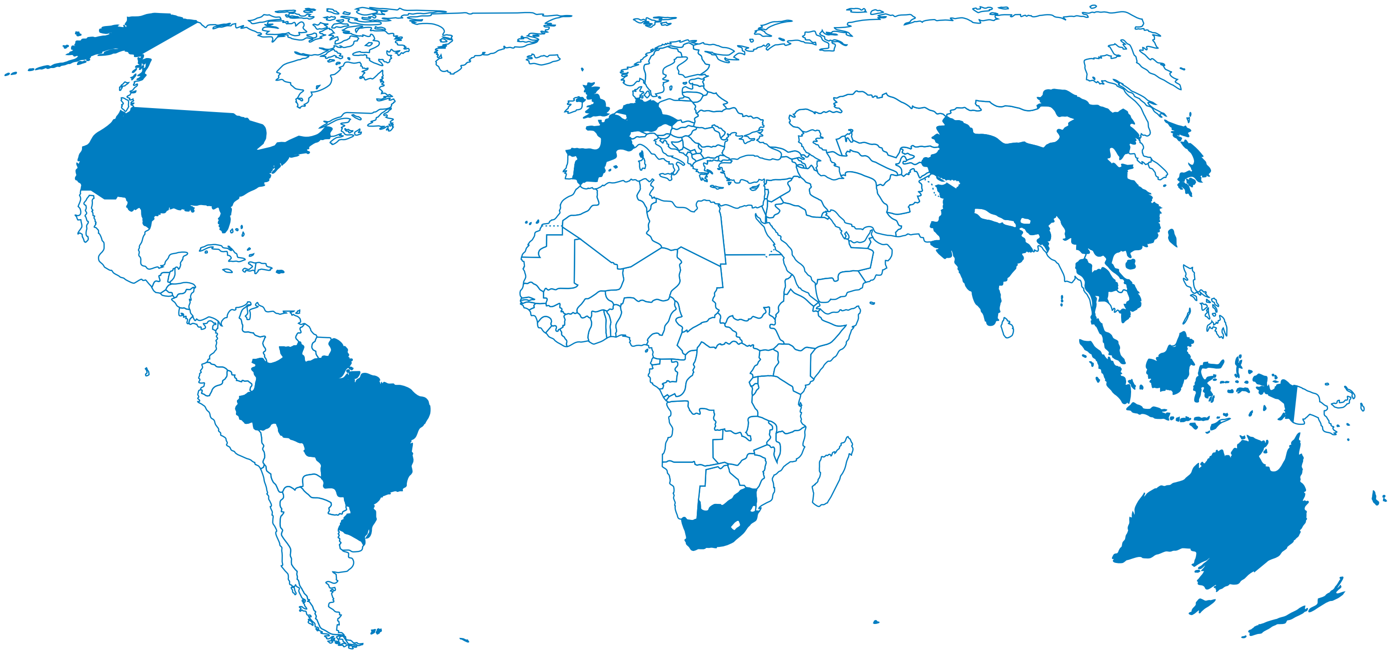
FINANCIAL REPORT

H&R GmbH & Co. KGaA

2022

Our
Mission Statement

As a Group with international operations, we focus on the manufacture of high-grade chemical-pharmaceutical specialty products. Our customers' needs are our top priority. They come from more than 100 different industries and benefit from 100 years of experience gleaned over time, comprehensive expertise and efficient production processes. Over the next few years, we aim to successfully expand our global presence – and with this transform our business to make it more sustainable.



GLOBAL
PRESENCE

Our
Business Model

RIGHT FROM THE START OF OUR PROCESSES, WE FOCUS ON THE END RESULT.

WITH OUR SPECIALTY PRODUCT MARKETING WE TAKE A CLOSE LOOK AT WHAT OUR CUSTOMERS NEED FROM US.

OUR CUSTOMERS RECEIVE CUSTOMIZED SPECIALTY PRODUCTS FROM US THAT HAVE BEEN TAILOR-MADE AT OUR SPECIALTY REFINERIES TO THEIR REQUIREMENTS.

OUR PRODUCTS

We produce high-quality chemical-pharmaceutical specialty products, transform our business model to make our operations more sustainable, and work to ensure that we can continue to reliably provide our customers with the products they need.

Our feedstock base is to become more diverse through the increased use of renewable, synthetic and recycled materials.

COSMETIC & PHARMACEUTICAL SPECIALTIES

In recent years, this H&R specialty business has successfully developed emulsifiers and bases for the cold processing of ointments, creams and lotions, among other things. Tailored advice and recommended formulations give many pharmacies and pharmaceutical/cosmetic manufacturers security in formulating premium products.

CABLE FILLERS

H&R is the world’s leading provider of cable compounds for the energy and telecommunications sector. We offer unique application solutions for manufacturers, operators and installers of cables through an international network of manufacturing sites.

PETROLEUM JELLIES & WHITE OILS

Turning crude oil first into base oil, and ultimately into cosmetics, is a long road. In between these two extremes lies a highly complex chemical process which H&R is continuously improving and enhancing. We use this multi-stage hydrogenation process to produce white oils. They are as clear as water and are used in a variety of products, such as cosmetics.

WAXES & EMULSIONS

The H&R Group is focused on waxes. Based on our integrated raw material portfolio, we develop, produce and sell waxes and formulated waxes for specific industrial applications.

PROCESS OILS

More than a fifth of a car's fuel consumption stems from the rolling resistance of its tires. Reducing this figure is therefore nothing else than a practical example of climate protection. It has been scientifically proven that environmentally friendly plasticizers make a key contribution to improving the operating characteristics of state-of-the-art tires.

MINERAL-OIL TRADE & INDUSTRY

Modern, high-performance engines need top-quality motor oil in order to withstand the demands of daily use. H&R motor oils satisfy the requirements of the newest generation of engines and were manufactured for use by major manufacturers. They keep the engine clean, provide reliable protection against sludge build-up and reduce excessive wear and tear.

CONSTRUCTION INDUSTRY

Special water-based H&R waxes and oil emulsions made from natural waxes are used in industrial sectors such as paints and varnishes, paper and packaging, chemicals and blenders, construction industry and insulation materials, as well as in engineered woods.

PLASTICS

Full service – a claim we also live up to in the plastics product segment. Here, we precisely tailor the properties of the material to the level of stress the end product will be subjected to on a daily basis. This also applies to our lightweight precision gears, which are also used in dental drills.

OUR KEY FIGURES

Overall, the general market and business conditions the company faced were anything but easy. This made it all the more important and gratifying to achieve good income figures and demonstrate our stability once again. With sales revenue of nearly €1.6 billion, we achieved EBITDA of €124.9 million.

SALES 2022

1,576.0

MILLION EUROS

EBITDA 2022

124.9

MILLION EUROS

EMPLOYEES 2022

1,631

T. 01 **THE H&R GROUP IN FIGURES**

IN € MILLION	2022	2021	Change (absolute)
Sales revenue	**1,576.0**	**1,188.4**	**387.6**
of which Chemical and Pharmaceutical Raw Materials Refining	1,020.6	745.3	275.3
of which Chemical and Pharmaceutical Raw Materials Sales	526.7	412.2	114.5
of which Plastics	49.0	43.8	5.2
Reconciliation	-20.3	-12.8	-7.5
Operating income (EBITDA)	**124.9**	**132.5**	**-7.6**
of which Chemical and Pharmaceutical Raw Materials Refining	92.7	103.4	-10.7
of which Chemical and Pharmaceutical Raw Materials Sales	33.4	29.0	4.4
of which Plastics	5.0	3.9	1.1
Reconciliation	-6.2	-3.8	-2.4
EBIT	**69.6**	**81.6**	**-12.0**
Earnings before income tax	**62.0**	**73.4**	**-11.4**
Consolidated net income	**45.4**	**52.5**	**-7.1**
Consolidated income attributable to shareholders	**42.7**	**50.2**	**-7.5**
Consolidated income per share (undiluted, in €)	**1.15**	**1.35**	**-0.20**
Cash flow from operating activities	**38.0**	**37.4**	**0.6**
Equity ratio (in %)	**49.0**	**46.7**	**2.3**
Employees as of December (absolute)	**1,631**	**1,585**	**46**

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Dear Shareholders,

I am pleased to present the 2022 annual report of H&R GmbH & Co. KGaA to you. In the following pages, we have once again put together a comprehensive overview of our business performance over the past financial year. We are also keen to share with you our assessment of the progress, successes and challenges we have encountered this year.

Our industry and its customers faced a multitude of challenges in 2022, both on account of international geopolitics and economic forces. The prevailing topic, however, was – and unfortunately still is – the war in Ukraine. The invasion of Ukraine by Russian troops is not only causing untold human suffering on the ground, but has also led to a high level of instability on the international energy and raw materials markets. As German industry had previously been heavily dependent on cheap gas and raw materials from Russia, this was cause for concern.

The situation also presented us with a major challenge. Not only were raw material prices rising, but above all we had to continue to secure the supply of grades that could be used for the processes at our production sites.

In mastering this task, H&R was once again able to play to one of its key strengths: its adaptability. We have always been able to process a wide basic range of feedstock grades at our facilities. We simply needed to secure alternatives quickly enough. Thanks to the tremendous effort by our purchasing department, we were not only able to do this quickly, but also in sufficient quantities.

Another challenge was the steadily decreasing gas supply levels to Germany and Western Europe in response to sanctions imposed by the West. This led to significant price increases and – almost even more threateningly – to a fundamental discussion about distribution.

For almost all industries, whether steel production in Germany or the local chemical industry, rising energy prices had a significant impact on production costs, as alternative


Niels H. Hansen Sole Managing Director
of H&R GmbH & Co KGaA

and even renewable energy sources were far from being available in sufficient quantities. H&R responded to this situation at both major production sites by significantly reducing the level of gas used.

Another problem that affected industry in Germany was the global disruption of logistics chains. We thought the pandemic and the supply chain bottlenecks were long behind us. But the continuing impact of the Covid-19 pandemic and the restrictive policies imposed by China for much of 2022 meant that it remained difficult to get raw materials and products moved quickly and cost-effectively.

These were not easy conditions for successful business overall – especially as these factors also impacted the supply and purchase volumes of our customer industries, and had to be taken into account in the pricing.

We were able to placate some of the above-mentioned cost increase factors within the market. Sales increased significantly due to raw material prices. This is a development that you are probably familiar with from past experience. As someone who knows H&R, you are aware of its limited significance. What was clearly more important and particularly encouraging was our results of operations. With operating income of €124.9 million, we achieved our second-best figure to date, which is a just reward for a very good operating performance.

We want you, our investors, to benefit from this success and will therefore propose to the Annual Shareholders' Meeting the distribution of a dividend of €0.10 per share. As you may know, the credit line in place with KfW stipulates a prohibition on distribution with a view to higher participation.

You will find details and further explanations of the business and earnings trend in the annual report. We have once again opted for a combination of detailed written explanations and additional introductory descriptions.

Now I only need to mention the outlook.

In the current financial year, we are likely to see many of the factors described above persist. Other matters, such as regulatory issues, will also arise or gain in importance. Despite these challenges, H&R's business also faces opportunities for growth and innovation. A focus on sustainability and the introduction of new technologies and product qualities in particular will play a central role here in the coming years. Companies that are in a position to offer their customers more environmentally friendly solutions are expected to reap the benefits of rising demand.

Overall, we believe we are in a good position to master the tasks ahead of us. We want to build on this and continue down the path we have laid out. Let’s work together and make the year a success!

All the best,

Executive Board of H&R KGaA

Niels H. Hansen
Sole Managing Director

Salzbergen, March 2023

Company Representative Bodies

The representative bodies of H&R KGaA are comprised of people who combine entrepreneurial thinking with professional skills. They complement each other with their specific skills and diverse expertise, which they use to achieve our shared corporate objectives.

The Executive Board

As the general partner with full personal liability, H&R Komplementär GmbH is responsible for managing H&R KGaA. It conducts business and runs the company. In the 2022 financial year, the Executive Board comprised:

Niels H. Hansen
Sole Managing Director

The Supervisory Board

The Supervisory Board of H&R KGaA is responsible for the supervision of the Executive Board. In financial year 2022, the Supervisory Board of H&R KGaA comprised the members listed below. The Chairman of the Supervisory Board of H&R KGaA is Dr. Joachim Girg.

Chairman of the Supervisory Board

Dr. Joachim Girg
Master of Business Administration,
Managing Director
of H&R Beteiligung GmbH

Members of the Supervisory Board

Roland Chmiel
Certified public/chartered accountant

Sabine U. Dietrich
Chartered engineer, Member of the Supervisory Board of Commerzbank AG, Member of the Supervisory Board of MVV Energie AG

Sven Hansen
Business administration

Dr. Hartmut Schütter
Chartered process engineer, consulting engineer

Dr. Rolf Schwedhelm
Tax attorney and partner in the law firm Streck Mack Schwedhelm

Patrick Ewels
Continuing education coordinator,
Works council chairman of H&R ChemPharm Group GmbH

Thomas Merting
Chemical technician

Dominik Franz
Process technician,
Works council chairman of GAUDLITZ GmbH

The Advisory Board

The Advisory Board of H&R KGaA consists of experts who contribute their expertise in the areas of finance and economics, industrial management and refinery technology on an advisory basis.

Eckbert von Bohlen und Halbach
Managing Director of Bohlen Industrie GmbH

Dr. Erwin Grandinger
Entrepreneur

Dr. Bernd Pfaffenbach
Secretary of State in the German Federal Ministry of Economics and Technology, retired

Michaela Pulkert
Master of Business Administration

Dr. Mazdak Rafaty
Entrepreneur

Wilhelm Scholten
Managing Director of Ölfabrik Wilhelm Scholten GmbH

Dr. Torsten Sevecke
State Councilor for the Hamburg Ministry of Economy, Transport and Innovation, retired

Dr.-Ing. Peter J. Seifried
Chemical engineer, independent consultant

Dr. Gertrud Rosa Traud
Chief economist of Helaba Landesbank Hessen-Thüringen

Supervisory Board Report

Dear shareholders, dear readers,

Before you lies the Supervisory Board report on the 2022 financial year – a year that we will all remember for a long time to come. H&R GmbH & Co. KGaA set out into 2022 with great expectations. We hoped that the Covid-19 pandemic had been overcome and that our everyday lives would return to pre-2020 normality. Our company was clearly focused on the transformation of the refinery business, and the national and international economies were showing significant signs of recovery. It really could have been a great year for all of us.

Then came February 24, 2022. This date will mark the invasion of Ukraine by Russia and the onset of the still-raging war for years to come. Since then, nothing has been as it was before. Our company also felt the war's grave effects. Production costs rose significantly due to erratic price trends. Russia had been an important supplier of raw materials for our two German production sites for a long time. In the 2021 fiscal year, over 90% of our feedstocks were of direct and indirect Russian origin. In 2022, we had to procure the relevant volumes from other sources through our raw material purchasing activities. However, short-term adjustments were also necessary on the sales side in national and international business. Internationally, the company continued to suffer from ongoing restrictions relating to the Covid-19 pandemic, especially at sites in Asia.

Given these circumstances, the annual results for the 2022 financial year before you are more than satisfactory.

I. With EBITDA of €124.9 million, H&R GmbH & Co. KGaA again posted strong operating income. It is the second best figure in the company's history. Income before tax came to €62.0 million and consolidated income attributable to shareholders was €42.4 million. Sales reached €1,576.0 million, up 32% on the previous year due to price increases.

II. Despite more difficult conditions, the international Sales segment also recorded progress last year. Work at the new Lumut site in Malaysia thus proceeded without any significant delays. The company hopes to start generating sales and earnings in Lumut in 2023 and become operational ahead of schedule.

III. Following extensive restructuring measures in 2019 and 2020, the Plastics division based in Coburg again saw stable development in the challenging market environment of the automotive industry.

A differentiated look at the annual results reveals that, following a comparatively weak start to the year, the income position improved significantly from the end of the first quarter onwards. The second and third quarters were excellent, due in particular to the ChemPharm Refining segment. This development could not have been foreseen in the wake of the events at the end of February. This was due to high demand coupled with limited supply in the middle of the year. From the end of October, the income position came under pressure again, which in the ChemPharm Refining segment was mainly due to increased shipments from China to Germany and Europe.

The Executive Board and the Supervisory Board however intend to propose to the Annual Shareholders' Meeting that a dividend of €0.10 be distributed for each share for the financial year 2022, and that, in addition, the distributable profit be carried forward. A higher distribution is not possible due to the credit arrangements for the KfW loan from coronavirus aid funds.

Key Focal Points of Supervisory Board Work

The focus of the Supervisory Board's activities naturally underwent a shift in the past year. While we originally assumed that the focus of the Supervisory Board's activities would be on sustainability and the transformation of our refinery operating model, the events in Eastern Europe gave rise to a new dominant topic.

The invasion of Ukraine by the Russian army on February 24, 2022, and the war in Ukraine, which has been raging ever since, permanently changed and influenced the economic situation of national and international businesses and entire societies.

Even H&R GmbH & Co. KGaA has not been spared from this. Strict compliance with international sanctions, procurement of feedstocks in line with the boycott, the impact of the sharp rise in electricity and gas costs, and opportunities for energy savings took on unforeseen importance for the full Supervisory Board. The numerous crises of recent years have, however, given our company a certain amount of practice in adapting our business model to changing circumstances.

For the second core topic, namely the advancement of our refinery operating model and the transition to sustainable production, our company has set itself ambitious goals for the period up to 2035 and has initiated projects and investments aimed at making production climate-friendly and, ideally, climate-neutral. The Supervisory Board's agenda also included reviewing the projects that had been launched and the associated investment projects, as well as making adjustments to targets in response to changed global conditions. To the general public, the most visible sign of this transformation was the technical commissioning of our power-to-liquid demonstration plant at the Hamburg production site in September 2022.

A recurring topic on the Supervisory Board's list is the safety of our facilities and the health and safety of our employees and partners. Both of these topics are top priorities for us. For this reason, the Board's main goal is to achieve a zero-accident record. Each meeting of the Refinery Technology and Strategy Committee began with an update on the topic of safety and this topic also took on a prominent position at the beginning of every regular Supervisory Board meeting.

Our most stable earnings generator, the international ChemPharm Sales segment, was again a key focus of the Board's activities in 2022. The safeguarding and, where possible, further intensification of our established sites were topics of detailed discussion, as was the expansion of our activities in North and Latin America, Africa and

India. As is well known, our company has placed a special focus on the South East Asian region. We were given regular updates on the measures and constraints imposed as a result of the Covid-19 pandemic in these areas. We were also regularly informed about progress with the project at the new site in Lumut, which was acquired in 2021.

The plenary session also discussed two key topics from the past few years, namely the Covid-19 pandemic and the implementation of targets following the restructuring measures at GAUDLITZ GmbH in Coburg, Germany. However, in view of the stable results of operations in the Plastics segment, these issues were of secondary importance compared with previous years.

The first two-day workshop on specialty production was also held in the past financial year. At the two all-day sessions, technical issues and business matters were discussed in detail with the management, individual executives and project managers.

Objectives and Composition of the Supervisory Board

Since the change of legal form in 2016, the activities performed by the Supervisory Board of our company have focused primarily on control functions and an advisory role. In contrast to companies with the legal form of a limited partnership (AG), the Supervisory Board of a limited liability company (KGaA) has no statutory co-determination rights when it comes to, e.g., major investment projects or defining the company's strategy. Furthermore, it has no human resources competencies regarding the managing directors (e.g., their appointment or dismissal, extending, altering or terminating contracts, and dealing with matters relating to their remuneration). At H&R GmbH & Co. KGaA, this function is performed by an Advisory Board of the company acting as the general partner, which has been composed of independent members of the Supervisory Board since it was set up as part of the change in legal form. In this respect, the recommendations of the German Corporate Governance Code in the current version dated April 28, 2022, only apply to a limited extent or not at all to the legal form of a partnership limited by shares (KGaA). The Executive Board and Supervisory Board regularly report on deviations in the statement of compliance with the German Corporate Governance Code, which is published on the company's website.

The objectives and composition of the Supervisory Board are reviewed by us at regular intervals and are adjusted, or elaborated, as and when required. This last occurred at the meeting on March 23, 2023. Accordingly, the Supervisory Board of H&R GmbH & Co. KGaA is to be composed so as to ensure the qualified monitoring of, and provision of advice to, the Executive Board. All in all, its members should have the knowledge, skills and professional experience required to enable them to perform the duties incumbent upon a Supervisory Board of a capital market-oriented group of companies with international operations in the refinery segment, and in the business with chemical-pharmaceutical specialty oils and plastics, in a due and proper manner. The special features that apply to structures in which the company acting as the general partner is a family-run business must be taken into account within this context.

Supervisory Board members should have entrepreneurial/business experience in at least one of the areas listed in figure T.04, as well as general knowledge of the refinery segment or related areas. On the basis of their knowledge, skills and professional experience, they should be able to perform the duties incumbent upon a Supervisory Board member in a company with international operations and safeguard H&R Group's public image. At least one-third of the shareholder representatives should have long-standing international experience in the markets relevant to H&R. When proposing candidates to the Annual Shareholders' Meeting for election, attention should also be paid to an individual's personality, integrity, motivation, professionalism and independence.

At least two-thirds of the Supervisory Board members must be independent within the meaning of Section C.II. of the German Corporate Governance Code, as amended. In this respect, it is assumed that the fact that members represent the employees or have a contract of employment with the H&R Group does not call their independence into account. The Supervisory Board must not include more than two former members of the Executive Board of H&R GmbH & Co. KGaA. As a general rule, the members of the Supervisory Board should not be aged over 70. Exceptions can be made from this rule in justified individual cases. In general, the length of service on the

Supervisory Board should not exceed 15 years or three terms of office.

The Supervisory Board of H&R GmbH & Co. KGaA would like to promote and strengthen a culture of diversity as a forward-looking foundation for our business. To us, diversity is a way of thinking that is characterized by mutual respect and open-mindedness. The Supervisory Board places particular emphasis in this regard on promoting women to leadership positions. According to the requirements set out in Section 96, paragraph 2 of the German Stock Corporation Act (AktG), the Supervisory Board should comprise at least 20% female members and at least 20% male members. The aim is to have achieved these objectives by the end of 2022 at the latest. As a matter of principle, the selection of Supervisory Board members should be based on professional criteria alone. An individual's skin color, religious affiliation, gender or sexual orientation are no reasons to exclude a particular candidate. In general, adhering to these quotas is seen as the joint responsibility of the shareholder and employee representatives.

When selecting a Supervisory Board member, care must be taken to ensure that the individual can devote the amount of time that is expected to be necessary to ensure the due and proper performance of their Supervisory Board mandate. Within this context, it is important to bear in mind, in particular, that at least five ordinary Supervisory Board meetings are held every year, all of which have to be prepared for in an appropriate manner, that sufficient time must be set aside for the review of the annual and consolidated financial statements and that members who are also appointed to one or several Supervisory Board committees will require additional time to perform these tasks. Furthermore, extraordinary meetings of the Supervisory Board or a committee may have to be held to address special issues.

T.03 **SUPERVISORY BOARD COMMITTEES OF H&R GMBH & CO. KGAA AND THEIR COMPOSITION AT THE END OF 2022**

COMMITTEE	MEMBERS
Audit Committee	Roland Chmiel (chairman)
	Sabine U. Dietrich
	Dr. Joachim Girg
	Dr. Rolf Schwedhelm
Refinery Technology and Strategy Committee	Dr. Hartmut Schütter (chairman
	Sabine U. Dietrich
	Dr. Joachim Girg
	Sven Hansen
Nomination Committee	Sven Hansen (chairman)
	Dr. Joachim Girg
	Dr. Rolf Schwedhelm
Committee for Related Party Transactions and Other Legal Issues	Dr. Rolf Schwedhelm (chairman)
	Roland Chmiel
	Dr. Joachim Girg
	Sven Hansen
	Sabine Dietrich (substitute member)

General Information About Supervisory Board Activities

The Supervisory Board diligently and conscientiously performed the supervisory and advisory duties required by law, the Articles of Association and internal rules of procedure. During financial year 2022, the Supervisory Board and the Executive Board had a good, intensive working relationship. The Executive Board kept the Supervisory Board Chairman informed about all important issues on a regular basis and in a timely manner. The Supervisory Board and the Executive Board also stayed in close contact outside meetings in order to ensure a constant flow of information and an exchange of opinions.

