by the executive board. Moreover, we reconstructed how the impairment loss was allocated to goodwill and to the other assets in accordance with IAS 36.104.

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, 2020, an amount of mEUR 5,875 is recognized as revenue in the statement of profit or loss, of which mEUR 1,988 were recognized according to the percentage of completion method. The balance sheet as at December 31, 2020 states contract assets and contract liabilities of mEUR 352 and mEUR 968, respectively. A material part of the activities in the Defence segment 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 does therefore constitute 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 cost 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.

Auditor's report and opinion

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 had 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 projected 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-based aspects. The key criteria for the selection of the projects were the amount of the total contract value and of 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 and the executive board into the development of the projects, the current evaluation of the expected cost to be still incurred until completion as well as the estimate of the probability of occurrence of 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.

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,
- 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. Apart from that 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 stated above and, in so doing, 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.

Auditor's report and opinion

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

Auditor’s report and opinion

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

OTHER LEGAL AND REGULATORY REQUIREMENTS

Report on the Audit of the Electronic Files of the Consolidated Financial Statements and of the Combined Management Report prepared for Publication pursuant to Section 317 (3b) HGB

Audit Opinion

In accordance with Section 317 (3b) HGB, we have assessed with reasonable assurance whether the electronic files of the consolidated financial statements and of the combined management report (hereafter referred to as “ESEF files”) prepared for publication, contained in the accompanying file, which has the SHA-256 value BD7E037F12A0B9D2795BE97B88E47EDB61C888A518AA31FDA1AF5 B2C3A4645AE, meet, in all material respects, the requirements concerning the electronic reporting format (“ESEF format”) pursuant to Section 328 (1) HGB. In accordance with the German legal requirements, this audit only covers the transfer of the consolidated financial statements’ and the combined management report’s information into the ESEF format, and therefore covers neither the information contained in these electronic files nor any other information contained in the file stated above.

In our opinion, the electronic files of the consolidated financial statements and of the combined management report prepared for publication contained in the accompanying file stated above meet, in all material respects, the requirements concerning the electronic reporting format pursuant to Section 328 (1) HGB. Beyond this audit opinion and our audit opinions on the accompanying consolidated financial statements and on the accompanying combined management report for the financial year from 1 January to 31 December 2020 contained in the above “Report on the Audit of the Consolidated Financial Statements and of the Combined Management Report”, we do not express any audit opinion on the information contained in these electronic files and on any other information contained in the file stated above.

Basis for the Audit Opinion

We conducted our audit of the electronic files of the consolidated financial statements and of the combined management report contained in the accompanying file stated above in accordance with Section 317 (3b) HGB and on the basis of the IDW Draft Auditing Standard: Audit of the Electronic Files of the Annual Financial Statements and of the Management Report prepared for Publication pursuant to Section 317 (3b) HGB (IDW Draft AuS 410). Our responsibilities in this context are further described in the section “Group Auditor’s Responsibilities for the Audit of the ESEF Files”. Our audit firm has applied the Quality Assurance Standard: Quality Assurance Requirements in Audit Practices (IDW QS 1) promulgated by the Institut der Wirtschaftsprüfer (IDW).

Responsibilities of the Executive Board and the Supervisory Board for the ESEF Files

The executive board of the parent is responsible for the preparation of the ESEF files 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 control as it has determined necessary to enable the preparation of ESEF files that are free from material violations against the requirements concerning the electronic reporting format pursuant to Section 328 (1) HGB, whether due to fraud or error.

The executive board of the parent is also responsible for the submission of the ESEF files together with the auditor's report and the accompanying audited consolidated financial statements and the audited combined management report as well as other documents to be filed with the publisher of the Federal Gazette.

The supervisory board is responsible for overseeing the preparation of the ESEF files as part of the financial reporting process.

Group Auditor's Responsibilities for the Audit of the ESEF Files

Our objectives are to obtain reasonable assurance about whether the ESEF files are free from material violations, whether due to fraud or error, against the requirements pursuant to Section 328 (1) HGB. We exercise professional judgment and maintain professional skepticism throughout the audit. We also

- identify and assess the risks of material violations against the requirements pursuant to Section 328 (1) HGB, 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 opinion.

- obtain an understanding of internal control relevant to the audit of the ESEF files 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 controls.

- assess the technical validity of the ESEF files, i.e. whether the file containing the ESEF files meets the requirements of the Delegated Regulation (EU) 2019/815 in the version applicable as of the balance sheet date as to the technical specification of this file.

- evaluate whether the ESEF files enable a XHTML copy of the audited consolidated financial statements and of the audited combined management report whose content is identical with these documents.

- evaluate whether the ESEF files have been tagged using inline XBRL technology (iXBRL) in a way that enables an appropriate and complete machine-readable XBRL copy of the XHTML copy.

Auditor’s report and opinion

Further information pursuant to Article 10 of the EU Audit Regulation
We were elected as group auditor by the annual general meeting on May 19, 2020. We were engaged by the supervisory board on November 3, 2020. We have been the group auditor of Rheinmetall Aktiengesellschaft, Düsseldorf/Germany, 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).

GERMAN PUBLIC AUDITOR RESPONSIBLE FOR THE ENGAGEMENT
The German Public Auditor responsible for the engagement is René Kadlubowski.

Düsseldorf/Germany, March 1, 2021

Deloitte GmbH
Wirtschaftsprüfungsgesellschaft

Signed: (André Bedenbecker)
Wirtschaftsprüfer
(Geman 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 1, 2021

Rheinmetall Aktiengesellschaft
The Executive Board

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This report was published on March 18, 2021. The editorial deadline was 26 February 2021.

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.

This report contains statements and forecasts referring to the future development of the Rheinmetall Group which are based on assumptions and estimates made by the management. A number of factors, many of which are beyond Rheinmetall's control, influence the business activities, success, business strategy and results of the Company. Statements regarding the future are based on current plans, targets, estimates and forecasts and only take into account findings made up to and including the date this report was produced. If the underlying assumptions do not materialize, the actual figures may differ from such estimates. Uncertain factors include changes in the political and economic environment, changes to national and international laws and regulations, 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, the effect of changes to customer structures and changes 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 following the publication of this annual report.

PASSION FOR **TECHNOLOGY.**

RHEINMETALL