The Chairman of the Supervisory Board also frequently took part in the regular update meetings on the impact of the war in Ukraine on the business activities of H&R GmbH & Co. KGaA.

Topics Discussed by the Full Supervisory Board

In 2022, a total of six Supervisory Board meetings were held in person, and one online. As in previous years, the attendance rate of the Board members was very high at 97%. A two-day workshop on specialty production was also held for the first time in the past financial year. This event was held at our Hamburg production site at the beginning of November and was attended by all members of the Supervisory Board.

There were a total of two absences in 2022 – due to illness in one case and family reasons in the other. The four committees always met in full, putting the attendance rate at 100%.

It is a well-established practice to hold each regular Supervisory Board meeting according to a specific schedule. In addition to the approval of the minutes of the last meeting, the Supervisory Board Chairman reports on the meetings with the Executive Board and other committee-related occurrences that have taken place since the last meeting. The committee chairs report on the meetings that have taken place in the meantime.

In 2022, five topics were discussed at almost all meetings.

In order to keep the number of repetitions to a minimum in the following list of meeting topics, these should be mentioned briefly in advance:

I) The ramifications of the Russian attack on Ukraine on February 24, 2022, and its impact on our business, in particular the secure procurement of feedstocks in line with the boycott for our two German production sites.

II) Further development of our refinery operating model and transformation to sustainable production – measures currently being implemented and their consequences.

III) Implementation of investment projects.

IV) Safety / safety records of our sites.

V) Expansion of international business – current projects and measures implemented, above all in Malaysia.

The Covid-19 pandemic and the introduction of targets in line with the restructuring measures at GAUDLITZ GmbH in Coburg were a recurring point on the agenda. However, they were of secondary importance compared with previous years.

Insofar as one of the five points referred to was an explicit agenda item or meeting focus, it will not be discussed in further detail below.

In the first half of the year, individual Supervisory Board members logged in remotely to meetings held in person in Hamburg due to coronavirus restrictions in place at the time, while meetings were held in person in Hamburg in the second half of the year and in Salzbergen in October 2022.

The first meeting in the past financial year was scheduled for February 8, 2022. The agenda focused on organizational issues, the topic of sustainability, a report on the status of work on the 2021 annual financial statements, and updates on various investment projects. The latter included flue gas desulfurization and the power-to-liquids demonstration plant at the Ölwerke Schindler GmbH site at the Port of Hamburg. At the Chemisch-Pharmazeutische Spezialitäten GmbH site in Salzbergen, the extension of a tank field was outlined to create new storage capacity and thus make the production process more flexible. The organizational topics mainly dealt with the presentation and discussion of the evaluated efficiency audit (self-assessment) and with discussions on the composition of the Supervisory Board. With regard to the topic of sustainability, the Executive Board presented its plan for the transformation of the two production sites into “sustainability technology parks” and presented concrete measures for the current financial year.

The second Supervisory Board meeting, which was held on March 30, 2022, was used to discuss the annual financial statements for 2021. After the necessary supporting documents had been discussed by the Audit Committee in its meeting on March 22, 2022, in the presence of the auditor, the documents were then made available to all Supervisory Board members from this date. Following extensive editing, the audit reports were debated with the auditors at the meeting. On the recommendation of the Audit Committee, the Supervisory Board approved the company’s annual financial statements, the consolidated financial statements and the combined management and Group management report after detailed examination. The recommendations to the Annual Shareholders’ Meeting for the appropriation of earnings (carrying forward distributable profit) and the reelection of Grant Thornton AG, Wirtschaftsprüfungsgesellschaft, Hamburg, as auditors of the financial statements and the consolidated financial statements, each received a unanimous resolution. Furthermore, the Board members looked at the 2021 subordinate status report. After the internal audit had again not revealed any need for additions or changes, the subordinate status report in its submitted form was unanimously approved. In addition, the Supervisory Board Report was approved in form and content and released for publication on the following day as part of the 2022 annual report.

The members of the Supervisory Board then discussed the contents of the non-financial statement, which was to be completed by April 30, 2022, and scheduled a conference call for its final adoption on April 27, 2022.

Upon recommendation of the Nomination Committee, the Supervisory Board also passed a unanimous resolution to propose Dr. Joachim Girg and Sven Hansen to the Annual Shareholders' Meeting for election as members of the Supervisory Board. In addition, Ms. Kyra Hansen was put forward as a substitute candidate for Mr. Sven Hansen in the event of his retirement during the five-year term of office. Here, too, the Board passed a unanimous resolution to propose to the Annual Shareholders' Meeting the election of Ms. Kyra Hansen as a substitute member in the event of Mr. Sven Hansen's resignation.

In relation to the nominations, the full Supervisory Board intensively discussed the composition of the Supervisory Board of H&R GmbH & Co. KGaA. Not all of the goals that it has set itself in this respect have been achieved yet. Particularly in light of the new appointment of five Supervisory Board members in 2022 – also including three employee representatives – the goal was reinforced of achieving the intended 20% quota for the proportion of women as soon as possible. At the same time, the responsibility of both Supervisory Board benches for target achievement was reaffirmed.

The Supervisory Board also discussed the agenda for the Annual Shareholders' Meeting to be held on May 24, 2022. The preparation of the presented agenda was also decided, as well as the initiation of all necessary steps for conducting a virtual Annual Shareholders' Meeting.

Finally, the Supervisory Board held intensive discussions with the Executive Board on current developments in the political, economic and social spheres and their impact on our company. A great deal of attention was paid to the war in Ukraine and its direct impact on H&R GmbH & Co. KGaA. The Executive Board reported on planned measures to find new feedstock suppliers and on the current energy supply. The economic situation of the company was impacted by the sharp rise in raw material and energy costs and their high volatility. Despite this, the company performed in line with forecasts.

On May 23, 2022, the day before the Annual Shareholders' Meeting, the third meeting of the full Supervisory Board was held. In the first part of the meeting, the Executive Board reported on the current status of preliminary work and the expected procedure of the Annual Shareholders' Meeting. The agenda also included the presentation of the results of the 2020 Solomon Study and project updates on investment measures in Hamburg and Salzbergen, as well as the introduction of planned measures to transform the refinery operating model to meet the challenging conditions posed by the war in Ukraine. At the same time, the Director of Transformation, who had been appointed by the company at the turn of the year, was introduced. This role involves coordinating the switch at the two specialty production sites of H&R Ölwerke Schindler GmbH and H&R Chemisch-Pharmazeutische Spezialitäten GmbH – both of great importance to the entire Group – to the use of more renewable raw materials sources, which is essential for the achievement of the strategic sustainability goal. A core team, the Transformation Core Group, supports this process, including representatives from global product management and higher-level refinery management.

In the second part of the meeting, an intensive exchange of ideas took place between the Supervisory Board members, without the Executive Board.

The fourth meeting of the full Supervisory Board took place in Hamburg on August 24, 2022. After the Chairman of the Supervisory Board had acquainted the three newly elected employee representatives, Mr. Patrick Ewels, Mr. Dominik Franz and Mr. Thomas Merting, with the tasks, procedures and responsibilities of the full Supervisory Board and the way in which meetings are conducted, the Supervisory Board met for the first time in its new composition for its constituent meeting. Two major topics dominated the agenda: the impact of the war in Ukraine on the

T. 04 **PROFILE REQUIREMENTS WITHIN THE RECOMMENDATION C.1 OF THE GERMAN CORPORATE GOVERNANCE CODE FOR THE SUPERVISORY BOARD**

Name		Dr. Joachim Girg	Roland Chmiel	Sabine U. Dietrich	Patrick Ewels
Age		58	65	62	41
Function		Chairman of the Supervisory Board; representative of the majority shareholder; financial expert	Deputy Chairman; independent financial expert	Independent member of the Supervisory Board	Employee representative; works council chairman of H&R ChemPharm Group, Salzbergen
Occupation/professional background		MBA	MBA; Certified public/chartered accountant	Chartered engineer	Continuing education coordinator
Profile requirements	Family-run SME, capital market operator	x	x		
	Refinery business & petroleum specialty products; plastics			x	x
	Application research & product development				
	Production; marketing; sales/distribution; digitalization			x	
	Sustainability, especially environmental, social and governance (ESG) elements		x	x	x
	Internationality	x		x	
	Accounting & auditing	x	x		
	Controlling & risk management	x	x	x	
	Financing & capital market	x			
	Law & taxes		x		
Boards		Audit Committee; RTS; Nomination Committee, LEGAL Committee	Audit Committee (chairman); LEGAL Committee	Audit Committee; RTS; LEGAL Committee (substitute member)	
On the panel since/ elected until		September 2011/HV 2027	May 2011/HV 2026	May 2019/HV 2025	May 2022/HV 2027
Panel activity (# meetings/ participation)		Meetings 8 / 8 Boards 20 / 20	8 / 8 9 / 9	8 / 7 17 / 17	4 / 4 –
Additional board functions		none	TW Beteiligung AG, Munich: member of the supervisory board	COMMERZBANK AG, Frankfurt; MVV Energie AG, Mannheim; member of the supervisory board	

partnership limited by shares (KGaA) and the implementation of the sustainability strategy.

First of all, however, the Board dealt with adaptation measures in corporate governance systems and in the areas of IT security and data privacy. The Chairman of the Audit Committee reported on the most recent meetings of the committee and attested to the adequacy and effectiveness of the systems, control mechanisms, and other safeguards. The project managers also provided information on the updated Code of Conduct.

With regard to the first core topic, the Executive Board outlined the changes to the procurement of feedstocks since February 24, 2022. Russian feedstocks have now been replaced by grades from West and North Africa. The company faces

	Dominik Franz	**Sven Hansen**	**Thomas Merting**	**Dr. Hartmut Schütter**	**Dr. Rolf Schwedhelm**
	38	**54**	**43**	**78**	**67**
	Employee representative; works council chairman of GAUDLITZ GmbH, Coburg	Entrepreneur	Employee representative	Independent member of the Supervisory Board	Independent member of the Supervisory Board
	Process technician	Industrial manager (degree in Business Administration)	Chemical technician	Chartered process engineer, freelance consultant	Attorney; specialist lawyer (tax law)
		x			x
	x	x	x	x	
		x		x	
		x		x	
					x
		x			
					x
					x
		RTS; Nomination Committee (chairman), LEGAL Committee		RTS (chairman)	Audit Committee; Nomination Committee, LEGAL Committee (chair)
	May 2022/HV 2027	August 2016/HV 2027	May 2022/HV 2027	May 2013/HV 2023	May 2011/HV 2026
	4 / 4 –	8 / 8 12 / 12	4 / 4 –	8 / 7 5 / 5	8 / 8 15 /15
		none		none	Deutsche Anwalt Akademie Gesellschaft für Aus- und Fortbildung sowie Serviceleistungen mbH, Berlin; chairman of the supervisory board

fiercer competition in this area, which brings with it major price volatility. The changes in the output structure resulting from the new raw materials were discussed at length during the meeting. The more complex situation on the distribution side and the ramifications of the war on our customers were also discussed in detail.

Various electricity and gas saving measures and process changes to ensure production were presented when the topic of energy was discussed. Despite a sharp rise in feedstock and energy costs, the ChemPharm Refining segment was able to deliver a good contribution to income thanks to high demand coupled with short supply. At the same time, the Executive Board made the point that it is becoming increasingly difficult to pass on the high costs of energy and feedstocks.

With regard to the implementation of the sustainability strategy, the Executive Board outlined the cornerstones of the transformation of the production process and, in particular, its ongoing flexibilization and the switch to bio-based, synthetic and recycled feedstocks. Various projects that had already been implemented (e.g. hydrogen electrolysis, green power purchasing) or that were under construction or development (e.g. in Portugal with a JV partner) were presented and discussed.

The fifth Supervisory Board meeting of our company was held in Salzbergen on October 12, 2022. The Executive Board and local site management first provided an overview of the unit's history, processing plant setup, and strengths. This was followed by details of measures currently being implemented and those planned for the future in connection with the transition of the production operating model at the site. Energy and hydrogen supply, as well as alternative energy generation options, were also discussed at length. The Executive Board detailed its focus on decarbonizing the energy supply while at the same time defossilizing H&R's products. The Supervisory Board members then visited the site and inspected the expansion of a tank field in particular.

The development of international sales formed the second core topic of the meetings. Current developments at the individual sites were discussed in detail, as was the project currently under way in Lumut, Malaysia. At this site, the company's sustainability goals will be put into practice from the outset. Discussions on this topic were rounded off by the presentation of future measures to be taken in India and Vietnam.

In connection with the changed circumstances caused by the war in Ukraine, the Executive Board reported declining demand and issued an increasingly pessimistic outlook.

The members of the Supervisory Board met for a workshop in Hamburg on November 2 and 3, 2022. In two all-day sessions, technical issues – specifics of the process industry from the perspective of chemical-pharmaceutical production sites as well as H&R's positioning in the refinery landscape – and commercial matters were discussed intensively with the Executive Board and individual executives and project managers. Discussions on commercial matters focused on an overview of the value-adding stages in H&R's areas of activity, an up-to-date overview of the various core products and by-products, as well as production planning measures and ways of optimizing them. The event was wrapped up with an in-depth discussion on opportunities and risks under the changed conditions (war in Ukraine, transformation of the operating model).

Last year's meeting season was concluded on December 14, 2022, with the sixth regular meeting of the Supervisory Board. As in previous years, the agenda focused on a review of the current financial year, the 2023 budget, and the five-year mid-term planning. The updated statement of compliance and the results of the efficiency audit were discussed in detail, and the former was unanimously adopted.

The Executive Board reported on the visits to Namibia and South Africa with a delegation from the German Federal Minister of Economics and Climate Protection, which focused on hydrogen production and solar power.

The meeting was rounded off by a report on the status of the 2022 annual financial statements.

The Work of the Supervisory Board Committees

In 2022, a total of 20 committee meetings were held. The Audit Committee and the Refinery Technology and Strategy Committee held combined meetings on five dates, and the Audit Committee met separately on three occasions. The Committee for Related Party Transactions and Other Legal Issues (LEGAL Committee) met six times and the Nominating Committee met once.

As in the previous years, no absence was recorded at any of the committee meetings in 2022, putting the attendance rate at 100%.

Audit Committee

Roland Chmiel
Chairman of the Audit Committee

The Audit Committee held a total of eight meetings in financial year 2022, five of which were held jointly with the Refinery Technology and Strategy Committee (RTS).

A major part of the committee's work in this financial year was again the audit of the annual financial statements and the combined management report of H&R GmbH & Co. KGaA and the Group, the non-financial Group report, the subordinate status report and the proposal for the appropriation of net income.

These documents relating to the 2021 financial year were discussed in detail with the auditor and the Executive Board in the meeting on March 23, 2022. The Audit Committee then gave the Supervisory Board its recommendations regarding approval of the financial statements for financial year 2021 and the proposal to the Annual Shareholders' Meeting concerning the appropriation of the distributable profit as of December 31, 2021, and the election of the auditors for financial year 2022.

The Audit Committee's work also particularly included issuing the audit engagement to the auditors elected for financial year 2022 – including defining the focal points of the audit and determining the auditing firm's fees, as well as the assessment of the audit quality. The course and results of the audit of the financial statements were also followed, discussed and evaluated in a timely manner.

Regarding the monitoring of the auditors' impartiality, the Audit Committee implemented appropriate measures to ensure that it is notified in a timely manner of intended letters of engagement to the auditors and/or to members of the auditing firm's network regarding non-audit services. After assessing the admissibility of such services and/or potential risks they might pose to the auditors' independence, the letters of engagement were approved in advance in each case, provided that they were found to be unobjectionable.

In addition, the Audit Committee paid close attention to an external audit commissioned by the Executive Board and completed at the beginning of 2022 to identify potential improvements in the areas of compliance management, the internal control system, IT security and data protection.

As a result, the adequacy and effectiveness of the measures and procedures implemented in these areas were determined. A project plan, which was closely monitored by the Audit Committee, was used to work through isolated recommendations for adjustments and updates, and these have now been almost completely implemented.

The Audit Committee also dealt with individual aspects of the Group's compliance and risk management system, the activity reports of the Internal Audit department, Compliance Management and the external data protection officer, and the regular reports on the risk situation. This also included issues relating to Group-wide IT authorization management and the certification of the H&R data center.

Other topics of discussion included the development of the net assets, financial position and results of operations and the liquidity situation, budget planning for the coming financial years from 2023 onward, monitoring the quality of the audit of the financial statements, trends in non-financial and sustainability reporting and its external audit, and the statement of compliance with the German Corporate Governance Code (GCGC) and its revision in the financial year.

For the purposes of self-assessment of the efficiency of the Supervisory Board and its activities, the assessment procedure applied to date involving a detailed questionnaire was again conducted for financial year 2022. Support for this internal solution by external consultants is now planned for 2023, following the appointment of all three new employee representatives to the Supervisory Board in the middle of the 2022 financial year.

On top of the committee meetings, the Chairman of the Audit Committee, the Executive Board, the Head of Finance, and the Head of Internal Audit held regular discussions to exchange information and coordinate their work. The Chairman also provided close support with the preparation and audit of the annual financial statements of H&R

GmbH & Co. KGaA, the consolidated financial statements and the annual financial statements of individual Group companies, holding regular discussions with the auditor in this regard.

Refinery Technology and Strategy

Dr. Hartmut Schütter Chairman of the Refinery Technology and Strategy Committee

In the 2022 financial year, the Refinery Technology and Strategy Committee each met with the Audit Committee five times. The meetings were prepared and supported through numerous consultations between the committee chairs and the Chairman of the Supervisory Board and the higher-level refinery management, in addition to regular interim reports.

The focus of each committee meeting was on safety performance, an analysis of this, and determining further opportunities for improvement.

Furthermore, the analysis of the current status and forecasting of investment projects currently being planned and implemented took on a continuous and central role.

The following meeting topics are particularly noteworthy:

- February 8, 2022 (virtual meeting): Flue gas desulfurization project and NextGate / Power-to-Liquid demonstration plant

- May 23, 2022 (virtual meeting): Results and evaluation of the latest Solomon Study (refinery comparison, ranking, conclusions; supply and availability issues in project implementations and special measures needed; energy management, HH/SBG – imports, congestion, outlook and targets)

- Hamburg, August 23, 2022: Site inspections of the flue gas desulfurization and NextGate projects and safety inspection by the committee chair; plan and status of the phased conversion to a renewable feedstock base

- Salzbergen, October 11, 2022: Salzbergen visit; progress of additional kerosene tank project at SBG and update on flue gas desulfurization at OWS; inauguration ceremony for NextGate plant in September (power-to-liquid)

- Hamburg, December 14, 2022: Annual review of safety performance – progress through training and culture change; analysis of operational problems / situation (root cause, management, lessons learned)

While the meetings in the first half of the year were held as virtual or hybrid events, the committee members predominantly met in person in Hamburg and Salzbergen from July onwards. During the course of this, individual visits and safety tours were completed at OWS in the Port of Hamburg and at the Salzbergen site.

Committee for Related Party Transactions and Other Legal Issues

Dr. Rolf Schwedhelm Chairman of the Committee for Related Party Transactions and Other Legal Issues

The committee met six times for meetings in the 2022 financial year. The meetings were mostly held in person in Hamburg. One meeting was held at the Salzbergen site on October 11, 2022.

Over the course of several meetings, the committee dealt with the process description for the implemented internal procedure for assessing the requirements of Section 111a (2) sentence 1 of the German Stock Corporation Act (AktG). A detailed process description was approved at the committee's meeting on October 11, 2022 and submitted to the Executive Board.

A regular subject of the meetings was the specification of the spot checks – in accordance with the process description for the internal procedure implemented to assess the requirements of Section 111a (2) sentence 1 AktG – and the detailed examination of these spot checks. To this end, members of the Executive Board and employees from individual departments involved in these transactions attended meetings of the committee and answered questions and held discussions with committee members.

Another point of focus of the meetings was the review of existing contractual relationships, in particular the contracts in connection with contract manufacturing by H&R Chemisch-Pharmazeutische Spezialitäten GmbH for H&R Vertrieb GmbH. The documents and contracts submitted by the Executive Board and the information and explanations provided in this regard were evaluated and discussed in detail by the committee with regard to the requirements of Section 111a AktG.

Nomination Committee

Sven Hansen
Chairman of the Nomination Committee

The Nomination Committee met only once in the 2022 financial year, on February 8. After preliminary discussions, the committee unanimously recommended to the full Supervisory Board that Dr. Joachim Girg and Sven Hansen be nominated for election again by the Annual Shareholders' Meeting on May 24, 2022, on the basis of their professional and personal qualifications.

Both gentlemen have belonged to the Board for a long time and perform important functions. Dr. Girg has been Chairman of the Supervisory Board for many years and Mr. Hansen chairs the Nomination Committee. In addition, both gentlemen are members of other committees (see figure T.03).

Furthermore, the committee recommended that the Annual Shareholders' Meeting elect Ms. Kyra Hansen as a substitute member of the Supervisory Board in the event of Mr. Sven Hansen's resignation. Ms. Hansen would also significantly rejuvenate the committee. Another aim was to send a clear signal that the Hansen family will continue to be involved in our company over the long term.

The achievement of the quota for women set by the plenum itself continues to remain a high priority for the Supervisory Board of H&R GmbH & Co. KGaA. The Nomination Committee sees this as a duty of both Supervisory Board benches.

The committee decided to search for suitable female candidates under various areas on our list of requirements for Supervisory Board candidates. Particular attention should be paid here to the role of Dr. Hartmut Schütter, who, as an engineer and chemist and Chairman of the Refining Technology and Strategy Committee, holds a prominent position on the Supervisory Board. Dr. Schütter's term of office will end at the close of the 2023 Annual Shareholders' Meeting.

Following a number of coordination discussions at Supervisory Board meetings, the Nomination Committee met on March 8, 2023, to discuss the results of the search in detail.

Although various potential candidates were identified and motivated to join the Supervisory Board of our company, unfortunately there were no candidates with an engineering background and an affinity for refineries, transformation and chemistry. The candidates approached were unable to commit to the Board due to time constraints, while others were not eligible to serve on our committee due to current professional reasons.

At its meeting on March 22, 2023, the Nomination Committee consequently resolved to propose to the Annual Shareholders' Meeting that Dr. Hartmut Schütter be elected to the Supervisory Board for a further term of office on account of his in-depth knowledge and close involvement in the transformation process and ongoing investment projects.

The Nomination Committee will continue the search for a suitable candidate at the same time and, if a suitable candidate is found, will agree with Dr. Schütter on a new successor in the best interests of our company.

The Nomination Committee would like to thank Dr. Hartmut Schütter most sincerely for his willingness to continue to serve on the full Supervisory Board and as Chairman of the Refinery Technology and Strategy Committee.

Audit of the Annual and Consolidated Financial Statements, the Non-financial Group Report and the Subordinate Status Report

Grant Thornton AG Wirtschaftsprüfungsgesellschaft, Hamburg, audited the annual and consolidated financial statements and the combined management report for H&R GmbH & Co. KGaA and the Group for financial year 2022 and issued an unqualified audit certificate for each.

The annual financial statements for H&R GmbH & Co. KGaA and the combined management report for H&R GmbH & Co. KGaA and the Group were prepared in accordance with the requirements of the German Commercial Code (HGB). The consolidated financial statements were prepared in accordance with International Financial Reporting Standards (IFRS) as adopted by the European Union (EU) and the additional requirements as set forth in Section 315(a), paragraph 1 of the HGB. The auditors carried out the audit in accordance with Section 317 HGB and the generally accepted auditing principles promulgated by the Institute of Public Auditors in Germany (IDW). The Executive Board distributed the aforementioned documents to the Supervisory Board in good time. The annual and consolidated financial statements and the combined management report were explained and discussed in detail by the auditor at the Audit Committee meeting on March 22, 2023.

The audit reports by Grant Thornton were distributed to all Supervisory Board members and were reviewed thoroughly in the presence of the auditors at the Supervisory Board meeting on the financial statements held on March 30, 2023. The auditors reported on particularly important audit matters, the main findings of their audit and confirmed that the internal control and risk management system had no major weaknesses as far as the accounting process was concerned. In addition, the auditors talked about significant transactions and decisions that had been taken concerning accounting policies. At the plenary meeting, the Chairman of the Audit Committee gave an extensive report on the Audit Committee's review of the annual and consolidated financial statements.

Based on the recommendation by the Audit Committee and following our own audit of the annual and consolidated financial statements, we approved the results of the audit conducted by the auditors and have no objections to raise in respect of both the annual and the consolidated financial statements including the combined management and Group management report. The annual financial statements are submitted to the Annual Shareholders' Meeting for approval.

The Executive Board's proposal regarding the appropriation of distributable profit has been deemed appropriate and approved by the Supervisory Board.

The Executive Board has prepared a separate non-financial Group report for the 2022 financial year – as part of a broader sustainability report – in accordance with the provisions set out in Sections 289b et seq. in conjunction with Sections 315b et seq. HGB. The Supervisory Board has commissioned a voluntary limited assurance audit in accordance with ISAE 3000 for the non-financial report for the 2022 financial year, which will be carried out by April 30, 2023, and also by Grant Thornton. The Audit Committee and the entire Supervisory Board will once again duly examine this report with regard to the correctness and appropriateness of the reporting. The report will then be published on the company website.

The report prepared by the Executive Board pursuant to Section 312 AktG on relationships with affiliated companies (subordinate status report) was also audited by the auditor.

The auditors informed the Supervisory Board of the outcome of the audit and issued the following auditors' opinion:

"Having carried out the audit and assessment in accordance with our professional duties, we confirm that

1. the factual information provided in the report is correct, and
2. the consideration paid by the company for the legal transactions listed in the report was not unreasonably high."

Personnel Changes on the Supervisory Board

There were changes in the composition of the Supervisory Board of H&R GmbH & Co. KGaA in the past year. The Annual Shareholders' Meeting re-elected Dr. Joachim Girg and Sven Hansen to the Board for a five-year term of office. Ms. Kyra Hansen was also elected by the Annual Shareholders' Meeting as a substitute candidate for Mr. Hansen in the event of his retirement during this election period.

The term of office of the three employee representatives Reinhold Grothus, Holger Hoff and Harald Januszewski ended at the close of the Annual Shareholders' Meeting on May 24, 2022. The Supervisory Board would like to thank these three gentlemen for their many years of dedication and their good and trusting teamwork. Reinhold Grothus had been on the Board since 2001.

Mr. Patrick Ewels, Mr. Dominik Franz and Mr. Thomas Merting were newly elected to the Board as employee representatives with effect from May 24, 2022.

The Supervisory Board would like to thank the Executive Board, all employees and the employee representatives for their hard work, their personal contributions and their constructive collaboration for the good of our company in these challenging times.

Stay tuned.

On behalf of the Supervisory Board

Dr. Joachim Girg, Chairman

H&R in the Capital Market

Capital Markets and Share Price Performance

Recovery of Global Economic Growth Fails to Materialize Due to the War

The year 2022 was dominated throughout by factors that had a negative impact on the capital markets. Geopolitical uncertainties due to the war in Ukraine, uncertainties surrounding the supply of raw materials and energy, soaring inflation rates and subsequent interest rate hikes put the brakes on global economic growth in the stock market year 2022. The race to catch up after the coronavirus pandemic stalled at the beginning of the year with the outbreak of the war in Ukraine. As a result, high price increases dampened consumer spending.

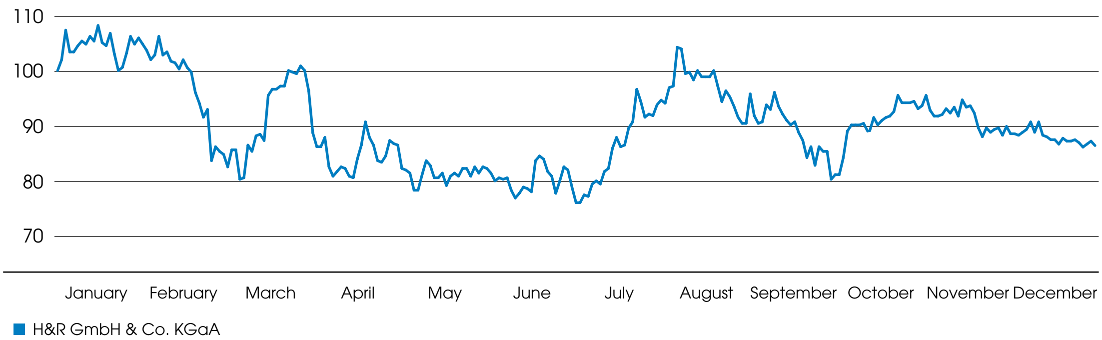
The year closed as one of the worst in a long time for the stock market. The Dow Jones closed at negative 9%, the Nasdaq Composite at negative 34%, the Nikkei at negative 11%, the Euro Stoxx 50 at negative 11%, and the DAX at negative 12%. The global stock market losses followed this pattern throughout the year.

H&R Share Price Under Pressure Over the Course of the Year

Joy and sorrow were closely intertwined for H&R KGaA's shares once again last year. Based on the price of €7.00 at the start of the year, the share attempted to climb toward the €8.00 mark throughout January. Within just a few weeks, the price reached its high for the year of €7.58. Surprisingly, however, it was the announcement of the good result for the full year 2022 that put the share price under pressure and provided little support before the outbreak of war in Ukraine permanently changed the basic conditions for the stock market year. Despite the stable quarterly figures and an early upward adjustment of earnings expectations, investor confidence in H&R shares remained low. The difficulties in procuring raw materials, rising energy prices and the gas shortage, which was the subject of public debate, appeared to be too great for H&R to be able to capitalize on the momentum of the good key figures. At year-end, the shares ended trading at €6.02, down 14%.

G. 01 **PERFORMANCE OF THE H&R SHARE**

(INDEX 3.1.2022=100)



T. 05 **BASIC DATA ON THE H&R SHARE**

ISIN/WKN	DE000A2E4T77/A2E4T7
Abbreviation	2HRA
Type	No-par bearer share
Listings	Official Market in Frankfurt (Prime Standard), Hamburg and Düsseldorf, freely traded in Stuttgart and Munich
Indices	Prime Standard All Share, Classic All Share, Prime Chemicals and Prime IG Specialty Chemicals, DAXPlus Family Index
Designated sponsor	Oddo Seydler Bank AG; Baader Bank AG

Number of Shares, Market Capitalization and Trading Volume

The number of company shares issued totaled 37,221,746 as of December 31, 2022.

As a company in the Prime Standard segment, H&R KGaA meets exacting disclosure and transparency standards. The share price can be obtained from the trading systems and the financial press.

During the past year, interest in our shares was lower in Germany than in the previous year. Overall, the order book volume traded on the Frankfurt Stock Exchange in 2022 was around 32% lower. Around 2.7 million shares were traded for H&R via Xetra. Another 1.7 million shares changed hands via Tradegate, Deutsche Börse's platform for private investors. There were therefore approximately 4.2 million traded shares in 2022, compared to 8.9 million in 2021.

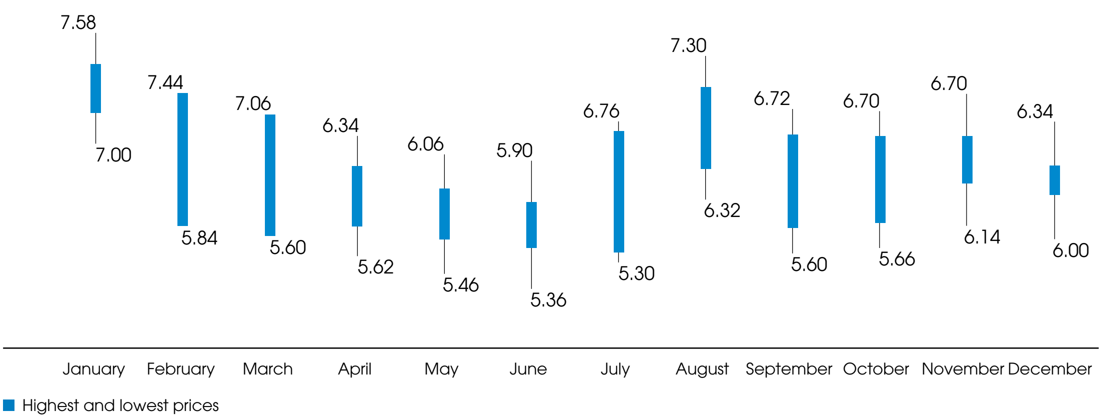
In terms of daily volumes and closing prices, the total trading volume resulting from this stood at around €28.9 million (previous year: €69.2 million).

T. 06 **KEY SHARE DATA/XETRA CLOSING PRICES**

	2022	2021	2020	2019	2018
Number of shares on December 31	37,221,746	37,221,746	37,221,746	37,221,746	37,221,746
Earnings per share	€1.15	€1.35	€-0.24	€-0.04	€0.59
Highest price for the year	€7.58	€10.25	€6.23	€7.99	€15.40
Lowest price for the year	€5.30	€5.31	€3.56	€4.93	€5.78
Price on December 31	€6.02	€7.02	€5.47	€5.22	€6.09
Market capitalization on December 31	€224.1 million	€261.3 million	€203.6 million	€194.3 million	€226.7 million
Average daily trading volume	€113 thousand	€270 thousand	€316 thousand	€162 thousand	€228 thousand

G. 02 **HIGHEST AND LOWEST PRICES OF THE H&R SHARE, FULL YEAR 2021/XETRA CLOSING RATES**

IN €



Shareholder Structure

We were not informed of any changes in the shareholdings of our majority shareholder in the financial year under review. According to an informal notification, the share of the company's share capital that is attributable to Mr. Nils Hansen corresponds to a total of 61.42% of the voting rights.

According to an informal notification, the stake in the share capital held by Mr. Wilhelm Scholten on December 31, 2022, was unchanged at 6.06%. 5.45% of this was held via Wilhelm Scholten Beteiligungen GmbH and the remaining 0.61% was held via Ölfabrik Wilhelm Scholten GmbH and a subsidiary.

The remaining 32.5% of H&R shares were in free float as of December 31, 2022. Of these, around 3.2% were in turn held by institutional investors.

Investor Relations

It was particularly important for us to quickly assess the changing political situation and the resulting economic challenges in the 2022 reporting year. The necessary and swift transition to raw materials of non-Russian origin had to be incorporated into communications and reporting, as did the impact of the rise in energy and gas costs on the company's net assets, financial position and results of operations.

The 2022 Annual Shareholders' Meeting was again conducted as a virtual event in May. In September, however, we took part in a capital market conference in person once again, and attended the Baader Investment Conference in Munich. Last year, management and the IR department also fielded an especially large number of telephone calls from investors, who were quite keen to receive information about the company.

Finally, we routinely provided information to our target groups through the quarterly reports and company press releases.

In 2022, analysts from Kepler Cheuvreux, DZ Bank and Baader Bank covered our shares.

T. 07 **RESEARCH COVERAGE OF THE H&R SHARE**

Kepler Cheuvreux
Baader Bank
DZ Bank

Get in Touch

Interested parties can download our company reports at any time from the Investor Relations section of our website, www.hur.com.

We would also be happy to send you a printed copy on request.

We also keep our target groups informed about current developments at our company through our e-mail newsletter. You can register for these publications at the Investor Relations section of our website.

Should you have any questions or suggestions, please contact us at:

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Website: www.hur.com

Combined Management and Group Management Report of H&R GMBH & CO. KGAA

Group Fundamentals

Corporate Structure and Business Model

Sectors and Organizational Structure

The H&R Group organizes its operating activities into two business divisions: Chemical-Pharmaceutical Raw Materials and Precision Plastic Parts. We also have three business segments: ChemPharm Refining, ChemPharm Sales and Plastics.

Our ChemPharm Refining segment includes the two German production sites in Hamburg and Salzbergen. We operate these sites with the aim of achieving as high a percentage as possible of output consisting of hydrocarbon-based specialty products. During the course of our production processes, we create approximately 800 different products that are used in almost every area of life.

Our ChemPharm Sales segment is comprised of numerous plants for additional processing as well as our distribution sites worldwide.

In the Plastics segment, we manufacture our precision plastic parts at our sites in Germany, the Czech Republic and China. The customers buying our Plastics products include the automotive industry, the medical technology industry and other traditional industrial sectors.

Group's Legal Structure

As the Group's holding company, H&R GmbH & Co. KGaA (hereinafter referred to as H&R) is in charge of the management of our business operations. The holding company is responsible for the Group's strategic focus and its financing activities. In addition, it provides various management functions and services for our subsidiaries.

At the end of the reporting period, there were 48 consolidated subsidiaries (December 31, 2021: 47). The list of shareholdings can be found in the notes to the consolidated financial statements under "Scope of Consolidation and Holdings".

The ChemPharm Refining segment, which primarily consists of the specialty production sites in Germany, has a functional management structure. Managerial staff within this segment have cross-site responsibility for key functions such as raw materials purchasing, project management, accounting, and sales/distribution.

In the ChemPharm Sales segment, which does not have any raw materials processing of its own, the responsibility for all functions is held by local managing directors. These report from the sites to a regional managing director, who in turn reports to the Group's Executive Board.

There are two management levels at the Plastics segment: managing directors at the international sites report to the divisional Executive Board, which is also responsible for managing the production plant in Coburg, Germany.

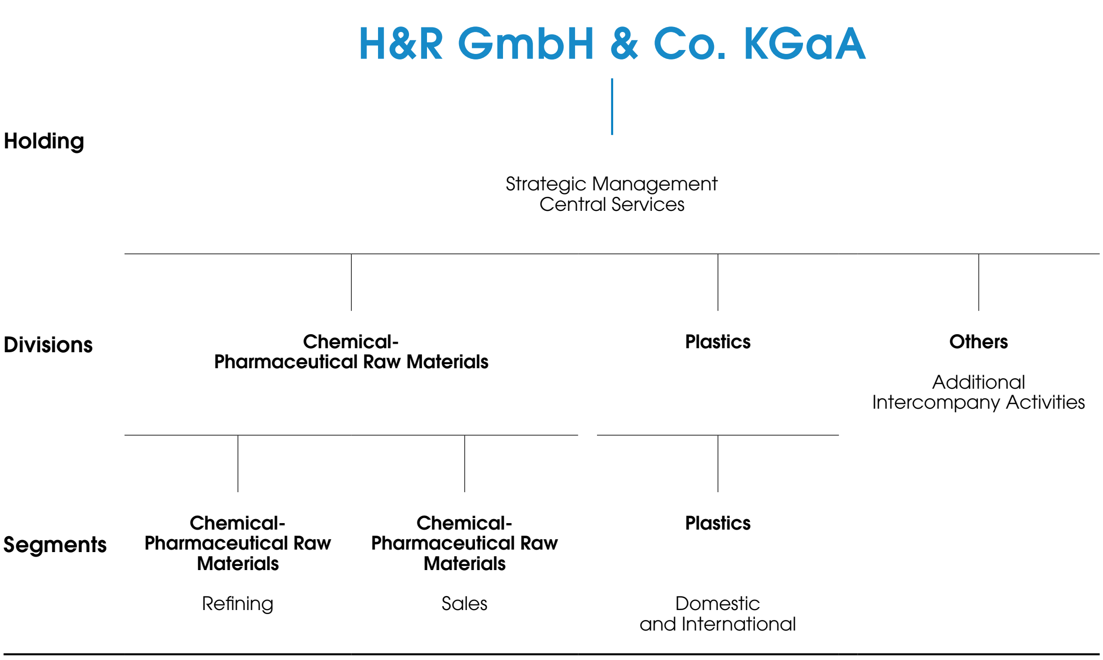
Sites

At year-end 2022, our Group employed 1,631 people worldwide (December 31, 2021: 1,585). The following overview shows the most important sites of our three segments with more than 25 employees:

T. 08 **MAIN SITES IN THE H&R GROUP**

Continent	Country	City	Division	Employees
Africa	South Africa	Durban	ChemPharm	66
Asia	China	Wuxi	Plastics	103
		Ningbo/ Daxie	ChemPharm	121
		Fushun	ChemPharm	97
	Thailand	Bangkok/ Si Racha	ChemPharm	71
Europe	Germany	Hamburg	ChemPharm	310
		Salzbergen	ChemPharm	418
		Coburg	Plastics	123
	Benelux	Nuth	ChemPharm	36
	United Kingdom	Tipton	ChemPharm	50
	Czech Republic	Dačice	Plastics	83

G. 03 **OVERVIEW OF GROUP STRUCTURE**



Main Products, Services and Business Processes

At our domestic production sites in the ChemPharm Refining segment, we are currently using hydrocarbon-based raw materials. Bio-based products, synthesized products and recycled base materials are likewise already used as feedstock in addition to fossil products. Our feedstocks are used to produce approximately 800 specialty products: process oils, technical and medical white oils, paraffins and wax products. By-products and co-products produced as part of our processes are either processed to produce other high-quality specialty products or are used in bitumen to build roads. Another part is sold on to refineries as feedstock. At special filling facilities, we also mix end products based on well-known end customers' formulations.

In the production plants of the ChemPharm Sales segment, our production focuses on environmentally friendly label-free plasticizers and wax emulsions. Partnerships with local producers around the world allow us to avoid building up our own raw materials processing capacities.

In the Plastics segment, we manufacture precision plastic parts, as well as components and medical consumables.

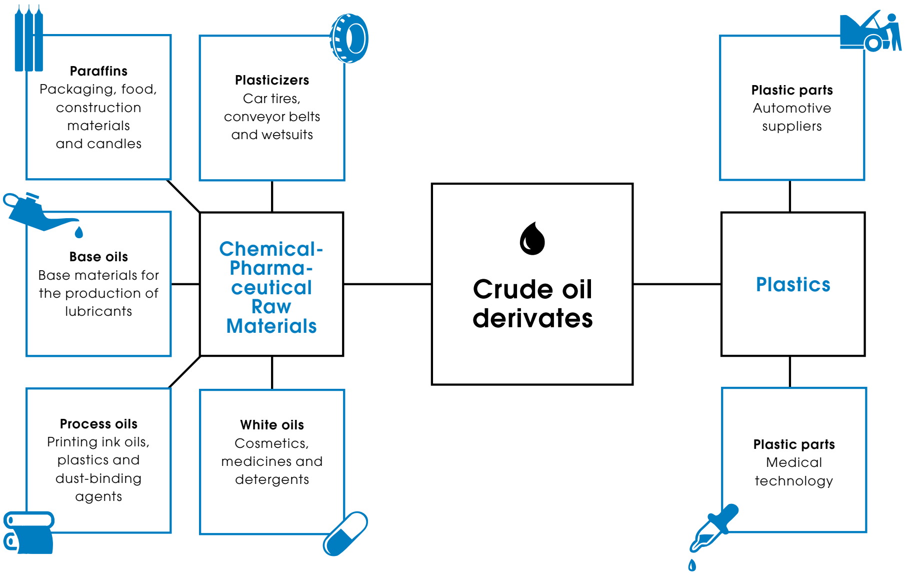
Objectives and Strategy

Key Sales Markets and Competitive Situation

The basis of our production of chemical-pharmaceutical specialty products are hydrocarbons from fossil-based, synthetic or bio-based sources. We mainly source our fossil-based raw materials from fuel refinery operators. Bio-based, synthetic and recycled products originate from our network of partners, from sources available on the market and from our own production. Consistently focusing on the customers' applications, we generate chemical-pharmaceutical specialty products from these. Over the decades, we have developed a solid market presence.

Our specialty products include, among others, environmentally friendly label-free plasticizers,

G. 04 **CRUDE OIL SPECIALTIES**



which are used in the rubber blends of well-known car tire manufacturers as well as in additional rubber products. Our main competitors in this product area are the major oil companies.

Our paraffins are used for a wide variety of applications. With their water-repellent properties, paraffins lend themselves well to applications in the food, packaging and construction industries.

With regard to white oils, we are sure that we are able to reliably meet high quality standards. Our technical white oils are used in industrial sectors. Our medical white oils are found, among other applications, as components in cosmetic products such as creams and ointments.

We sell the vast majority of our base oils to lubricant manufacturers as raw materials. Using additives, we further process a small quantity of these base oils into ready-made lubricants.

There were strong indications at the beginning of 2022 that the Covid-19 pandemic and its impacts on the chemical industry and the supply chain were easing off. At the same time, we assumed the rather muted economic development in chemical-pharmaceutical specialty products that began in fall 2021 would continue and we were expecting to stabilize our results at a lower but adequate level. We also intended to press ahead with our efforts to transform the two German production sites to produce more sustainable and more tailored raw materials.

Russia’s war of aggression against Ukraine markedly changed the market and competition conditions. Raw materials from Russian sources had to be substituted with grades from North and West Africa virtually overnight. This was the case for all market participants, resulting in the cost of these already expensive raw materials soaring just as quickly as transport and logistics costs. Likewise, energy costs increased to such a degree for German industry that Germany’s general location disadvantage regarding overall costs compared with elsewhere around the world was further exacerbated.

Nonetheless, in particular those producers who were able to supply their customers reliably remained interesting. These included H&R, which was able to pass on a large proportion of its additional expenses to the market under these conditions.

Nor did the matter of Covid-19 release its grip on the global markets, with the pandemic-related closure of many Chinese ports leading to the delayed handling of and increased bottlenecks with shipping containers. The bottom line for almost all of our customers was the adequate fulfillment of their requirements.

The customers of our Plastics division can be divided into three customer groups: the automotive industry, the medical technology sector and industry. 2022 remained a challenging year for the automotive industry in particular. While many experts assert that the industry is ready for decision regarding key strategies, in particular concerning sustainability and electric mobility, the policymakers are causing "toxic uncertainty" as they have so far failed to present the prospect of reliable regulation.

In particular regarding the pace at which renewable energies and the charging infrastructure were being developed, there was not the level of planning certainty in 2022 that German car manufacturers had hoped for to be able to make decisions. As such, GAUDLITZ GmbH was once again faced with difficult tasks, among other things due to highly volatile call-off figures and commitments from their customers which were in some cases vague regarding future projects and cooperation. In addition, the war likewise caused upheavals in the automotive sector, for example in supply chains.

Legal and Economic Factors

Economic Factors

Russia's war against Ukraine and its consequences were undoubtedly of overriding significance as an economic factor in the past financial year.

Prices of the fossil-based hydrocarbons used as the primary feedstock at our production sites in Germany up to now are closely correlated with the current price of crude oil. The dependence of Western European developed countries on cheap Russian oil and, above all, gas really made itself felt in 2022. Oil-processing industries initially switched to grades sourced from elsewhere, while the subsequent conscious use of Russian gas supplies to exert political pressure led to further uncertainty. H&R responded by significantly reducing the total volume of gas needed at the Hamburg and Salzbergen sites. At the same time, last year's changes in the prices of raw materials and energy due to high demand for reliable supplies could largely be passed on.

This is closely related to currency translation effects. The price of crude oil worldwide is denominated in US dollars, meaning that H&R is directly affected by fluctuations in this reserve currency and the corresponding currency translation effects, due to its high requirements for raw materials and the fact that raw material supplies are sourced internationally. In the Plastics segment, too, we may see currency translation effects due to the multinational distribution of sites across Germany, China, the United States and the Czech Republic, as well as its dependence on, for example, increases in the price of raw materials traded in foreign currencies. These effects were of an insignificant magnitude in financial year 2022.

Legal Factors

In addition to compliance with the rule of law in general, licensing issues are paramount for H&R, such as regarding the operation of plants or the Regulation on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH). We are seeing increasing hurdles here involving ever greater complexity and lengthier and more extensive procedures coupled with shorter approval windows.

Russia's war against Ukraine has also given rise to other aspects that need to be considered. First and foremost, there is sanctions law, which legally restricted trade with Russia wherever it had not already been ruled out on moral grounds. In addition, the German government's response to overall developments was mostly at short notice and involved numerous uncertainties, for example regarding gas contingency planning and the debate concerning windfall taxes.

Objectives

Across all of its divisions, H&R strives to achieve sustainable and commercially successful development in its income. We have set ourselves the ambitious goal of producing 70% of our core products on the basis of renewable resources by 2030 and of making our production climate-neutral by 2035. In doing so, we are following a comprehensive approach, which goes beyond the pure raw material aspect/increased use of bio-based or synthesized products. We also intend to drive forward the approach of increased sustainability through the efficient use of water, energy and heat. We additionally intend to continuously develop our expertise in this field in order to successfully continue on the path toward increased sustainability. The previous guiding principle of a "green refinery" that ideally produces as few combustion products as possible on the basis of fossil fuels will initially be replaced with a more sustainable and, in the medium term, climate-neutral production site.

We intend to build further on our operational strengths in international business through additional production partnerships and the targeted expansion of our further processing and distribution sites.

Strategy

The umbrella term used to describe our strategic approach is G.A.T.E., referring to a "gateway to the future". In line with our goal of achieving further international expansion, we see ourselves as a company that thinks globally. At the same time, we are building regional connections and we operate at a local level. The most important driver of our economic activity is our proximity to the market, which enables us to always act with a deep understanding of our customers' specifications and needs in a user-oriented manner. We also remain "technovative" by ensuring that our sites are always on the cutting edge of technological development and by keeping a close eye on innovative process and product solutions. We successfully combine economy and ecology, acting in an economically prudent way, with full awareness of the resources we are using. Eco², i.e., "ecology x economy", increases the potential in both areas exponentially while representing a key step toward sustainability.

We still regard the selection of our raw materials as the factor with the greatest leverage. In this respect, we have been pursuing a "three-pillar strategy" for several years. It describes the path away from fossil base materials toward more bio-based and synthesized products. The objective is a sustainable supply of raw materials with renewable hydrocarbons, which have the same properties as crude oil, without its fossil-based DNA. Therefore, H&R is not aiming to decarbonize its production processes, but intends to change the source of carbon instead. The traditional fossil-based raw materials are to be replaced with water, green electricity from the wind and sun, biomass and recycled base materials. By technically further developing our production processes and closely coordinating with our customer industries, we want to expand our portfolio of feedstocks that can be used by introducing sustainable grades and generate climate-friendly and market-oriented specialty products at the end of the value chain.

Status of the Realization of the Strategic Objectives in View of the Covid-19 Pandemic and Russia's War Against Ukraine

We generally adhered to our objectives and the strategy in 2022. We are of the opinion that there are no alternatives to topics such as sustainability, resource conservation and the efficient use of resources; in other words, objectives which are important not only to the company, but also socio-politically.

In the past financial year, the official inauguration of the NextGate project certainly had particular significance. By means of the synthesis process, the hydrogen produced by us will be combined with green CO_2, with e-fuels and e-waxes being produced at full capacity in a commercially viable quality in the future. This pilot project is currently one of only two similar projects in Germany and in addition to initial relevant product quantities, it will also provide important findings about scaling the production of e-fuels.

We were again unable to implement our endeavors regarding "addition to the raw material base" to the degree we had hoped to in 2022. We were, for example, only partially successful in securing supplies of new raw materials as the suppliers – primarily refineries with a different production focus – could only provide these components to a limited degree, if at all. As such, this aspect of our objective of continued specialization came under pressure in the reporting year.

Nonetheless, fewer by-products were ultimately combusted again this time. Thanks to target-oriented sales/distribution and customers requesting specific compositions of certain by-products, we succeeded in selling more of these components to other refinery customers. Instead of being used for combustion, for example as marine diesel oil, these components, which are known as cracker feed, were converted into other value added products. For 2022, the share of by-products that were able to be sold in higher-quality applications was over 98%.

Company Control

Internal Management System

The Group is managed based on the comprehensive reporting of key performance indicators and ratios that look at the areas of profitability, liquidity, the capital structure and operating performance. In addition to this, we monitor both company-specific and macroeconomic early indicators. At the production level, this includes data relating to plant availability, throughput volumes and quality parameters. In sales and distribution, we draw on sales volume statistics, general market data and macroeconomic early indicators for their management.

The management system also consists of monthly reports from the divisions, the management of risks and opportunities and our functional management structure, whereby responsibility is assigned for more than one site in important areas such as raw materials purchasing, project management and sales/distribution.

Control Parameters

In recent years, we have shifted the focus of our control instruments to a more intensive examination of short-term performance parameters in response to constant changes in the overall global economic situation. We measure and control profitability, in particular through contributions to income. Manufacturing planning is based on optimizing contribution margins; the segments are controlled using EBITDA and EBT figures.

H&R KGaA's presentation of EBITDA refers to earnings before net interest income, income taxes, other financial income, depreciation and amortization, and impairment of intangible assets and property, plant and equipment.

H&R KGaA calculates EBITDA as follows:

Consolidated income
+/–
Income taxes
+
Financing expenses
–
Financing income
+
Depreciation, impairments and amortization of intangible assets and property, plant and equipment
= EBITDA

Although operating income/EBITDA is not an earnings figure defined by IFRS, but rather an alternative performance indicator, H&R KGaA's Executive Board considers EBITDA to be a major and, indeed, the most significant indicator of Group earnings. EBITDA is the relevant operating income figure for the H&R Group. It represents the income needed to cover the Group's ongoing (maintenance) capital expenditure. This cover is of critical importance for the company's capital-intensive business model.

T. 09 **RECONCILIATION OF OPERATING INCOME (EBITDA) TO CONSOLIDATED INCOME (IFRS)**

IN € MILLION	2022	2021
Operating income (EBITDA) of H&R GmbH & Co. KGaA	124.9	132.5
Depreciation and amortization of intangible assets and property, plant and equipment	-55.3	-50.9
Financing income	0.3	0.7
Financing expenses	-7.8	-8.9
Income taxes	-16.7	-20.8
Consolidated income	45.4	52.5

We calculate the EBT as income before tax.

The long-term weighted average cost of capital (WACC) performance indicator, which consists of the weighted capital costs of our equity and borrowings, is used in medium-term and long-term planning, for example, for the evaluation of investments and calculation of the holdings' carrying amounts and impairment tests.

The profitability ratio return on capital employed (ROCE) is also used in the medium-term and long-term planning. The ROCE compares earnings before interest and taxes to the average committed capital necessary for operations.

Liquidity. Our free cash flow is essentially determined by operating income (EBITDA), the change in net working capital (total of inventories and trade receivables less trade payables) and capital expenditure. Because of our business model, our cash flow is generally quite volatile. This is attributable to changes in our net working capital, in particular when deliveries of raw materials for our specialty refineries occur around the same time as the reporting dates. By constantly monitoring our free cash flow, we can reliably detect any issues requiring action so that we can respond accordingly. This will allow us to ensure the financial stability of the H&R Group in the future, too.

T. 10 **CHANGE IN FREE CASH FLOW**

IN € MILLION	2022	2021	2020	2019	2018
Cash flow from operating activities	38.0	37.4	60.1	95.9	23.3
Cash flow from investing activities	-72.5	-48.6	-38.1	-75.1	-69.7
Free cash flow	-34.5	-11.1	22.0	20.8	-46.5

The starting point for calculating and reporting cash flow from operating activities in 2022 was, first of all, consolidated income which had fallen by around 13.6% year-over-year to €45.4 million (December 31, 2021: €52.5 million). With this as a basis, we generated an almost identical cash flow of €38.0 million with an increase in depreciation and amortization and a decrease in net current assets (December 31, 2021: €37.4 million). Investing activity was around 49.2% higher in the past financial year, amounting to €-72.5 million. Free cash flow, which declined from €-11.1 million to €-34.5 million, presented itself as being under pressure accordingly.

Capital Structure. We aim to have a balanced capital structure that provides leeway for the strategic development of the Group while optimizing the cost of capital for our equity and borrowings. Our loan agreements require us to comply with two financial covenants. These relate to our equity base and net debt in relation to operating income (EBITDA).

Another control parameter relating to our capital structure is net gearing, which is the ratio of our net financial debt to equity. In spite of a slight increase in debt in the course of 2022, this performance indicator improved from 39.9% to 42.9% as a result of the increase in equity.

T. 11 **CAPITAL STRUCTURE**

	2022	2021	2020	2019	2018
Net debt/EBITDA	1.52	1.13	2.25	2.42	1.38
Equity ratio in %	49.0	46.7	46.5	43.3	48.9
Net gearing in %	42.9	39.9	35.3	37.4	28.9

Operating Performance. We regularly measure our operating business based on sales, on the basis of absolute earnings indicators such as EBITDA, EBIT, and EBT as well as by sales volumes for our chemical-pharmaceutical specialty products. The trend in the crude oil price, which is invoiced in US dollars, always has a direct impact on the cost of materials, which affects H&R KGaA's sales revenue for reasons related to the business model. On their own, our sales are therefore only of limited use as a performance indicator.

We calculate the sales and EBITDA figures both for the individual segments and for the Group as a whole. Together with the consolidated net debt, they constitute the main relevant control parameters used by our company.

T. 12 **INCOME AND VOLUME TREND**

IN € MILLION	2022	2021	2020	2019	2018
Sales volume of core products in kt[1]	811	869	805	815	836
EBITDA	124.9	132.5	55.8	52.9	74.7
of which REFINING	92.7	103.4	35.2	29.2	46.0
of which SALES	33.4	29.0	25.9	30.7	30.1
of which PLASTICS	5.0	3.9	-0.4	-4.9	3.0
EBIT	69.6	81.6	-0.3	7.4	40.6
EBT – income before tax	62.0	73.4	-10.4	-1.2	33.7

[1] Chemical-Pharmaceutical Raw Materials division.

Research and Development

Focus of Our R&D Activities

One focal point of our research and development (R&D) activities is on boosting the efficiency of our production processes, thereby increasing the value we create.

The corresponding research activities are carried out by H&R itself and managed on the divisional level. In addition to traditional laboratories for material testing and improvement for the refinery sites, we also have a department for innovative process technologies. It deals with the implementation of new procedures and processes and integrates important demonstration plants into our process flows. In this way, H&R seeks to provide "proof of concept" for the large-scale industrial use of new and sustainable technologies.

Chemical-Pharmaceutical Raw Materials. Our products, which total around 800, are used as feedstock in almost all areas of life. As a result, there is considerable potential for developing new, and improving existing, products. Our sales/distribution staff and partners are an important source of ideas for product innovation. Thanks to the customer relationships they have developed over a long period of time, they have an excellent feel for the customers' changing needs.

We are also researching processes that could increase the yield of specialty products from our raw materials and further improve the level of value creation at our specialty refineries. The results of this research work have influenced our investment planning.

The use of increasingly sophisticated technologies in vehicles to reduce fuel consumption and carbon emissions is leading to a growing demand for lightweight and simultaneously complex plastic parts. We often develop such parts – which consist of several different materials – in cooperation with our customers. In light of the increasing trend toward electric mobility, we expect the intended range optimization in this sector to lead to the further and accelerated substitution of metal with plastic parts.

R&D Expenses

The importance of our research and development activities is reflected in our consistent spending in this area.

At just over €2.0 million, R&D spending was significantly lower than in the previous year. Our R&D ratio, defined as R&D expense divided by sales, was below the previous year, at 0.13%, due to the significant increase in sales.

T. 13 **RESEARCH AND DEVELOPMENT COSTS**

IN € THOUSAND	2022	2021	2020	2019	2018
Research and development costs	2,030	2,520	2,795	2,801	2,695
of which ChemPharm	1,924	2,031	2,240	2,216	2,170
of which Plastics	106	489	555	585	525
as % of annual sales	0.13	0.21	0.32	0.26	0.24

Report on Economic Position

Trends in the Business Environment

Macroeconomic Conditions

In their joint diagnosis produced in the fall on behalf of Germany's Federal Ministry for Economic Affairs and Climate Action (BMWK), the experts at the ifo Institute in Munich, the Kiel Institute for the World Economy (IfW), the Halle Institute for Economic Research (IWH) and the RWI Research Network saw the critical escalation in the gas markets as a particularly heavy burden on the German economy.

The sharp rise in gas prices drastically pushed up energy costs and was accompanied by a massive reduction in macroeconomic purchasing power. Gross domestic product is likely to have expanded by 1.4% in the reporting year in spite of a drop in the second half of the year. As such, only half of the original forecast for 2022 was fulfilled. The expectation for the coming year is just -0.4%. According to the experts, the weaker economic outlook is primarily attributable to the reduced gas supplies from Russia, which have eliminated a substantial proportion of the gas supplies available and will continue to do so in the future. At the same time, there is an increased risk that the remaining delivery and stored volumes will not be sufficient to cover the demand from industry and private households next winter. Gas prices had already soared in the summer months in view of this, while businesses simultaneously began to noticeably reduce their gas consumption.

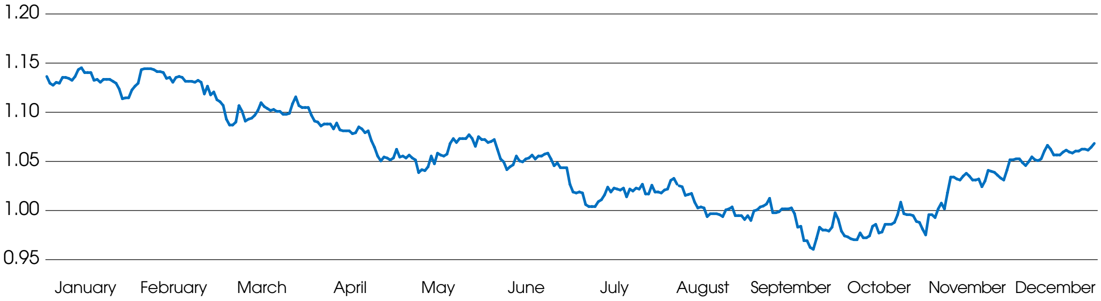
Based on normal weather conditions, the institutes are not anticipating a gas shortage next winter, but do have concerns about a tense supply situation. The situation is likely to ease off in the medium term, but gas prices will nevertheless probably remain well above the precrisis level. For Germany, this potentially means a permanent drop in prosperity. The International Monetary Fund was the first to publish an updated prognosis in spring 2023, in which it revised its growth forecast upwards by around 0.5%. According to its assessment, we could still see growth of 1.9% in 2022 and 0.1 % in 2023.

After a strong first half of the year, the EU economy moved into a more difficult phase. On the one hand, the shock waves caused by Russia's war of aggression against Ukraine are dampening demand and driving inflation around the world. At the same time, the EU's geographic proximity to the war zone and its heavy reliance on gas imports from Russia make it one of the most exposed advanced economies. Although the 2022 economic data is set to be better than previously forecast and growth in the euro area is forecast at 3.2%, the European Commission's outlook for 2023 was considerably bleaker in its November 2022 fall forecast.

Elevated uncertainty, high energy price pressures, the erosion of households' purchasing power, a weaker external environment and tighter financing conditions will tip the EU, the euro area and most member states into recession in the last quarter of the year. The Commission nevertheless

G. 05 **EXCHANGE RATES US$ PER € IN 2022**

(CLOSING RATE US$ PER €)



expects GDP to continue to grow both in the EU and the euro area in 2023, probably by 0.3% in total. The International Monetary Fund is already somewhat more optimistic now in spring 2023 and sees growth at 0.7%.

The global economy grew slower in 2022, too, compared with previous years. After achieving growth of 6.0 % in the previous year, the International Monetary Fund projected growth of 3.4 % for the year 2022 in January 2023. Growth of 2.9% is expected in 2023.

The reasons for this assessment are manifold. The outlook is being seriously dampened by inflation, which is higher than it has been for decades, Russia's invasion of Ukraine and the ongoing Covid-19 pandemic. An expansionary monetary, financial and fiscal policy, which offered unparalleled support during the pandemic, has given way to the goal of lowering inflation.

The euro, which is the functional currency used to calculate the earnings trend at H&R KGaA, started the financial year almost at a high for the year against the US dollar, at an exchange rate of US$1.14. It went on to weaken considerably up to the end of September when it fell below parity with the US currency at US$0.96, but made a recovery in the final quarter. The single currency was trading at €1.07 at the end of the year.

Crude oil prices (all data refer to the daily closing prices for a barrel of North Sea Brent) rose sharply in the course of the year. Starting from around US$78 at the beginning of the year, the price had already risen to almost US$130 in March 2022 as a direct consequence of Russian troops invading Ukraine. After a brief low-level recovery, prices upward of US$120 were once again being demanded in June, before the price of oil fell steadily in the second half of the year, albeit remaining at a high level. It was trading at US$82 for a barrel of Brent at the end of the year. We had originally assumed an average annual price of US$75 per barrel of North Sea Brent for budget year 2022.

Industry-Specific Climate

At the end of the year, the German Chemical Industry Association (VCI e.V.) saw the industry confronted above all with the impacts of the energy crisis. Production in Germany's third-largest industry was reduced significantly, affecting all sectors. At the same time, businesses found it increasingly difficult to pass on the increased energy costs in the value chain. The association did not see many positives for the chemical industry for the final months and the turn of the year either and expected declines in production and turnover and only a marginal increase in prices, which would be unlikely to compensate for the high costs.

Overview of Business Development and Performance

In 2022, H&R sold a total of 810,863 tons of core products from its Chemical-Pharmaceutical Raw Materials division (2021: 868,512 tons) to external customers. Due to price factors, it generated higher sales than in the previous year, at €1.58 billion (2021: €1.19 billion). Considerably more needed to be spent in particular on feedstocks and energy than in the previous year, at €1.27 billion (2021: €901.6 million). Overall, demand from our customers remained high in spite of the unusual circumstances in 2022 with the war in Ukraine and China's zero-Covid policy. In the Plastics segment, demand fluctuated with the volatile situation in the automotive sector. The sector still contributed higher sales than in the previous year. All in all, the operating income (EBITDA) generated by the Group amounted to €124.9 million (2021: €132.5 million).

Events With a Major Impact on Business Development and Performance

Overall, the Group's €1,576.0 million of sales was around 32.6% above the prior-year level (2021: €1,188.4 million). In spite of the company's own business uncertainties, sales development was driven by high customer demand, with the higher raw material and energy costs largely being passed on to them.

Comparison of Actual Business Development and Performance With the Forecast Made in the Previous Year

The expectations with which H&R KGaA started financial year 2022 were based on the assumption that developments would be less positive than in the previous year. We predicted rising sales but significantly lower operating income (EBITDA) ranging between €80.0 million and €95.0 million in comparison to 2021.

It was by no means certain at the beginning of the year that we would achieve or even surpass this goal. The war of aggression against Ukraine influenced politics as well as raw material and sales markets and resulted in considerable uncertainty. This constituted a significant risk factor for H&R, but it succeeded in securing regular and sufficient supplies of the feedstocks needed in good time, and the higher expenses this caused were accepted by the market. While the outlook remained unchanged after the first quarter of 2022, our expectations regarding the EBITDA we could achieve increased to "above €100.0 million" in the middle of the year. The results in the subsequent period too remained at a very good level, leading us to aim for an operating result of up to "€120.0 million".

Total sales revenue ultimately reached €1,576.0 million. At €124.9 million, the EBITDA recognized in the consolidated income statement for the financial year was once again slightly above our projected range.

The consolidated net income attributable to shareholders, which we did not forecast, was €42.7 million for 2022 (2021: €50.2 million).

T. 14 **FORECAST FOR FINANCIAL YEAR 2022**

Forecast date	Publication of the 2021 annual report	Publication of preliminary half-year figures for 2022	Publication of preliminary figures for Q3/2022	Actual value
Total sales	"€1,100.00 million to €1,300.0 million"	not defined	not defined	€1,576.0 million
Sales in ChemPharm Refining	"≥ €704.0 million"	not defined	not defined	€1,020.6 million
Sales in ChemPharm Sales	"≥ €363.0 million"	not defined	not defined	€526.7 million
Sales in Plastics	"≥ €33.0 million"	not defined	not defined	€49.0 million
EBITDA at Group level	"between €80.0 million and €95.0 million"	"above €100.0 million"	"between €110.0 million and €120.0 million"	€124.9 million

In the Chemical-Pharmaceutical Raw Materials division, sales were above the prior-year level at €1,547.3 million due to price-related factors (2021: €1,157.5 million). Considered separately, the revenue of the segments were also above the forecasts from the beginning of the year. On the earnings side, both ChemPharm Refining and ChemPharm Sales surpassed the expectations published at the beginning of the year. Instead of the figure of at least €54.4 million of EBITDA expected at the start of the year in the forecast report, our refinery sites generated a total of €92.7 million. The international activities of the ChemPharm Sales segment contributed another €33.4 million to the operating income. A contribution of €24.8 million had been expected.

The Plastics division also showed more stable development. In spite of the difficulties in the automotive industry such as chip shortages and the interruption of key logistics chains, at €49.0 million, the segment achieved sales revenue above the level of the previous year (2021: €43.8 million). There was also an improvement in EBITDA, which totaled €5.0 million, thereby likewise surpassing the expectations at the beginning of the year (€0.8 million). In the previous year, operating income was only €3.9 million.

Economic Position of the H&R Group

Assessment of Economic Performance and Overall Statement by the Management Board

Overall, H&R's business performed much better during the reporting period than the Management Board had expected at the beginning of 2022. In particular, the company suffered relatively little economically from the impact that Russian troops invading Ukraine had on the Western European markets.

Key factors here were the swift transition to feedstocks of non-Russian origin and close coordination with the needs of the customer industries. Overall, the Group consolidated its position as a valued and reliable supplier and once again achieved a very good result for the year on this basis, with operating income of €124.9 million.

Note on Presentation of the Influence of Accounting Policies on the Economic Situation

The accounting is based on discretionary decisions and estimates which we have exercised as we consider appropriate, taking into account the company's current economic situation including our assessment of future development. Our net assets and financial position also reflect, inter alia, the steps we have taken to manage working capital (inventory management, advance payments for orders). For a full description of the assumptions and discretionary decisions made with respect to the measurement of assets and liabilities, please refer to the presentation in the notes to the consolidated financial statements.

Results of Operations

In financial year 2022, we generated sales of €1,576.0 million (previous year: €1,188.4 million), up on the previous year's level. The revenue share from the Chemical-Pharmaceutical business (sales contribution in 2022: 96.9%; previous year: 96.3%) grew significantly in both segments: 36.9% in the ChemPharm Refining segment and 27.8% in the ChemPharm Sales segment. The growth in sales was slightly more moderate in the Plastics segment at 11.9% (sales contribution in 2022: 3.1%; previous year: 3.7%).

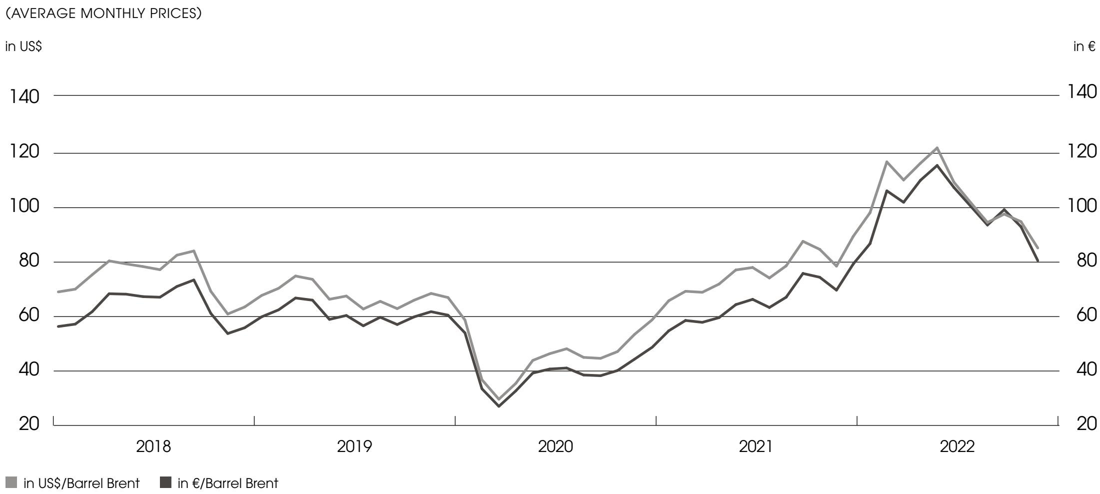
In terms of operating income (EBITDA), the Refining segment yielded 10.3%, while the Sales segment increased by a sizable 15.2%. The Plastics segment improved by 28.2%.

All in all, the company achieved its second-best result since its IPO in spite of the general circumstances being anything but optimal. Overall, consolidated operating income (EBITDA) totaled €124.9 million (previous year: €132.5 million). Driven by the weaker year-over-year result, there was a 3.2-percentage-point drop in the EBITDA margin to 7.9%, compared to 11.1% in 2021.

Due to higher depreciation and amortization, consolidated income before interest and taxes (EBIT) totaled €69.6 million in 2022 (previous year: €81.6 million). Income before tax (EBT) decreased from €73.4 million in 2021 to €62.0 million. Consolidated income attributable to shareholders amounted to €42.7 million (previous year: €50.2 million).

The company reported lower earnings per share of €1.15 for 2022, as against €1.35 per share in the prior-year period.

G. 06 **OIL PRICES 2018-2022**



T. 15 **CHANGES IN SALES AND INCOME**

IN € MILLION	2022	2021	2020	2019	2018
Sales revenue	1,576.0	1,188.4	873.0	1,075.3	1,114.2
EBITDA	124.9	132.5	55.8	52.9	74.7
EBIT	69.6	81.6	-0.3	7.4	40.6
Income before tax	62.0	73.4	-10.4	-1.2	33.7
Consolidated income attributable to shareholders	42.7	50.2	-9.0	-1.4	21.6
Earnings per share	1.15	1.35	-0.24	-0.04	0.59

Trend in Orders

Throughout 2022, new orders for products in our Chemical-Pharmaceutical business reflected varying factors. On the one hand, the uncertainties triggered by the Covid-19 pandemic and Russia's war of aggression in Ukraine resulted in a great need for reliable producers like H&R who were able to deliver. On the other hand, just like their end customers, our customer industries felt the effects of generally higher costs for raw materials, energy, logistics and the necessary services. Many market participants were accordingly cautious regarding their purchase volumes. The tonnages of the core products sold therefore failed to match the previous year's figures in both the Refining and the Sales segment. Overall, volumes were similar in both segments.

In the Plastics division, the fluctuating capacity utilization of various automobile manufacturers caused initially by the ongoing semiconductor shortage and consequently also by difficulties in other supply chains (for example, cable harnesses from Ukraine) made itself felt in GAUDLITZ's orders and in the number of units requested.

Trends in the Main Items on the Income Statement

During the reporting period, there was a €36.0 million change in inventories of finished products and work in progress (previous year: €31.1 million). For the second consecutive year, our cost of materials grew sharply (by 41.3%) to €1,274.0 million in financial year 2022 (previous year: €901.6 million); this was a direct consequence of the increased raw material prices.

T. 16 **TRENDS IN THE MAIN ITEMS ON THE INCOME STATEMENT**

IN € MILLION	2022	2021	2020	2019	2018
Sales revenue	1,576.0	1,188.4	873.0	1,075.3	1,114.2
Changes in inventories	36.0	31.1	-24.8	-1.7	12.9
Other operating income	37.1	29.6	28.0	25.6	27.3
Cost of materials	-1,274.0	-901.6	-634.3	-844.6	-877.5
Personnel expenses	-99.6	-99.2	-83.0	-88.5	-87.1
Depreciation and amortization	-55.3	-50.9	-56.1	-45.5	-34.2
Other operating expenses	-150.2	-115.6	-103.2	-113.8	-115.4
Operating result	70.2	**81.7**	**-0.3**	**6.9**	**40.2**
Financial result	-8.2	-8.4	-10.1	-8.1	-6.4
Consolidated income before taxes	62.0	**73.4**	**-10.4**	**-1.2**	**33.7**
Consolidated income before minority interests	45.4	**52.5**	**-7.8**	**0.1**	**22.3**
Consolidated income attributable to shareholders	42.7	**50.2**	**-9.0**	**-1.4**	**21.6**

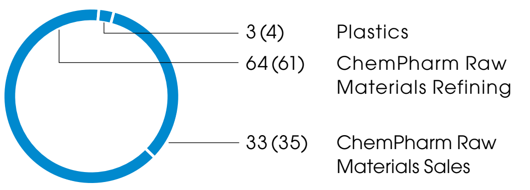
Personnel expenses remained essentially unchanged year-over-year at €99.6 million (previous year: €99.2 million) as a consequence of contractual tariff adjustments and higher profit-sharing due to the good consolidated income.

As in the previous year, there was no impairment of goodwill. Depreciation and amortization surpassed the previous year's figure of €50.9 million by €4.4 million (2022: €55.3 million).

Other operating expenses were much higher, totaling €150.2 million in 2022 compared with €115.6 million in 2021.

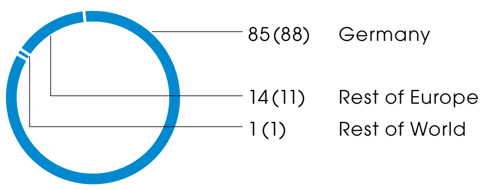
G. 07 **SALES BY SEGMENT IN 2022**

IN % (PREVIOUS YEAR'S FIGURES)



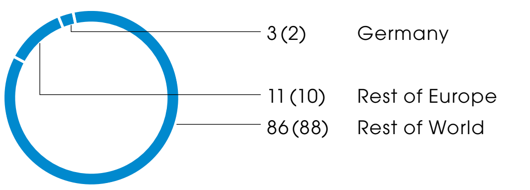
G. 08 **SALES BY REGION IN THE CHEMPHARM REFINING SEGMENT IN 2022**

IN % (PREVIOUS YEAR'S FIGURES)



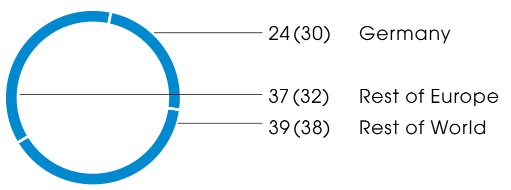
G. 09 **SALES BY REGION IN THE CHEMPHARM SALES SEGMENT IN 2022**

IN % (PREVIOUS YEAR'S FIGURES)



G. 10 **SALES BY REGION IN THE PLASTICS SEGMENT IN 2022**

IN % (PREVIOUS YEAR'S FIGURES)



Earnings Trend by Segment

ChemPharm Refining. Sales volumes of core products in our Group's largest segment did not live up to the prior-year figure at 410,454 tons (2021: 441,307 tons).

The higher segment sales were due above all to the cost of raw materials being passed on in the form of higher product prices. All in all, sales amounted to €1,020.6 million (previous year: €745.3 million). Meanwhile, operating income (EBITDA) for the segment fell by approximately 10.3% year-on-year, from €103.4 million in the previous year to €92.7 million.

ChemPharm Sales. Sales in the international segment improved by 27.8% to €526.7 million (previous year: €412.2 million). At the same time, we recorded a drop in sales here, too, from around 427,207 tons in the previous year to 400,409 tons in 2022. As in previous years, there were mixed developments in income at our subsidiaries. All in all, income was approximately 15.1% above the previous year's result, with operating income (EBITDA) totaling €33.4 million, which was also higher than in the previous year (2021: €29.0 million).

Plastics. With €49.0 million in sales, our Plastics segment made more of a contribution to total sales than in the previous year (2021: €43.8 million). After contributing €3.9 million to operating income (EBITDA) in the previous year, the segment achieved a much improved EBITDA of €5.0 million in the reporting period.

T. 17 **KEY FIGURES BY SEGMENT (IFRS)**

IN € MILLION	2022	2021	2020	2019	2018
Sales revenue					
ChemPharm Refining	1,020.6	745.3	524.6	665.0	694.5
ChemPharm Sales	526.7	412.2	317.0	376.9	374.9
Plastics	49.0	43.8	40.1	43.2	55.0
Reconciliation	-20.3	-12.8	-8.7	-9.9	-10.2
Operating income (EBITDA)					
ChemPharm Refining	92.7	103.4	35.2	29.2	46.0
ChemPharm Sales	33.4	29.0	25.9	30.7	30.1
Plastics	5.0	3.9	-0.4	-4.9	3.0
Reconciliation	-6.2	-3.8	-4.9	-2.2	-4.4

Net Assets and Financial Position

Financial Management Principles and Objectives

We manage our finances centrally. The overriding objectives of this function are as follows:

- To provide the company with sufficient liquidity and to use it efficiently
- To finance net working capital and capital expenditure
- To hedge against financial risks
- To ensure compliance with financing terms
- To optimize our capital structure

We cover our short-term financing needs using a widely syndicated, variable-interest syndicated loan. In December 2022, the existing syndicated loan was refinanced early with a volume of €230.0 million and a term up to December 2027. In order to ensure that we remain solvent at all times and to make efficient use of the liquidity of our German subsidiaries, the latter is incorporated into the cash pool structures in place at H&R GmbH & Co. KGaA.

We currently cover our long-term financing needs primarily using fixed-interest redeemable loans with interest between 1.5% and 3.6%, which are refinanced by the German development bank KfW.

T. 18 **MAIN FINANCING INSTRUMENTS OF THE H&R GROUP**

	Original loan amount in € million	Year of issue	Current loan amount in € million	Maturity
Syndicated loan	up to 230.0	2022	57.4	12/08/2027
Redeemable loans	28.8	2015	4.1	12/31/2023
Redeemable loans	10.0	2017	5.3	6/30/2027
Redeemable loans	19.0	2017	7.7	6/30/2026
Redeemable loans	14.5	2017	8.6	9/30/2027
Redeemable loans	4.0	2018	0.25	6/30/2023
Redeemable loans	4.0	2018	0.25	6/30/2023
Redeemable loans	4.0	2018	0.25	6/30/2023
Redeemable loans	4.0	2018	0.25	6/30/2023
Redeemable loans	7.0	2019	3.7	3/31/2027
Redeemable loans	13.3	2021	13.3	12/31/2026
Redeemable loans	13.3	2021	13.3	12/31/2026
Redeemable loans	30.0	2021	30.0	12/16/2023
Redeemable loans	25.0	2022	25.0	6/30/2032

As of December 31, 2022, there were firmly agreed but unused credit lines in the amount of €158.1 million.

Analysis of the Cash Flow Statement

Based on the heavily reduced consolidated income figure of €45.4 million, cash flow from operating activities totaled €38.0 million in the reporting period and was therefore on a par with the previous year (€37.4 million). This amount included €55.3 million of depreciation and amortization (previous year: €52.1 million). The company's cash flow performance was also impaired by higher prices for the raw materials we use, which kept net working capital requirements at a high level.

Cash flow from investing activities increased from €-48.6 million to €-72.5 million. The main component of this item was the €-64.7 million spent on the reporting year's higher investments in property, plant and equipment in connection with projects realized in our specialty refineries and sites (2021: €-46.6 million). In total, free cash flow fell to €-34.5 million (previous year: €-11.1 million).

Overall, financing activities resulted in a net cash inflow of €41.5 million (previous year: €2.5 million). Financial liabilities, which had already been steadily reduced in the past, were further reduced in 2022 (€-218.1 million; 2021: €-196.6 million). At the same time, the total new financial liabilities taken out also increased to €259.6 million (2021: €198.9 million). At the end of the reporting period, cash and cash equivalents amounted to €56.0 million, compared to €48.9 million a year earlier.

In the fourth quarter of 2022 alone, the company reported a recovered cash flow from operating activities of €47.0 million (Q4/2021: €24.3 million). In spite of higher investing activities of €-21.1 million (2021: €-9.9 million), the free cash flow for the fourth quarter of 2022 improved to €25.8 million (Q4/2021: €14.4 million).

The company was able to fulfill its payment obligations at all times in 2022. The total amount of liabilities to banks was €192.0 million as of the reporting date.

T. 19 **FINANCIAL POSITION**

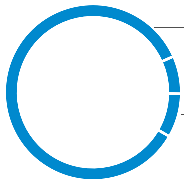
IN € MILLION	2022	2021	2020	2019	2018
Cash flow from operating activities	38.0	37.4	60.1	95.9	23.3
Cash flow from investing activities	-72.5	-48.6	-38.1	-75.1	-69.7
Free cash flow	-34.5	-11.1	22.0	20.6	-46.4
Cash flow from financing activities	41.5	2.5	-57.7	25.4	33.2
Cash and cash equivalents as of Dec. 31	56.0	48.9	55.0	94.8	46.5

Capital Expenditure

During the reporting period, our investments in property, plant and equipment of €65.6 million were significantly higher than in the previous year (2021: €48.2 million). We invested a total of €59.9 million in the Chemical-Pharmaceutical Raw Materials division in 2022 (previous year: €46.4 million). A substantial portion of this amount (€54.6 million) was again invested in the ChemPharm Refining segment, where it was used to expand and replace capital assets at the specialty refineries in Hamburg and Salzbergen.

G. 11 **CAPITAL EXPENDITURE BY REGION IN 2022**

IN % (PREVIOUS YEAR'S FIGURES)



The division's remaining €5.3 million of capital expenditure was divided among our ChemPharm Sales segment's international sites.

In the Plastics segment, investments in property, plant and equipment came to €5.5 million (previous year: €1.6 million). The segment's comparatively high capital expenditure relates to the acquisition of a site and operations in the Czech Republic.

In total, an order commitment for property, plant and equipment amounting to €18.4 million existed as of December 31, 2022. Its financing was secured by existing resources and credit lines.

T. 20 **CAPITAL EXPENDITURE BY SEGMENT**

IN € MILLION	2022	2021	2020	2019	2018
ChemPharm Refining	54.6	32.5	19.9	75.3	84.5
ChemPharm Sales	5.3	13.9	4.2	5.8	4.0
Plastics	5.5	1.6	0.6	1.7	2.9
Reconciliation (other activities)	0.2	0.2	–	0.1	0.1
Group	**65.6**	**48.2**	**24.7**	**82.8**	**91.6**

Analysis of the Statement of Financial Position

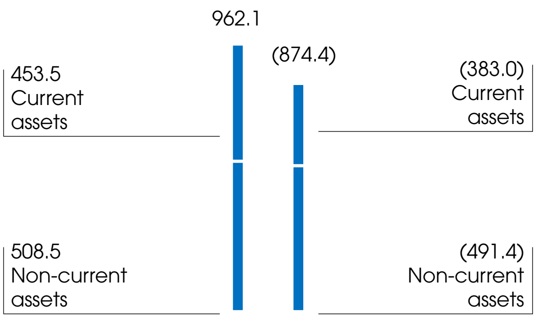
As of year-end 2022, the balance sheet total stood at €962.1 million (December 31, 2021: €874.4 million). On the assets side, cash and cash equivalents increased to €56.0 million compared to €48.9 million at the end of the previous year. Meanwhile, trade receivables were almost unchanged year-on-year, totaling €124.4 million (December 31, 2021: €125.6 million).

Inventories – one of the main components of current assets – increased by 32.8% to €235.1 million (2021: €177.0 million), primarily as a direct result of the higher cost of materials. Overall, current assets increased by 18.4% to €453.5 million as of December 31, 2022, compared with €383.0 million at the end of the previous year. They accounted for 47.1% of the balance sheet total.

Non-current assets grew by a marginal 3.5% to €508.5 million in financial year 2022 (December 31, 2021: €491.4 million). Property, plant and equipment increased from €432.4 million to €452.5 million. Goodwill remained unchanged at €17.4 million, and other financial assets fell to €12.6 million (2021: €16.2 million). Deferred tax assets decreased from €6.2 million to €3.1 million.

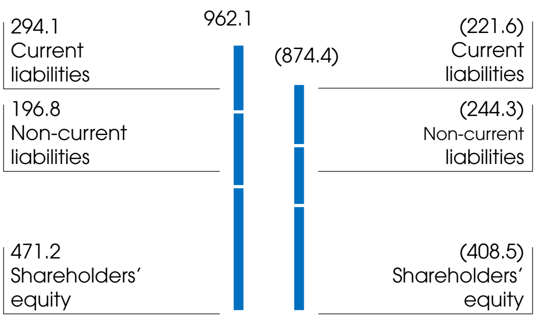
G. 12 **ASSETS 2022**

IN € MILLION (PREVIOUS YEAR'S FIGURES)



LIABILITIES AND SHAREHOLDERS' EQUITY 2022

IN € MILLION (PREVIOUS YEAR'S FIGURES)



Overall, non-current assets comprised 52.9% of the balance sheet total.

On the liabilities side of the statement of financial position, current liabilities increased by 32.7% from €221.6 million to €294.1 million and their percentage of the balance sheet total increased to 30.6% (December 31, 2021: 25.3%). Liabilities to banks increased from €54.2 million to €128.2 million, thereby accounting for the main share of the changes.

During the same period, non-current liabilities decreased by 19.4% to €196.8 million (December 31, 2021: €244.3 million), changing their percentage of the balance sheet total from 27.9% to 20.5%. Non-current liabilities to banks decreased from €87.6 million to €63.8 million, thereby accounting for the main share of the changes together with significantly reduced pension provisions of €54.3 million (December 31, 2021: €81.2 million).

H&R KGaA's equity amounted to €471.2 million at the end of the reporting period (December 31, 2021: €408.5 million). It was around 15.3% higher than in the previous year, due primarily to the significant improvement in retained earnings.

As the balance sheet total and equity both increased, with the latter increasing much more sharply, the equity ratio was higher as of the reporting date at 49.0% (December 31, 2021: 46.7%). Net gearing (the ratio of net financial liabilities to equity) increased by 3.0 percentage points from 39.9% to 42.9%.

Net Assets, Financial Position and Results of Operations of H&R KGaA

T. 21 **RESULTS OF OPERATIONS OF H&R GMBH & CO. KGAA UNDER HGB**

IN € THOUSAND	2022	2021	Change
Sales revenue	966	1,000	-34
Other operating income	1,970	1,784	186
Personnel expenses	-744	-753	9
Depreciation and amortization of intangible assets and property, plant and equipment	-20	-24	4
Other operating expenses	-9,556	-7,463	-2,093
Income from equity investments	1,396	–	1,396
Income from profit transfer agreements	41,210	55,703	-14,493
Expenses from loss transfer agreements	–	-417	417
Income from lending financial assets	1,841	1,188	653
Other interest and similar income	3,341	2,981	360
Depreciation and amortization on investments and current securities	-185	-7,974	7,789
Interest and similar expenses	-4,847	-3,617	-1,230
Income before tax	**35,372**	**42,408**	**-7,036**
Income taxes	-7,596	-6,500	-1,096
Other taxes	-9	-6	-3
Net income	**27,767**	**35,902**	**-8,135**
Profit or loss carryforward	48,370	12,468	35,902
Distributable profit/accumulated deficit	76,137	48,370	27,767

We have prepared the annual financial statements of H&R GmbH & Co. KGaA (short form: H&R KGaA) in accordance with the German Commercial Code (HGB).

They are published in the Bundesanzeiger (Federal Gazette) and are permanently available for download from the Investor Relations>Publications Overview section of our website (https://www.hur.com). For financial year 2022, we have combined the management reports of the H&R Group and of H&R KGaA.

H&R KGaA's sales revenues are generated solely by services rendered to companies in the Group. They were nearly at the prior-year level at €966 thousand. Personnel expenses for the reporting period were slightly lower than in the previous year at just under €744 thousand (2021: €753 thousand). Depreciation of property, plant and equipment decreased from €24 thousand to €20 thousand. Other operating expenses came to €9.6 million in the reporting year, up considerably on the previous year (2021: €7.5 million). Income from profit transfer agreements with our subsidiaries fell from €55.7 million to €41.2 million. There were no expenses from loss transfer agreements in 2022 (2021: €0.4 million).

The subsidiaries of H&R KGaA obtain funding for their financing needs from H&R KGaA's resources, which in turn are financed via credit lines. Due to slightly higher demand, other interest and similar income increased from €3.0 million to €3.3 million. Financing costs also rose in 2022; interest and similar expenses went up from €3.6 million to €4.8 million.

Overall, income before tax amounted to €35.4 million (previous year: €42.4 million). Tax expense came to €6.5 million, as against a higher expense of €7.6 million in the prior-year period. Overall, H&R KGaA generated a reduced net profit for the year of €27.8 million (2021: €35.9 million).

T. 22 **NET ASSETS AND FINANCIAL POSITION OF H&R GMBH & CO. KGAA**

IN € THOUSAND	2022	2021	Change
Concessions, industrial property rights and similar rights and assets acquired against payment, as well as licenses to such rights and assets	11	20	-9
Advance payments	43	–	43
Intangible assets	**54**	**20**	**34**
Other equipment, operating and office equipment	19	21	-2
Property, plant and equipment	**19**	**21**	**-2**
Shares in affiliated companies	123,550	123,735	-185
Loans to affiliated companies	64,040	51,388	12,652
Holdings	5,068	2,568	2,500
Financial investments	**192,658**	**177,691**	**14,967**
Trade receivables	1	49	-48
Receivables due from affiliated companies	265,699	206,080	59,619
Other assets	72	1,699	-1,627
Receivables and other assets	**265,772**	**207,828**	**57,944**
Securities	**31**	**41**	**-10**
Bank balances	**142**	**1,692**	**-1,550**
Net current assets	**265,945**	**209,561**	**56,384**
Accruals and deferrals	**21**	**–**	**21**
Active difference from offsetting of assets	109	21	88
Assets	**458,805**	**387,314**	**71,491**
Subscribed capital	95,156	95,156	–
Capital reserve	59,899	59,899	–
Other retained earnings	29,866	29,866	–
Distributable profit/accumulated deficit	76,137	48,370	27,767
Equity	**261,058**	**233,291**	**27,767**
Provisions for pensions and similar commitments	1,563	1,690	-127
Tax provisions	4,829	6,366	-1,537
Other provisions	1,919	1,437	482
Provisions	**8,311**	**9,493**	**-1,182**
Liabilities to banks	169,408	119,127	50,281
Trade payables	263	329	-66
Liabilities to affiliated companies	19,749	25,040	-5,291
Other liabilities	16	34	-18
Liabilities	**189,436**	**144,530**	**49,906**
Liabilities and shareholders' equity	**458,805**	**387,314**	**71,491**

As of December 31, 2022, H&R KGaA's balance sheet total had increased by a good 18.5% to €458.8 million (December 31, 2021: €387.3 million). Loans to affiliated companies increased to €64.0 million (previous year: €51.4 million), but once again related predominantly to loans for projects in the reporting year. As a result, the company mainly invested in the maintenance and capacity of the existing process units and their added value at both refinery sites. Overall, at €192.7 million, financial assets were higher than the previous year's value of €177.7 million.

Receivables due from affiliated companies increased from €206.1 million to €265.7 million in total. This was mainly due to increased receivables from cash pooling.

Bank balances fell significantly from €1.7 million to €0.1 million. All in all, net current assets increased from €209.6 million to €265.9 million.

On the liabilities side, subscribed capital changed (2021: €95.2 million), and the capital reserve (2021: €59.9 million) did not. Other retained earnings were also comparable to the prior-year figure (2021: €29.9 million).

The net income generated during the reporting period, €27.8 million, was posted to distributable profit, which therefore improved to €76.1 million. Equity followed suit and as of December 31, 2022, came to €261.1 million, compared to €233.3 million at the end of the previous year's reporting period. The equity ratio dropped slightly to 56.9% (December 31, 2021: 60.2%).

Provisions for pension commitments decreased slightly once again due to the development of interest rates. Lower tax provisions additionally reduced the income, causing the total provisions item to drop from €9.5 million on December 31, 2021, to €8.3 million.

Liabilities climbed to €189.4 million (December 31, 2021: €144.5 million), due first and foremost to a significant increase in liabilities to banks (€169.4 million; previous year: €119.1 million).

Overall, the Management Board of H&R KGaA is satisfied with the stability of the company's net assets, financial position and results of operations in light of the challenges faced by the company.

Other Legally Required Disclosures

Disclosures in Accordance With Section 289a, Sentence 1 No. 3 and Section 315a, Sentence 1, No. 3 of the German Commercial Code (HGB)

Item 1: Composition of Subscribed Capital

On the reporting date, subscribed capital totaled €95,155,882.68, divided into 37,221,746 ordinary no-par bearer shares. This corresponds to a notional value of around €2.56 per share. There are no different classes of shares; they are all ordinary shares. Each of these shares entitles the holder to one vote.

Item 2: Restrictions on Voting Rights or the Transfer of Shares

There is a voting rights restriction and pooling agreement between the limited liability shareholders of H&R Beteiligung GmbH and H&R Internationale Beteiligung GmbH. A portion of the shares and voting rights in the company held by H&R Beteiligung GmbH (9.70% of voting rights in the company) and all shares and voting rights in the company held by H&R Internationale Beteiligung GmbH (16.44% of voting rights in the company) are subject to the mutual voting rights restriction. A total of 26.14% of company voting rights are therefore subject to a voting rights restriction.

In addition, shares and voting rights held by members of the Supervisory Board and of the Executive Board of the general partner with full personal liability are subject to a voting rights restriction pursuant to Section 136 of the German Stock Corporation Act (AktG) regarding voting on the resolution by the Annual Shareholders' Meeting to approve their actions.

The company's Executive Board is not aware of any further restrictions affecting voting rights or the transfer of shares.

Item 3: Direct or Indirect Interests Exceeding Ten Percent of Voting Rights

In an informal voting rights notification dated December 31, 2022, Mr. Nils Hansen, Quickborn, reported that his share of voting rights totaled 61.42% of the company's voting rights due to his own direct holdings and the attribution of voting rights held by or attributed to H&R Beteiligung GmbH, H&R Internationale Beteiligung GmbH, and H&R Holding GmbH.

According to the aforementioned notification, (i) the share of voting rights of H&R Beteiligung GmbH totaled 59.74% of the company's voting rights due to direct holdings and the attribution of voting rights; (ii) the share of voting rights of H&R Internationale Beteiligung GmbH totaled 26.14% of the company's voting rights due to direct holdings and the attribution of voting rights; and (iii) the share of voting rights of H&R Holding GmbH totaled 59.74% of the company's voting rights due to the attribution of voting rights.

In accordance with an informal notification made at the end of 2022, Mr. Nils Hansen also holds 1.69% of the shares as privately owned shares, meaning that he holds shares corresponding to 61.42% of the share capital in total.

Item 4: Holders of Shares With Special Rights Granting Powers of Control

There are no shares with special rights granting powers of control.

Item 5: Control Over Voting Rights of Shares Held by Employees

The voting rights of employees who hold shares in the company's capital are not controlled.

Item 6: Statutory Regulations and Provisions of the Articles of Association on the Beginning and End of the Legal Position of the General Partner With Full Personal Liability and on Amendments to the Articles of Association

Since the company's legal form was changed to that of a partnership limited by shares on August 1, 2016, the company's management and representation have been the responsibility of its general partner with full personal liability, H&R Komplementär GmbH.

The general partner with full personal liability is defined in the company's Articles of Association; see Section 5, paragraph 1 of the Articles of Association. The general partner with full personal liability shall only leave the company in the cases governed by law or through an amendment to the Articles of Association. If the general partner with full personal liability leaves the company and a new general partner with full personal liability has not been admitted simultaneously, the company shall continue to operate with the limited liability shareholders alone for a transitional period. In this case, the Supervisory Board must immediately appoint an emergency representative, who shall represent the company until a new general partner with full personal liability has been admitted.

In this case, the Supervisory Board shall be entitled to adjust the Articles of Association to reflect the change in the general partner with full personal liability. Amendments to the Articles of Association must always be based on a resolution by the Annual Shareholders' Meeting, the adoption of which shall require a simple majority of the share capital represented during the voting, unless a bigger majority is required by law (compare Section 18, paragraph 2 of the Articles of Association and Sections 133 and 179 AktG). According to Section 285, paragraph 2 AktG, resolutions by the Annual Shareholders' Meeting regarding amendments to the Articles of Association also require the approval of the general partner with full personal liability. According to Section 24 of the Articles of Association, the Supervisory Board may adopt amendments to the Articles of Association that only affect the wording of the Articles of Association without the approval of the Annual Shareholders' Meeting. According to Section 4, paragraph 6 of the Articles of Association, this also applies to respective utilizations of the contingent capital defined in Section 4, paragraphs 1 and 6 of the Articles of Association. Finally, the Supervisory Board is entitled to adjust the Articles of Association to reflect the change in the general partner with full personal liability (see Section 5, paragraph 5 of the Articles of Association).

Item 7: Powers of the General Partner With Full Personal Liability, Particularly Regarding the Option of Issuing or Buying Back Shares

The general partner with full personal liability currently has an option for implementing corporate actions.

Under Section 4, paragraph 5 of the Articles of Association, the general partner with full personal liability is authorized by way of a resolution passed by the Annual Shareholders' Meeting on May 24, 2022 – with the Supervisory Board's approval – to increase the company's share capital up until May 23, 2027, by a maximum of €47,577,000.00 by issuing new, ordinary no-par bearer shares. The issue may be effected in one or more tranches in return for cash and/or contributions in kind (2022 Approved Capital).

The shareholders generally have a subscription right to the new shares. The subscription right can also be granted indirectly using an arrangement in which the new shares are assumed by one or several credit institutions/companies with equivalent status to the latter in accordance with Section 186, paragraph 5, sentence 1 AktG that are then obliged to offer them to the shareholders for subscription (indirect subscription right).

The general partner with full personal liability is authorized, however, to exclude the shareholder subscription rights upon approval of the Supervisory Board,

a) to the extent necessary to exclude fractional share amounts from the subscription rights;

b) if the shares are being issued in exchange for contributions-in-kind, in particular for the purpose of acquisitions of companies, parts of companies, equity interests in companies, other assets or in the context of business combinations, or for the purpose of acquiring receivables or other rights;

c) if the company's shares are being issued in return for cash and the issue price for each share is not significantly lower than the quoted price for shares with what are, essentially, the same features that are already listed on the stock exchange at the time the issue price is set definitively. This authorization only applies, however, subject to the proviso that the new shares issued excluding shareholders' subscription rights in accordance with Section 203, paragraph 1, sentence 1 and paragraph 2, sentence 1 and Section 186, paragraph 3, sentence 4 AktG do not exceed 10% of the company's share capital in total, neither at the time this authorization takes effect nor at the time it is exercised if this value is lower. The following count toward this 10% threshold: (i) new shares issued, excluding shareholders' subscription rights, during the term of this authorization up until the time at which it is utilized on the basis of another authorization from approved capital in accordance with Section 203, paragraph 1, sentence 1 and paragraph 2, sentence 1 and Section 186, paragraph 3, sentence 4 AktG, (ii) those shares that were, or are to be, issued to satisfy conversion or option rights and/or conversion or option obligations and/or tender rights of the issuer under convertible bonds and/or bonds with warrants, profit participation rights and/or participating bonds (or combinations of these instruments) ("bonds"), insofar as the bonds were issued during the term of this authorization up until the time at which it is utilized pursuant to Section 221, paragraph 4, sentence 2 and Section 186, paragraph 3, sentence 4 AktG, excluding shareholders' subscription rights and (iii) treasury shares sold during the term of this authorization up until the time at which it is utilized pursuant to Section 71, paragraph 1, no. 8, sentence 5, 2nd half-sentence and Section 186, paragraph 3, sentence 4 AktG excluding shareholders' subscription rights. Any reduction is reversed to the extent that authorizations to issue new shares from approved capital, to issue bonds or to sell treasury shares in corresponding application of Section 186, paragraph 3, sentence 4 AktG are granted again by the Annual Shareholders' Meeting once the authorizations that resulted in the reduction have been exercised;

d) if the shares were issued to satisfy conversion or option rights or conversion or option obligations or tender rights of the issuer under bonds carrying conversion or option rights and/or conversion or option obligations and/or tender rights of the issuer to the company's shares;

e) insofar as is required to grant subscription rights to holders/creditors of bonds carrying conversion or option rights and/or conversion or option obligations and/or tender rights of the issuer to the company's shares to such an extent as such holders/creditors would be entitled to after having exercised their conversion or option rights and/or following the fulfillment of the conversion or option obligations and/or tendering of shares as a shareholder.

The general partner with full personal liability is authorized, with the approval of the Supervisory Board, to specify details about the capital increase and its implementation, including details regarding the rights accruing to the shares and the terms of issue.

Under Section 4, paragraph 6 of the Articles of Association, a resolution passed by the Annual Shareholders' Meeting on May 29, 2020, authorizes the conditional increase of the company's share capital by a maximum of €19,940,383.37 by issuing up to 7,800,000 new ordinary no-par bearer shares with dividend entitlement from the beginning of the financial year in which they are issued (2020 Contingent Capital). The contingent capital increase serves to grant shares as issued by the company, companies under its control, or companies in which it has a majority interest to the holders or creditors of warrants or convertible bonds and profit participation rights/participating bonds with option or conversion rights/conversion obligations. This only occurs insofar as the option or conversion rights relating to the aforementioned warrants and convertible bonds/profit participation rights or participating bonds with option or conversion rights are exercised or conversion obligations relating to such bonds are fulfilled and insofar as no treasury shares or new shares from the approved capital are used to satisfy rights. The new shares are issued at the conversion/option price as determined in accordance with the stated authorization.

The general partner with full personal liability is authorized, with the approval of the Supervisory Board, to determine the further details of the process relating to the contingent capital increase. The Supervisory Board is authorized to amend Section 4, paragraphs 1 and 6 of the Articles of Association in accordance with the respective utilization of the contingent capital.

Item 8: Essential Agreements Subject to the Condition of a Change in Control Owing to a Takeover Bid

The banks involved in the syndicated loans and redeemable loans have the right to call in the loans in the event of a change in control.

Item 9: Compensation Agreements to be Concluded With the Members of the Executive Board or With Employees Covering the Eventuality of a Takeover Bid

No such arrangements exist at this time.

Subordinate Status Report

The company exercising direct control is H&R Beteiligung GmbH, a member of the Hansen & Rosenthal Group, with a 43.30% stake. The management and representation of H&R GmbH & Co. KGaA is the responsibility of H&R Komplementär GmbH. Mr. Nils Hansen holds the majority (51%) of the shares in H&R Komplementär GmbH and thereby is in a position to directly influence the management of the company.

As a result, we produce a subordinate status report in accordance with Section 312 AktG.

In the report for financial year 2022, the Executive Board came to the following conclusion:

"With regard to the transactions listed in the Report on Relationships with Affiliated Companies for the reporting period from January 1, 2022, to December 31, 2022, based on the circumstances that we were aware of at the time such transactions took place, our company received appropriate consideration for every transaction. No relevant measures were implemented or omitted during the reporting period."

Non-financial Report

The 2022 non-financial statement will be subject to a voluntary audit in accordance with ISAE 3000 and published under the name "Non-financial Report" in the 2022 Sustainability Report by April 30, 2023, and made available for download on the company's website at www.hur.com/en/sustainability/sustainability-report.

Statement on Corporate Governance

The Company publishes its Statement on Corporate Governance on its website at www.hur.com/en/investor-relations/corporate-governance.

Events After the Reporting Date

Between December 31, 2022, and the date of this combined group management report, there were no events with a concrete material impact on the net assets, financial position and results of operations.

However, it is possible that the developments in the war in Ukraine may have significant consequences during the further course of the year. Due to the volatile situation, however, it is only possible to quantify these to a limited extent at present. We have nevertheless assessed the set of issues qualitatively and taken it into consideration in our remarks on the Risk and Forecast Report.

Report on the Internal Control and Risk Management System and on the Main Opportunities and Risks

Main Features of the Internal Control and Risk Management System and Opinion on the Adequacy and Effectiveness of These Systems

Risk Policy

H&R KGaA's business policy is aimed at increasing the value of the company over the long term. In order to achieve this, we must seize market opportunities while carefully weighing the associated risks.

The goal of our risk policy is to optimize the relationship between risks and opportunities while avoiding risks that could jeopardize the company's continued existence as a going concern. Systematic risk management is the direct responsibility of the Executive Board. Risks are identified and communicated by the managing directors of the respective local operating units. As far as possible, risks are eliminated or otherwise addressed at a local level.

As a manufacturer of crude-oil-based specialty products and plastic parts, we have a particular responsibility to operate our specialty refineries, processing facilities and production sites for plastic parts in a way that protects both people and the environment. All our production sites therefore have officers who actively work to ensure the safety of our employees and our facilities while protecting the environment.

Internal Control and Risk Management

The risks to which H&R KGaA and its subsidiaries are exposed are identified, assessed, quantified (to the extent possible), communicated and, if applicable, limited on the basis of appropriate measures across the entire Group in a uniform manner. We use various methods to identify risks, such as monitoring industry-specific and macroeconomic risk indicators and analyzing purchasing and sales markets. The assessment is based primarily on estimates by in-house experts – such as the risk managers at the local units – which in turn are based on appropriate assumptions about the corresponding risk. All segments are included in the risk management process. Identifying risks is considered to be the responsibility of all employees. This is encouraged by flat hierarchies and a culture that encourages open discussion of potential risks, with local managing directors leading by example. H&R KGaA uses the COSO (Committee of Sponsoring Organizations of the Treadway Commission) model (Enterprise Risk Management — Integrated Framework) to assess risks; this method is one of the standards for internal controls recognized by the American Securities and Exchange Commission (SEC). The risk manager (generally the relevant operations manager) conducts on-site risk assessments on a quarterly basis using a risk checklist/inventory list and an integrated data entry form on which the calculation can be substantiated, if necessary.

Risks are classified according to certain criteria. They are then measured using an approach in which the nominal extent of a potential risk is multiplied by the probability of its occurrence. All risks measured for an individual company are entered in the risk inventory and reported quarterly to the Risk Control department of the parent company, H&R KGaA. The Risk Control department helps the risk managers to establish early-warning indicators that make it possible to react quickly if a risk becomes more acute.

In general, all risks that a subsidiary classes as relevant are recorded. All other risks are neither recorded nor regulated.

The early-warning indicators are checked regularly to ensure that they are appropriate and up to date. Where possible and economically feasible, measures to reduce or avoid risks are also defined. Every quarter, the Risk Control department sends the Executive Board the consolidated risk inventory, including a detailed breakdown of the value at risk (VaR), which serves as the basis for controlling overall risk. If new risks arise at short notice or a loss event occurs, the Executive Board is notified directly and independently of normal communication channels.

In addition, a monthly performance report is prepared for all the main individual companies and the Group. This report compares sales and earnings figures with the relevant target figures. The Risk Control department analyzes any variances between target and actual figures. These analyses enable the Executive Board to identify undesirable trends at an early stage so that the necessary countermeasures can be implemented immediately.

Another instrument for the early identification of risks are the regular divisional meetings, which are attended by the local managing directors and the Executive Board of H&R KGaA. The interface thus created between the operating and administrative levels ensures that operational risks are captured by and reflected in the accounting process (e. g., in the form of provisions) and communicated internally. At Supervisory Board meetings, changes in the risk inventory and the risk strategy are dealt with on a regular basis as part of the risk management reporting process. If the risk situation changes significantly, the Supervisory Board will also be informed promptly between meetings by the Executive Board.

The functionality and effectiveness of the risk early-warning system are reviewed not only by the Executive Board, but also on an annual basis as part of the audit of the financial statements. The results of these audits are taken into consideration as part of the ongoing refinement of our risk management system.

To the best of our knowledge and on the basis of the information available to us – resulting from the internal control and risk management system detailed above – as of December 31, 2022, there were no weaknesses in internal controls or matters of significance which would indicate that our company-wide internal control and risk management system was inadequate or ineffective as of December 31, 2022.

Description of the Main Features of the Internal Control and Risk Management System With Regard to the Group Accounting Process (Sections 289, Paragraph 4 and 315, Paragraph 4 of the German Commercial Code (HGB))

H&R KGaA's accounting guidelines specify uniform accounting and valuation principles for the companies included in the consolidated financial statements in accordance with International Financial Reporting Standards (IFRS).

New accounting regulations are reviewed immediately to determine whether they affect companies in the H&R Group and if necessary are incorporated into our accounting guidelines. The local managing directors are responsible for applying existing regulations at the level of the individual companies. Consolidated financial statements are prepared and drawn up by Group Accounting at H&R KGaA. The employees in this department also serve as contacts to answer questions on accounting matters from the subsidiaries.

To minimize the risk of incorrect accounting even in complex circumstances, H&R KGaA employees involved in the accounting process undergo continuous and extensive training. The relevant departments are adequately staffed, both in terms of numbers and competence. Advice on specific accounting matters is also obtained from external experts as necessary. The internal control system at the H&R Group consists of principles and processes that ensure the effectiveness (i. e., making sure the annual and consolidated financial statements, as well as the combined management report, comply with the relevant standards) and, where appropriate, the efficiency of the controls in the accounting process.

The H&R Group's internal control system consists of a management system and a monitoring system. Important aspects of the measures that have been integrated into our processes with respect to the Group accounting process include both manual controls, such as the dual-review principle, and automated IT controls. After selecting professionally qualified employees, we provide them with regular training. This helps us to ensure that our monitoring system identifies risks promptly and thus ensures that our annual and consolidated financial statements conform to the relevant standards.

The Audit Committee of H&R KGaA's Supervisory Board is integrated into the H&R Group's internal monitoring system through its audit activities, which are independent of operating processes. In accordance with Section 107, paragraph 3 AktG (German Stock Corporation Act), this body primarily focuses on monitoring the accounting process, the audit of the financial statements and the effectiveness of the internal control and risk management system.

Access management regulations for the relevant IT systems and a strict dual-review policy in the Accounting department – both at the individual companies and at the Group level – help ensure that the accounting processes are thorough, precise and secure.

The subsidiaries are obliged to report their figures to Group Finance every month in a standardized format in accordance with IFRS accounting regulations. This enables variances between target and actual figures to be identified at an early stage and gives us the opportunity to determine the reasons behind the variances and to take any necessary countermeasures.

The Risk Management System as it Relates to Derivative Financial Instruments

H&R KGaA has very strict rules governing the use of derivative financial instruments. We only use standard market instruments from selected banks with good ratings. As a rule, the transactions are carried out by the Group Treasury department after approval by the Executive Board of H&R Group Finance GmbH and are then monitored on an ongoing basis. They are used to hedge underlying transactions that either exist already or are highly likely to take place in the future (anticipatory hedging). In financial year 2022, for forex hedging we restricted ourselves to micro-hedging individual risk positions in the area of current foreign currency book positions, the continued existence of which is monitored by the hedging entity during the hedging period. In view of the terms of a maximum of six months, the market values and therefore also the counterparty risks remained manageable. Additionally, we have concluded raw materials price swaps which will lead to stabilization of the profit margin achievable in the co-products area, particularly in the bitumen business, by the end of 2023. To ensure the intended effectiveness, changes in the planning quantities of the risk positions are compared on a monthly basis to the hedging quantities, as well as following the market value movements of the underlying and hedging transaction. Raw material hedges are also reflected as hedges for accounting purposes.

Derivative financial instruments are not used for speculative purposes.

Specific Risks

All our relevant risks are classified uniformly throughout the Group. A risk is classified as low, medium or high based on the parameters “Likelihood of occurrence” and “Potential financial impact”. The resulting risk classification matrix is shown in the following table:

T. 23 **POTENTIAL FINANCIAL IMPACT[1)]**

	Likelihood of occurrence[2)]		
	unlikely	**possible**	**likely**
Existential threat	High risk	High risk	High risk
Significant	Medium risk	High risk	High risk
Moderate	Low risk	Medium risk	Medium risk

[1)] Moderate: some negative effects on business activity, financial position, results of operations and cash flows, for example if EBITDA falls below €60.0 million in 2023.
Significant: substantial negative effects on business activity, financial position, results of operations and cash flows, for example if EBITDA falls below €60.0 million annually over the next two years.
Existential threat: substantial negative effects on business activity, financial position, results of operations and cash flows owing to which the continued existence of the enterprise would be jeopardized, e.g., with EBITDA permanently below €60.0 million.
[2)] 1–33%: unlikely; 34–66%: possible; 67–99%: likely

Low risk   Medium risk   High risk

Depending on the degree of potential financial effect and the estimated likelihood of occurrence, risks are generally classified as being “high”, “medium” or “low”.

T. 24 **CORPORATE RISKS**

	Likelihood of occurrence	Possible financial impact	Risk classification	Risk situation compared to previous year
Macroeconomic and Industry Risks				
Fluctuations in demand and margins	possible	significant	high	unchanged
Risks related to Covid-19	possible	moderate	medium	lower
Raw material supply risks	possible	significant	high	higher
Risks related to raw materials composition	likely	significant	high	unchanged
Risks related to consequences of the war in Ukraine	likely	significant	high	unchanged
Risks from the development of substitute products/general competitive pressure	likely	significant	high	unchanged
Changes in the regulatory, tax and legal environment	likely	significant	high	higher
Operating and Corporate Strategy Risks				
Operational risks	possible	moderate	medium	unchanged
Investment risks	unlikely	significant	medium	unchanged
Risks associated with contractual relationship with Hansen & Rosenthal Group	unlikely	significant	medium	unchanged
Product liability risks	unlikely	moderate	low	unchanged
IT risks/cybersecurity	possible	significant	high	unchanged
Financial Risks				
Liquidity risks	unlikely	significant	medium	unchanged
Risks from the breach of covenants	possible	significant	high	unchanged
Risks from future refinancing requirements	unlikely	significant	medium	unchanged
Currency risks	possible	moderate	medium	unchanged
Interest rate risks	possible	moderate	medium	unchanged
Risks from defaulting customers and banks	unlikely	moderate	low	unchanged

Unless stipulated otherwise below, the description of risks, opportunities and the forecast generally applies equally to the H&R Group and to H&R KGaA. This reflects the fact that, while certain risks may originate with the subsidiaries and not with H&R KGaA, H&R KGaA will have direct exposure as the parent company. Above all, this applies to risks involving operating processes and the immediate business activities of the subsidiaries.

In its capacity as the parent company, H&R KGaA holds equity investments in Group companies at its own original risk. The carrying amounts of these investments are subject to the risk of an impairment in the event of negative changes in the economic situation of these Group companies. This may have a negative impact on H&R KGaA's annual results.

Macroeconomic and Industry Risks

Demand and Margin Fluctuations (Risk Class: High). External influences can cause demand for our products to fluctuate. In addition to global economic weak phases, these influencing factors particularly also include geopolitical tensions which have a significant impact on changes in our sales and income.

2022 absolutely has to be classified as another phase that involved particular challenges in view of the lingering effects of the pandemic, the logistics problems and, above all, the poorer availability and higher prices of raw materials as well as higher energy prices as a consequence of the war in Ukraine. In view of the results of operations, however, it can be stated for the past financial year that H&R's reliability as a supplier paid off and was rewarded by the customers with high demand and stable margins.

Although these opportunities were able to be used in 2022, H&R is addressing the general negative effects from demand and margin fluctuations.

As a strategically sensible response to the challenge of reduced demand and margins in the medium term, we continue to strive to accelerate the specialization of our production units, doing our very best to avoid producing combustion products and base oils. At the same time, the Group is addressing the reduced need for fossil-based chemical-pharmaceutical specialty products due to societal demand with the targeted strategic expansion of its product portfolio to include bio-based, synthetic and recycled grades. If we can manage to produce specialty products with a high margin in a targeted manner as part of an enhanced production process, this could translate into a significant improvement in our overall results of operations. There is, however, still a demand and margin risk that the company considers to be "high" in general due to the probability of occurrence and the potentially significant impact.

In the Plastics division, we are – like other component manufacturers for automotive suppliers – dependent on industry trends. This applies, in particular, to components called off on a just-in-time basis, which fluctuate depending on the production figures of the OEMs/automobile manufacturers themselves. In 2022, some closures took place of automobile manufacturers and suppliers, particularly due to difficulties in important supply chains. However, last year's reduced fixed cost basis helped to stabilize and further improve the income position. With the economic environment as it is, the risks generally remain high.

Risks Related to the Continuation of the Covid-19 Pandemic (Risk Class: Medium). In principle, the possibility exists that the pandemic will continue to have an impact. H&R could possibly be affected by this directly in the form of employee absence, or indirectly through absences in our customer industries and raw material suppliers or due to disruptions to the energy supply or logistics chains.

After three years now of the pandemic, we do not assume such a scenario and also believe that the impacts are now low enough as a result of our significantly improved understanding of it as well as the much greater vaccine protection since the beginning of the pandemic for us to downgrade the risk to merely "medium".

Risks Related to Raw Materials Procurement (Risk Class: High). In principle, H&R is reliant on the supply of raw materials and therefore bears a risk with regard to these raw materials being sufficiently available. As long as a substantial portion of our raw materials needs to be procured externally, there is a risk in principle that the procurement of these may be impeded by circumstances that are beyond the control of H&R (wars, pandemics, environmental disasters, etc.). Accordingly, we are diversifying our sources with deliveries from renowned oil companies in different parts of the world.

This risk was to some extent realized in 2022 with sanctions imposed on oil imports from Russian sources (see also risks related to consequences of the war in Ukraine). We generally safeguarded the overall volume requirements with supplies from alternative sources and were also able to pass the higher prices for these raw materials on to the market. Nonetheless, the situation illustrates that a deterioration can no longer be classified as "unlikely", as was previously the case. We have therefore decided to classify the risks related to raw materials procurement as "high" until further notice.

The same risks also exist, in principle, in the Plastics segment. Therefore, our strategy for avoiding bottlenecks in the supply of raw materials also aims at always using several suppliers for important raw materials. In spite of this diversification in procurement, we identified an ongoing shortage of important granulate raw materials in 2022.

Risks Related to Raw Materials Composition (Risk Class: High). We are committed to optimizing the yield of our refineries and aim to achieve as large a proportion of core products as possible while also minimizing co-products. In order to achieve this, we adapt the operating modes used in our production processes to suit the composition of the raw materials. Depending on the raw materials quality available, the product split that we can achieve can fluctuate, meaning that the proportion of the overall yield attributable to core products varies.

This risk manifested itself to an extent last year also; the purchase of different raw materials than previously, which were also of a higher quality than Russian goods, led to a change in the output structure. Above all, however, the quality of some of our products improved beyond the specifications agreed with the customers without our being able to achieve higher prices for them ("quality giveaways").

Risks Related to Consequences of the War in Ukraine (Risk Class: High). The Ukraine war bundles together several of the aforementioned risks into a cluster. For example, up to the end of the first quarter of 2022, Russia had played a very important role in the supply of raw materials for our production sites. As these raw materials were no longer available or were deliberately no longer purchased, this gap needed to be filled by other suppliers in our network.

We achieved this. However, as these raw materials sourced primarily from North and West Africa and Ireland were also being procured by other market participants and industries, their procurement additionally involved higher purchase prices. This was not a problem specific to H&R, but relates to the entire European chemical and petroleum industry. In addition, we were able to pass the higher raw material costs on to our customers.

As things stand, we are not expecting the raw materials procurement situation to change in the foreseeable future. We should therefore still be able to secure supplies, albeit on the basis of conditions which will remain less favorable.

The prices of electricity and gas remaining high could constitute another risk factor and a driver of operating costs at our two German production sites.

Substituting the gas needs in Germany with LNG from the Gulf States or gas from the USA, Norway or the Netherlands rather than from Russian sources is an option which was used in 2022. However, at least in the short term, this would not reduce gas and energy costs due to the high price of gas.

Risks From the Development of Substitute Products and General Competitive Pressure (Risk Class: High). One risk applicable to both ChemPharm divisions is the development of substitutes or alternative production methods for our products. For example, base oils of groups II and III are a higher quality, but are not necessarily any more expensive than our products. Still, it is worth noting that over the last two years predatory competition has not taken place and the demand for our products was at a high level in this area. We nevertheless intend to push ahead with our focus on the further enhancement of the business model, which focuses on avoiding group I base oils and prioritizing a change in the use of raw materials from renewable and synthesized products. In this way, we are aiming to transform our own product portfolio and virtually create our own substitutes for our current products.

Due to the many unknowns, the risk arising from market or competitive trends cannot be quantified.

Changes in the Regulatory, Tax and Legal Environment (Risk Class: High). As an operator of industrial plants, we run a business that is governed by laws and regulations. Our two production sites in Germany, in particular, are required to comply with the requirements of legislation on the environment, chemicals and energy. A potential tightening of these regulations entails the risk of financial burdens caused by higher operating costs and capital expenditure. We limit these risks by remaining involved in political decision-making processes as much as possible – either directly or through membership in various associations. We also identify and monitor the changing requirements with our internal compliance organization.

We keep a close eye on regulatory, tax and legal changes resulting from the societal debate on climate change. We focus here in particular on the European Union's climate and energy policies and their regulatory impacts, the latter taking the form both of direct EU Regulations and their transposition into national law. We evaluate our corporate strategy on the basis of these legal guidelines and aim to make a contribution to sustainable business development with our future process and product setup. At the same time, we regularly report on our endeavors in our non-financial statement, making reference to the relevant frameworks such as the German Corporate Governance Code and the EU Taxonomy Regulation.

Our specialty refinery operations do currently entail emissions and the use of chemicals. The trend in some areas toward tougher legal requirements for the manufacturing sector in Germany and Europe could lead to competitive disadvantages vis-à-vis international and non-European market participants.

Operations are also energy-intensive. The last financial year presented H&R and the entire chemical industry with the challenge of dwindling gas availability. H&R succeeded in cutting the gas requirements of its two German production sites by around a quarter by using alternative energy sources. Should gas availability for industrial customers be further reduced in the course of the winter, this having an impact on the productivity of our sites cannot be ruled out. We have accordingly "upgraded" this risk in comparison to last year.

Operating and Corporate Strategy Risks

Operational Risks (Risk Class: Medium). H&R KGaA's subsidiaries produce hydrocarbon-based specialty products and high-precision plastic parts. Operating the plants that produce such products entails both operating risks and the risk of accidents. Technical disruptions or natural disasters can cause harm to people or the environment and result in production downtime.

We counter these risks with a comprehensive safety strategy. Extensive control and safety measures, coordinated by our IT-based measuring stations, enable us to identify operational risks at an early stage and to adopt suitable countermeasures. We also regularly invest in environmental protection and safety and fire protection measures at our specialty refineries.

The certification of our production sites in both the Chemical-Pharmaceutical division and our Plastics Parts contributes significantly to ensuring operational safety. We use the strict ISO standards and IATF rules as a basis for this. If a loss event occurs despite these precautions, the financial consequences are largely covered by insurance, provided that the risk is insurable and such coverage makes sense from a financial and economic standpoint.

Thanks to comprehensive health and safety measures to protect our own staff, the number of suspected cases of Covid-19 or identified infections in 2022 were kept under control at our sites so effectively that no restrictions to business operations occurred.

Risks Associated With the Sales/Distribution Relationship With the Hansen & Rosenthal Group (Risk Class: Medium). The sale and distribution of the ChemPharm Refining segment's products are handled predominantly by companies belonging to the Hansen & Rosenthal Group, which acts as sales/distribution partner under long-term contracts, reflecting many years of business ties and making Hansen & Rosenthal the most significant customer of H&R KGaA.

If this contractual relationship came to an end and the Hansen & Rosenthal Group were no longer available as a sales/distribution partner, this would have a considerable negative impact on H&R KGaA's net assets, financial position and results of operations. Among other things, the company would have to develop its own sales and distribution capacity for the ChemPharm Refining segment at short notice.

Even if it succeeded in doing so, it would still face the risk of either not being able to establish direct customer relationships at all or not being able to do so over the long term. In such a case, contract production for the Hansen & Rosenthal Group at the Salzbergen site could be terminated as well. In this case, H&R KGaA would have to raise new funds to cover the significantly increased net working capital requirements and pay for the procurement of raw materials at both sites. This could have a significant negative impact on net gearing.

H&R KGaA estimates the impact of such a risk, should it occur, as "significant"; however, it rates the probability that such a risk will materialize as "low". H&R KGaA is part of the Hansen & Rosenthal Group, the main shareholder and managing director of which is also the majority shareholder of H&R Komplementär GmbH, H&R KGaA's general partner with full personal liability. The interdependencies are not just one-sided, as H&R KGaA is the current sales/distribution partner's biggest supplier. Consequently, a long-term continuation of the sales/distribution relationship is in the interest of both parties.

Investment Risks (Risk Class: Medium). In the years ahead, we intend to keep investing in measures for the sustainable added value and competitiveness of our existing production sites. We are collaborating with young and innovative partners, in particular in the area of new technologies for the manufacture and processing of sustainable grades. In principle, however, investment projects with this kind of start-up character may entail cost overruns and delays in construction.

To mitigate the risks associated with the project implementation process, we deploy project teams with in-depth knowledge of our plants to professionally coordinate and strictly monitor such value maintenance measures. We adopt the same approach to projects designed to boost sustainable value creation.

Product Liability Risks (Risk Class: Low). Our hydrocarbon-based specialty products and plastic parts are incorporated directly into our customers' products. Incorrect processes or failure to adhere to specifications can result in our customers incurring damage, giving rise to warranty claims. For this reason, all the products in both our Chemical-Pharmaceutical division and our Plastics division are subject to extensive quality controls. If we are faced with liability claims despite this, we are largely covered by insurance.

IT Risks/Cybersecurity (Risk Class: High). Advancing digitalization offers major opportunities for the Group. Particularly in the last three years, we have adapted our IT structure to the pandemic requirements and enabled the majority of our employees to perform their activities via remote solutions. In principle, the risk exists of not always being able to react to changing conditions quickly and adequately. At the same time, we know that digitalization is generally associated with risks, e.g., in the form of cyberattacks. Under certain circumstances, such attacks can lead to an impairment of the IT systems, which could only be remedied with significant financial and time resources. Therefore, we are continuously working on the security of our digital technologies and systems in order to address cyber risks in the best possible manner, train our employees and avert risks for our customers and business partners, as well as for the company. We also record IT and cybersecurity risks as part of our queries about the Group-wide risk inventory.

Financial Risks

Our subsidiaries receive the funds they use to execute business and production processes from H&R KGaA, which in turn ensures that such funds will be available. As a result, risks that could arise from or for these financing instruments generally originate directly from H&R KGaA itself. In addition to the risks explained in detail below, there may also be an overriding risk in the future that the Covid-19 pandemic continues; this could have earnings-reducing effects on operating processes and thus also on the financial and asset situation.

Financial Covenant Breach Risk (Risk Class: High). Compliance with the financial covenants will also be a crucial part of the financing agreements in 2023. If these covenants were to be breached, which is not expected to happen, this could jeopardize the continued existence of the financing arrangements and therefore the Group's financial and economic situation. Due to the possibility of occurrence and the potentially significant financial impact, this is – from an objective standpoint – fundamentally a "high-risk" issue.

Liquidity Risks (Risk Class: Medium). Prices for the raw materials used in our Chemical-Pharmaceutical segments are closely correlated with the price of crude oil. Accordingly, the prices of our raw materials are subject to fluctuations. The prices of our finished products are similarly volatile.

In order to cover the net working capital (the sum of inventories and trade receivables less trade payables) required for our production activities, a large part of the line of credit under the syndicated loan, which currently amounts to €230.0 million, has been earmarked as a risk cushion. At year-end, €68.6 million had been utilized for cash loans and €3.3 million for guarantees.

Our Group Treasury department monitors our liquidity status on a daily basis to avoid any cash flow difficulties. The credit lines granted by the banks in the lending consortium are subject to financial covenants relating to our equity base and the ratio of our net debt to operating income (EBITDA). If any of these covenants are breached, the banks are entitled to call in the loan.

Risks of Future Need to Refinance (Risk Class: Medium). The short-term financing figure represents our existing refinancing risks, which primarily consist of drawdowns from the syndicated loan, loans of our Chinese subsidiaries and maturities on KfW redeemable loans. The syndicated loan agreement for a maximum of €230.0 million and the existing cash and cash equivalents account for the bulk of current refinancing risks.

However, there is no guarantee that it will be possible to refinance under the same or more favorable terms and conditions in the future. We secured long-term commitments of liquidity provision by concluding the syndicated loan agreement with an original term of five years anew. This also illustrated that banks are interested in a further loan commitment to H&R KGaA. Since the lending banks' risk would be manageable even if the company's financial and economic situation were to deteriorate (inventories of raw materials and products can be sold at short notice), we assume that we will succeed in concluding follow-up financing agreements in the future. Were we unable to refinance, the company would have to use a higher percentage of its cash and cash equivalents to repay these amounts. This could have a significant impact on business activities, as well as on the company's net assets, financial position and results of operations.

Risks from Defaulting Customers and Banks (Risk Class: Low). Our indirect risks from delays in payment and/or defaults on the part of customers or service providers of our subsidiaries are limited by the broadly diversified customer base on the whole, but cannot be ruled out entirely. This is why we have taken out default insurance policies for major customers.

We counter the default risk of banks by only entering into financial transactions with top-rated banks and by spreading larger transactions among several banks.

Currency Risks (Risk Class: Medium). As an international group, we are exposed to various exchange rate risks. The depreciation of a foreign subsidiary's local currency can diminish the cash flow it generates in relation to the Group currency, the euro. Furthermore, revenues from the sale of products from within the euro area to a country outside the euro area will fall if the foreign currency in question depreciates against the euro.

Some of the most important foreign currencies for us are the US dollar, the Chinese renminbi, the British pound, the Thai baht, the Malaysian ringgit and the South African rand.

We always weigh the costs for hedging foreign currency risks against the financial effects of a potential loss event.

The US dollar/euro exchange rate generally affects our raw material costs, as we purchase our main raw materials in US dollars. Decreases and increases in the value of the US dollar against the euro, while raw material costs in USD remain unchanged, therefore have an impact on our raw material costs in EUR. However, changes in the raw material costs due to exchange rates would generally also be reflected in the selling prices, and the competition would also feel the effects.

Interest Rate Risks (Risk Class: Medium). Changes in market interest rates lead to a change in the fair value of fixed-interest financial instruments and to fluctuations in interest payments for variable-interest financial instruments. We take out fixed-interest loans for investment projects to increase planning certainty for net interest income. Some of the interest rate risks have materialized as a result of the increase in particular of the euro interest rate coupled with higher short-term debt in the context of greater liquidity being tied up in net current assets due to the price of oil. We expect to see a higher interest expense burden again in 2023.

Additional risks of increased interest expense in other currencies currently exist for our Chinese equity investments due to short-term fixed-interest loans denominated in Chinese renminbi that will have to be refinanced when they mature in 2022 as well as intragroup, hedged loans in particular in South Africa and Malaysia.

There are also company retirement liabilities in the form of pension commitments. On the one hand, the actual amount of these commitments is based on an actuarial forecast and, on the other, it is heavily dependent on conditions in the capital markets, in particular the interest rate. Lower interest rates cause pension liabilities to increase and result in a corresponding charge against H&R KGaA's equity.

General Statement by the Management Board on the Risk Situation

Our risk management system and the established planning and control systems are used to assess our risk situation. When all material individual risks are reviewed in aggregate, potential opportunities are not taken into account as offsets. We therefore believe that, based on currently available information, there are no risks that could jeopardize the continued existence of the H&R Group as a going concern.

Company Rating

The creditworthiness of H&R KGaA has not been evaluated by an independent rating agency. Our banking partners review the credit standing of H&R KGaA on an ongoing basis. The Deutsche Bundesbank classified H&R as "eligible" on May 4, 2022.

Report on Opportunities

Opportunities Management

At the H&R Group, the systematic management of opportunities is closely linked to the management of risks. We define opportunities as developments that are expected, but are not guaranteed, meaning that they cannot be quantified in monetary terms either, and could have a positive effect on our net assets, financial position and results of operations over the next twelve to 18 months. Managing strategic opportunities – such as acquisitions, joint ventures or major investments – is the responsibility of the Executive Board.

We use a variety of methods to make the best use of both operating and strategic opportunities. For example, we perform analyses of the market and our competitors that are as precise as possible. We develop scenarios for successful market entry, question the focus of our product portfolio, evaluate the cost drivers as well as the relevant success factors and from this information identify specific market opportunities that are then coordinated by the Management Board in close collaboration with the local operations managers. At the same time, we try to identify future market trends in a targeted manner by holding discussions with customers. In the Chemical-Pharmaceutical segments, there is an active exchange of ideas on these issues between the production sites, our Research and Development department, and our sales and distribution partner Hansen & Rosenthal, who uses its close customer contacts to identify current and future customer needs and to provide ideas for new products.

Finally, using a system similar to our risk classes, we rate our opportunities by degree of potential financial impact and likelihood of occurrence.

Specific Opportunities

Opportunities Arising From Market and Macroeconomic Trends (Opportunity Class: Medium). The focus of operators of big refineries on producing fuels and lubricants means that H&R's specialty production sites in the Chemical-Pharmaceutical Raw Materials division could play a more significant role in supplying the market with specialty products such as paraffins, or process oils and white oils.

If, at the same time, demand for hydrocarbon-based specialty products increases during this financial year, for example, due to changes in the competitive situation or general market recoveries, our revenues and income could exceed our current expectations.

The possibility of increased demand within society for products with a smaller carbon footprint or even for climate-neutral qualities could afford H&R additional opportunities. Our three-pillar strategy for supplying our production sites with fossil, bio-based and synthetic base materials and our existing ability to refine "traditional" mineral-oil-based products in our processes using green hydrogen are initial steps in this direction. At the same time, green hydrogen in conjunction with green carbon opens up new opportunities. Long-chain hydrocarbon compounds can be obtained from these two materials together in the course of synthesization. With the NextGate project, we intend to produce e-fuels and synthetic waxes from these non-fossil base materials at the Hamburg site. We are anticipating major market opportunities for both products, although H&R is focusing in particular on its synthetic wax market shares. We nevertheless believe we are in a strong position in the area of fuels. Together with the Hamburg-based company Mabanaft, we are running the joint venture P2X-Europe, which will act as both a buyer and seller of synthetic grades and will safeguard our production sites' access to these base materials. There are currently promising agreements regarding the sourcing of extensive volumes of synthetic base materials based on the realization of additional projects in Norway and Portugal.

Over the past few years, we have laid the foundation for profitable business, particularly in the international business. For example, the researchers at the International Monetary Fund are forecasting an increase in global output of 2.7% for 2023. This is significantly lower than in previous years because of the war in Ukraine, but is mainly driven by weak figures in Europe. On the other hand, in Asia – a region which has always been an important driver of the Group's growth – comparatively stable growth is still expected. We are strengthening our market presence in this region with the site currently under development in Lumut, Malaysia, which will in particular be capable of processing bio-based base materials.

For the Plastics division, demographic developments will create attractive growth opportunities, especially in the field of medical technology. Further opportunities will be generated by the trend in the automotive industry toward replacing heavy metal parts with lighter plastic components to reduce vehicle weight. The increasingly dynamic electric mobility initiatives pursued by automotive manufacturers have the potential to offer additional impetus, as the longer range of more lightweight vehicles can be a significant sales argument. Thanks to cooperation with our partners, we are ready for this trend, too. At the same time, we parted ways with some of our customers for cost and efficiency reasons, thereby consolidating our profitability. We expect this to likewise strengthen our business.

Strategic Opportunities for the Company (Opportunity Class: High). We believe that considerable opportunities lie in the development of our operating model. In addition to the flexibility of plant configuration and the ability to actively manage our output structure, we are particularly focusing on the right, diversified use of base materials. In financial year 2022, the positive effects of using specific base materials for operating model transformation were delayed. This was first and foremost attributable to a lack of availability of suitable grades, which were not available or not available to the desired extent at the refineries we had selected as potential suppliers, or which were available only on unfavorable delivery terms. Regardless of this, we are convinced that this area offers a great deal of potential. Based on a revamped and expanded feedstock and by-product portfolio of the production sites, we aim to strengthen market-oriented production that focuses exclusively on specialty products. We have also achieved initial successes in the use of sustainable raw materials, e.g., on a hydrogen or carbon dioxide basis, and see major potential with the commissioning of the NextGate plant for future scaling of this technology to an industrial level. We will harness this potential by means of the above-mentioned positioning as a joint venture and cooperation partner.

Internationally, we actively monitor market trends and align regional opportunities with our international expansion strategy. To do this, we can rely on our network of subsidiaries as important strategic bridgeheads that enable us to quickly penetrate emerging markets in a carefully targeted manner.

Economic Performance Opportunities (Opportunity Class: Medium). Operating specialty production sites is very energy-intensive. By investing in cutting conventional carbon emissions and achieving lower energy consumption, H&R KGaA has already met important climate goals and saved energy costs in the past. At the same time, we took advantage of the special compensation arrangements for energy-intensive businesses.

All in all, we see the debate on climate change and the efforts to forge ahead with the energy transition not only as a challenge, but also as an opportunity. This will be the case in particular if the EU and the German government as the competent regulators act in such a way that the high environmental, occupational health and safety, and energy standards can be met without proving to be an additional competitive disadvantage compared with other countries and regions.

We believe that a commitment to the increased production of green hydrogen and green carbon and the products to be obtained from these offers significant potential.

There are also fundamental opportunities – in the form of higher margins – when the supply of our products becomes scarce, such as during shutdowns, closures or capacity reductions at our competitors' refineries.

In addition to the positive effects resulting from the future change in use of raw materials, we continue to see opportunities also for the marketing of our lower-margin products. Both bitumen and cracker feed for other refinery types have sold well in the last two years and generated quite reasonable margins.

In the Plastics division, GAUDLITZ has not only its headquarters in Coburg, but also additional production capacities with its sites in the Czech Republic and China, offering production cost advantages while being close to its key sales markets at the same time. Should the trend witnessed among automobile manufacturers and suppliers to relocate production to these countries continue, this could afford GAUDLITZ opportunities if the company strengthens the units there.

The decisive factor for the automotive industry will be how successful it is in transforming the drive technology from the internal combustion engine to electric mobility. If the industry managed to respond to the necessary charging infrastructure with attractive offerings that promoted this changeover, individual vehicle use and, as a result, the total number of vehicles would, in principle, remain unchanged. Component manufacturers such as the H&R subsidiary GAUDLITZ will also have to adapt to a new type of mobility. They could, however, also benefit from the situation as further metal components could be replaced by plastics in order to optimize vehicle ranges. At the same time, manufacturers are likely to further standardize their vehicle platforms and components for cost reasons; fewer different components in total, but higher quantities, translate into better capacity utilization and more competitive production costs.

Overall Statement on Opportunities

Assessment of Opportunities by the Management Board. Although the absolute number of reported risks is higher than the number of specific opportunities identified, H&R KGaA sees the opportunities referred to above as direct responses to many of the risks described and believes that the overall situation is generally balanced.

Forecast Report

Future Focus of the Group

Companies and Segments

Statements concerning short-term company performance from January 1 to December 31 of financial year 2023 assume that, based on our current knowledge, the structure of the Group will remain largely unchanged.

How to deal with the trade-off between raw material prices and market conditions continues to be a crucial challenge for our company. This relates to the classic Chemical-Pharmaceutical Raw Materials division, as well as the business with precision plastic components.

H&R KGaA is positioned so that it can actively take advantage of its flexibility at three different levels of the value chain: in the ChemPharm Refining segment as a producer of chemical-pharmaceutical specialty products in Germany, in further processing of the ChemPharm Sales segment abroad and in global distribution. The Plastics business segment, with sites in Germany and abroad, has a comparable setup. If, in addition to our in-house expertise, we also need external capacity, we can fall back on a network of tried and tested partnerships. Every one of our Group subsidiaries fits into this simple matrix.

Sales Markets

In the Chemical-Pharmaceutical business, Germany will continue to be the main driver of our sales. In view of the maturity of this market, our growth strategy in this region, with our focus on the further enhancement of the business model, is based less on increasing volumes than on improving the efficiency of production processes and manufacturing higher-quality products. Internationally, we are focusing heavily on Asia. China, Singapore, Indonesia, Malaysia and Vietnam are key sales hubs and processing locations for our activities in the region, as is the Indian subcontinent. In the Plastics business, we are guided by our customers and see their production sites in Eastern Europe and China in particular as important customers.

Technologies and Processes

Constantly improving processes to increase efficiency and enhance the output structure is a core element of our corporate strategy. We combine long-standing skills and expertise with the use of new technologies, carving out a role for ourselves less as a traditional lubricant producer than as a manufacturer of high-quality specialty products. In order to satisfy the strongly increasing focus on sustainability in many of our customer industries and much of society, we are transforming our operating model for the German production sites. This will see us rely on a differentiated range of base materials, which is just as decisive for the quantity, composition and quality of our end products and by-products as plant configuration measures are. At the same time, we are expanding our feedstock and by-product portfolios to include hydrocarbon-based grades, which shall be less fossil-based and more sustainable in the future.

Products and Services

In spite of the above-mentioned changes in the operating model, we plan for our production sites to offer an almost identical product portfolio either directly or via our Sales segment – with one significant difference, namely that whatever was previously produced on a fossil basis will henceforth be created on a plant, recycled or synthetic basis. With a climate-friendly product portfolio, H&R is supporting its customers in their sustainability strategies.

The Plastics division aims to strengthen its existing business with European customers from the electric mobility sector and position itself with customers in China through a sales initiative in the medical technology and industry sectors.

Expected Performance in Financial Year 2023

Macroeconomic Conditions

General Economic Environment

The global economy was facing growing challenges at the turn of the year. Growth had lost momentum, high inflation was proving persistent, confidence had weakened and uncertainty was high. This was the OECD's summary in its analysis.

Russia's war of aggression against Ukraine has pushed up prices substantially, especially for energy, adding to inflationary pressures at a time when the cost of living was already rising rapidly around the world. Global financial conditions had tightened significantly, amidst the unusually vigorous and widespread steps to raise policy interest rates by central banks in recent months. Global GDP growth, already reduced in 2022, is expected to be 2.9% in 2023, according to the projections of the International Monetary Fund. The IMF is forecasting global growth of 3.1% for 2024.

Global prospects are also becoming increasingly imbalanced, with the major Asian emerging-market economies accounting for a significant amount of global GDP growth in 2023 while the United States and Europe weaken.

Our internal budget for financial year 2023 is based on a US dollar/euro exchange rate, which we set at 1.10 for the purposes of the planning process.

For crude oil prices, we rely on the estimates published by the economics departments of major banks. For budget year 2023, on the planning date we assumed a price of US$110 per barrel of North Sea Brent, which is higher than the average annual price of US$99 seen in 2022.

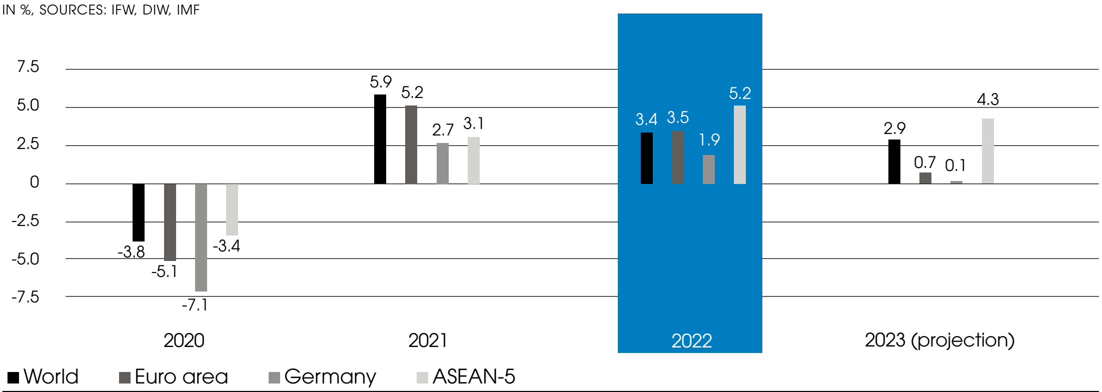
It is also higher than the daily oil price, which is currently stable but high after last year's sharp increase.

Industry Environment

At the turn of the year, the chemical industry is facing enormous challenges due to the energy crisis, according to its industry association Verband der Chemischen Industrie (VCI). Many companies find themselves in an extremely dire situation with their production in Germany, mainly because of the massively increased gas and energy costs. In particular SMEs recently had considerable problems sealing follow-up or new contracts when their electricity or gas supply contracts were due to expire.

G. 13 **GLOBAL ECONOMIC GROWTH FORECAST**

IN %, SOURCES: IFW, DIW, IMF



At the same time, the association saw a lack of committed action from policymakers. The German government and the federal states recently postponed their planned pact for the acceleration of planning and approval procedures once again. The VCI believes this stands in the way of progress being made with the development of renewable energies, infrastructure modernization and the fast approval of industrial plants.

The challenges for the industry therefore remain enormous over the next year and include a lack of orders, disrupted supply chains and high energy costs. At the turn of the year, the VCI was expecting a further major drop in production in the chemical-pharmaceutical industry in 2023. The association anticipated that sales would develop negatively, too, and initially felt unable to give a quantitative forecast due to the extremely volatile situation.

Company Performance

Sales and Earnings

The following table compares the actual values of the main or key control figures used by the H&R Group for the past financial year with the original forecast and shows the outlook for financial year 2023. It comprises sales and EBITDA.

T. 25 **COMPARISON OF ACTUAL VALUES WITH FORECAST**

Key figure	Original forecast FY 2022	Actual FY 2022	Outlook FY 2023
Consolidated sales	€1,100.0 million to €1,300.0 million	€1,576.0 million	€1,700.0 million to €1,900.0 million
of which ChemPharm Refining	64%	€1,020.6 million (approx. 64%)	66%
of which ChemPharm Sales	33%	€526.7 million (approx. 33%)	31%
of which Plastics	3%	€49.0 million (approx. 3%)	3%
Reconciliation with consolidated sales	n.a.	€-20.3 million	n.a.
Consolidated EBITDA	approx. €80.0 million to €95.0 million	€124.9 million	approx. €95.0 million to €110.0 million
of which ChemPharm Refining	68%	€92.7 million (approx. 68%)	68%
of which ChemPharm Sales	31%	€33.4 million (approx. 28%)	28%
of which Plastics	1%	€5.0 million (approx. 4%)	4%
Reconciliation with consolidated EBITDA	n.a.	€-6.2 million	n.a.

Sales. Our sales are affected considerably by the cost of raw materials for our Chemical-Pharmaceutical division. If our planning assumptions for crude oil prices and the US dollar/euro exchange rate materialize during the year, we anticipate that prices for raw materials and products will remain constant and high overall. We also assume we will be able to pass on these costs in the form of higher product prices.

All in all, we expect consolidated sales in 2023 to be higher than in 2022. The contribution from our ChemPharm Refining segment will account for around 66% of this amount. The ChemPharm Sales business will contribute approximately 31%, a lower percentage than in the previous year. The Plastics division is expected to contribute around 3% to total sales.

Income. H&R achieved another strong income result in the past financial year in spite of the lingering effects of the coronavirus pandemic and the impacts of the war in Ukraine. EBITDA of €124.9 million in 2022 was another clear indication that H&R is able to act so flexibly while nevertheless having stable roots in the market that it can not only endure adversity in its current setup, but is also more than able to make the most of it. To make things quite clear, this success was achieved in spite of the adverse circumstances and was not facilitated by them, in contrast to many fuel manufacturers.

The rapid changeover from Russian-sourced raw materials to alternative grades played a significant part in this. H&R not only managed to tap other sources to supply it with sufficient volumes, but also succeeded in processing the base materials acquired into the usual grades and agreed specifications for its specialty products. H&R consequently remained a reliable partner for its customers at a time of major uncertainty.

We must assume that the situation will remain difficult in financial year 2023, with the European sites and customers being affected in particular. The expectation is that the combination of expensive base materials, high energy prices and increased logistics and service costs will remain in place, but that it will only be possible to pass on some of this to the customers. We are accordingly expecting the ChemPharm Refining segment's contribution to income to be slightly lower but nevertheless strong.

In contrast, there was once again stable performance overall in the ChemPharm Sales segment in 2022. In 2023, the segment should continue its organic growth coupled with rising sales volumes. Its proportion of core products could surpass that of the Refining segment for the first time.

The Plastics segment was able to report a clearly recovered earnings trend in 2022. This trend is expected to strengthen in financial year 2023. At the same time, we expect the move of the Czech site within Dačice to give the area of electric mobility a boost, which should offer positive effects for the overall performance of the GAUDLITZ Group.

All in all, for 2023 we are initially forecasting consolidated operating income (EBITDA) of between €95.0 million and €110.0 million, thus lower than in financial year 2022. We are nevertheless confident enough to make a more optimistic starting assumption than last year. Accordingly, the income of H&R GmbH & Co. KGaA for 2023 in accordance with the German Commercial Code (HGB) will also be lower than in the previous year.

Based on budget assumptions, we expect the contribution to consolidated income made by our activities in the ChemPharm Refining segment to be around 68%. International business should account for approximately 28%. Meanwhile, the Plastics division should replicate the approximately 4% contribution to the Group's operating income (EBITDA) seen in 2022.

For the forecast of our Group EBITDA and/or the operating profit expectations within the segments, we have used the methodology of the reporting principles applied to the annual and consolidated financial statements.

No structural changes to the income statement are expected for 2023.

Liquidity

Due to the increasing uncertainty surrounding the future of the global economy and its impact on credit markets, we refinanced our syndicated loan with a term until 2024 in the amount of €230 million ahead of time in December 2022. We had also taken out a long-term KfW loan (current amount: €25.0 million) to finance planned environmental protection measures at our Hamburg-Neuhof production site.

This provides H&R with sufficient liquidity to make the necessary investments to maintain profitability. The oil-price-related increase in net working capital in 2021 continued in 2022 and was mainly financed by the otherwise strong cash flow from operating activities. This means that a significant part of the new credit facility is still available to H&R for loan drawdowns in order to cover additional oil-price-related increases in net working capital, refinancing requirements and other liquidity requirements into 2024/2025.

We therefore consider our liquidity to be secured in the long term.

Capital Expenditure

We also intend to use the good results from 2022 to invest in the future viability of our sites. Around 65% of total capital expenditure will be in the ChemPharm Refining segment. Around 27% of capital expenditure will be in the Sales segment and approximately 8% will be focused on investments in the Plastics segment and on other items. The lion's share will therefore once again go to the two German production sites. Overall, however, there is a shift in focus, with international business being afforded a much bigger weighting.

Financing Measures

The Articles of Association of H&R KGaA provide for authorizations to increase the share capital in return for cash and/or contributions in kind. At present, however, no specific corporate actions are planned.

H&R KGaA has entered into various loan agreements with banks. We cover our short-term financing needs using a newly concluded widely syndicated loan with a current volume of €230.0 million. This has a term of five years and has two one-year extension options. In order to ensure that we remain solvent at all times and to make efficient use of the liquidity of our German subsidiaries, the latter are incorporated into the cash pool structures in place at H&R GmbH & Co. KGaA. We currently cover our long-term financing needs primarily using redeemable loans that are refinanced by the German development bank KfW.

The KfW loans and the syndicated loan are subject to compliance with various financial covenants.

For more information on our main financing instruments, please refer to the section "Financial Management Principles and Objectives" in the notes to the consolidated financial statements.

Overall Statement by the Executive Board on Future Business Trends

H&R GmbH & Co. KGaA ended the last financial year with a slightly reduced EBITDA, but achieved record income levels on the basis of its second-best result ever. This is not something we had expected at the beginning of the year, nor to this extent during the course of the year. Overall, the development in recent years emphatically demonstrates that H&R can not only assert itself in times of crisis, but can also profit economically due to the fundamental stability of our business model, our having laid the right foundations and our high degree of flexibility.

We are therefore confident that we can support the upcoming transformation in our customer industries rapidly and securely. Specifically, we intend to fulfill our customers' requirements for more sustainability and environmentally friendly and future-friendly products. At the same time, we will not lose sight of our long-term objectives to push ahead with internationalization and to focus on the further enhancement of the operation of our highly specialized production sites. The advantages these offer – such as an improved output of high-quality products, a diversified product portfolio in the direction of greater sustainability and synthesized products – need to be expanded, thereby strengthening their standing compared to the competition.

Based on what has been achieved, our plans and the situation as of the editorial deadline for this management report, we are therefore initially setting our expectations for 2023 with an operating income (EBITDA) target in the range of €95.0 million to €110.0 million.

Consolidated Financial Statements

Consolidated Statement of Financial Position of H&R GmbH & Co. KGaA

as of December 31, 2022

ASSETS

IN € THOUSAND	Notes	12/31/2022	12/31/2021
Current assets			
Cash and cash equivalents	(6)	55,997	48,924
Trade receivables	(7)	124,427	125,634
Income tax refund claims		946	554
Inventories	(8)	235,051	177,044
Other financial assets	(9)	20,190	15,872
Other assets	(10)	16,938	14,993
Current assets		**453,549**	**383,021**
Non-current assets			
Property, plant and equipment	(11)	452,529	432,358
Goodwill	(12)	17,393	17,392
Other intangible assets	(12)	16,925	15,105
Shares in holdings valued at equity	(13)	4,262	2,430
Other financial assets	(9)	12,577	16,183
Other assets	(10)	1,735	1,670
Deferred tax assets	(34)	3,102	6,222
Non-current assets		**508,523**	**491,360**
Total assets		**962,072**	**874,381**

LIABILITIES AND SHAREHOLDERS' EQUITY

IN € THOUSAND	Notes	12/31/2022	12/31/2021
Current liabilities			
Liabilities to banks	(14)	128,225	54,155
Trade payables	(15)	99,392	94,625
Income tax liabilities		6,660	7,703
Contract liabilities	(16)	2,519	3,679
Other provisions	(17)	18,780	20,222
Other financial liabilities	(18)	14,841	17,751
Other liabilities	(19)	23,646	23,454
Current liabilities		**294,063**	**221,589**
Non-current liabilities			
Liabilities to banks	(14)	63,782	87,620
Pension provisions	(20)	54,312	81,219
Other provisions	(17)	2,759	3,610
Other financial liabilities	(18)	41,091	44,638
Other liabilities	(19)	22,181	23,627
Deferred tax liabilities	(34)	12,720	3,602
Non-current liabilities		**196,845**	**244,316**
Equity			
Subscribed capital	(21)	95,156	95,156
Capital reserve	(22)	46,427	46,427
Retained earnings	(23)	272,789	212,342
Other reserves	(24)	9,269	8,676
Equity of H&R GmbH & Co. KGaA shareholders		**423,641**	**362,601**
Non-controlling interests	(25)	47,523	45,875
Equity		**471,164**	**408,476**
Total liabilities and shareholders' equity		**962,072**	**874,381**

Consolidated Income Statement of H&R GmbH & Co. KGaA

January 1, 2022, to December 31, 2022

IN € THOUSAND	Notes	1/1–12/31/2022	1/1–12 /31/2021
Sales revenue	(27)	1,576,043	1,188,434
Changes in inventories of finished and unfinished goods		36,044	31,100
Other operating income	(28)	37,136	29,563
Cost of materials	(29)	-1,273,958	-901,593
Personnel expenses	(30)	-99,563	-99,223
Depreciation, impairments and amortization of intangible assets and property, plant and equipment	(11,12)	-55,322	-50,940
Other operating expenses	(31)	-150,154	-115,622
Operating result		**70,226**	**81,719**
Income from holdings valued at equity	(13)	-668	-137
Financing income	(32)	255	707
Financing expenses	(33)	-7,784	-8,931
Income before tax (EBT)		**62,029**	**73,358**
Income taxes	(34)	-16,665	-20,824
Consolidated income		**45,364**	**52,534**
of which attributable to non-controlling interests		2,654	2,358
of which attributable to shareholders of H&R GmbH & Co. KGaA		**42,710**	**50,176**
Earnings per share (undiluted), €	(35)	1.15	1.35
Earnings per share (diluted), €	(35)	1.15	1.35

Consolidated Statement of Comprehensive Income of H&R GmbH & Co. KGaA

January 1, 2022, to December 31, 2022

IN € THOUSAND	Notes	1/1–12/31/2022	1/1–12 /31/2021
Consolidated income		**45,364**	**52,534**
of which attributable to non-controlling interests		2,654	2,358
of which attributable to shareholders of H&R GmbH & Co. KGaA		42,710	50,176
Positions that will not be reclassified into profit or loss			
Remeasurement of defined-benefit pension plans		24,908	-240
Deferred taxes		-7,171	-296
Total remeasurement of defined-benefit pension plans		**17,737**	**-536**
Valuation effects from equity instruments		-2,702	-266
Deferred taxes		40	4
Total change in valuation effects from equity instruments		**-2,662**	**-262**
Total positions that will not be reclassified into profit or loss		**15,075**	**-798**
Positions that may subsequently be reclassified into profit or loss			
Changes in the fair value of derivatives held for hedging purposes		6,225	-27
Deferred taxes		-1,862	8
Total change in the fair value of derivatives held for hedging purposes		**4,363**	**-19**
Changes in the currency translation adjustment item		-2,114	10,740
Total positions that may subsequently be reclassified into profit or loss		**2,249**	**10,721**
Other comprehensive income		**17,324**	**9,923**
of which attributable to non-controlling interests		-1,006	4,641
of which attributable to shareholders of H&R GmbH & Co. KGaA		18,330	5,282
Total comprehensive income		**62,688**	**62,457**
of which attributable to non-controlling interests		1,648	6,999
of which attributable to shareholders of H&R GmbH & Co. KGaA		61,040	55,458

Consolidated Statement of Changes in Group Equity of H&R GmbH & Co. KGaA

as of December 31, 2022

IN T€	Subscribed capital (21)	Capital reserve (22)	Retained earnings (23)
1/1/2021	**95,156**	**46,867**	**162,702**
Capital reduction	**–**	**-440**	**–**
Consolidated income	–	–	50,176
Other comprehensive income	–	–	-536
Total comprehensive income	–	–	49,640
12/31/2021	**95,156**	**46,427**	**212,342**
Consolidated income	–	–	42,710
Other comprehensive income	–	–	17,737
Total comprehensive income	–	–	60,447
12/31/2022	**95,156**	**46,427**	**272,789**

	Other reserves/cumulative other comprehensive income					
	Valuation effects from equity instruments (24)	Derivative financial instruments (24)	Difference from currency translation adjustment (24)	Equity attributable to shareholders of H&R KGaA	Non-controlling interests (25)	Total
	6,096	–	**-3,238**	**307,583**	**39,299**	**346,882**
	–	–	**–**	**-440**	**-423**	**-863**
	–	–	–	50,176	2,358	52,534
	-262	-19	6,099	5,282	4,641	9,923
	-262	-19	6,099	55,458	6,999	62,457
	5,834	**-19**	**2,861**	**362,601**	**45,875**	**408,476**
	–	–	–	42,710	2,654	45,364
	-2,662	4,363	-1,108	18,330	-1,006	17,324
	-2,662	4,363	-1,108	61,040	1,648	62,688
	3,172	**4,344**	**1,753**	**423,641**	**47,523**	**471,164**

Consolidated Cash Flow Statement of H&R GmbH & Co. KGaA

January 1, 2022, to December 31, 2022

IN T€			Notes	2022	2021
1.		Consolidated income		45,364	52,534
2.		Income taxes		16,665	20,824
3.		Net interest income		7,530	7,095
4.	+/–	Depreciation and amortization/appreciation on fixed assets and intangible assets		55,322	52,070
5.	+/–	Increase/decrease in non-current provisions		-3,756	-2,081
6.	+	Interest received		255	707
7.	–	Interest paid		-5,510	-6,005
8.	+/–	Income tax received/paid		-14,031	-4,687
9.	+/–	Other non-cash expenses/income		2,091	-391
10.	+/–	Increase/decrease in current provisions		-1,480	10,678
11.	–/+	Gain/loss from the disposal of intangible assets		1,005	-127
12.	–/+	Changes in net working capital		-57,972	-98,768
13.	+/–	Changes in remaining net assets/other non-cash items		-7,503	5,568
14.	**=**	**Cash flow from operating activities (sum of items 1 to 13)**	(37)	**37,980**	**37,417**
15.	+	Proceeds from disposals of property, plant and equipment		59	1,819
16.	–	Payments for investments in property, plant and equipment		-64,742	-46,613
17.	–	Payments for investments in intangible assets		-5,277	-2,391
18.	+	Proceeds from the sale of financial investments		–	240
19.	–	Payments for the acquisition of financial investments		-2,500	-1,614
20.	**=**	**Cash flow from investing activities (sum of items 15 to 19)**	(37)	**-72,460**	**-48,559**
21.	**=**	**Free cash flow (sum of items 14 and 20)**		**-34,480**	**-11,142**
22.	+	Dividends received from holdings valued at equity		–	153
23.	–	Payments for settling financial liabilities		-218,072	-196,552
24.	+	Proceeds from taking up financial liabilities		259,586	198,874
25.	**=**	**Cash flow from financing activities (sum of items 22 to 24)**	(37)	**41,514**	**2,475**
26.	**+**	**Changes in cash and cash equivalents (sum of items 14, 20 and 25)**		**7,034**	**-8,667**
27.	+	Cash and cash equivalents at the beginning of the period		48,924	55,029
28.	+/–	Change in cash and cash equivalents due to changes in exchange rates		39	2,562
29.	**=**	**Cash and cash equivalents at the end of the period**		**55,997**	**48,924**

Notes to the Consolidated Financial Statements of H&R GmbH & Co. KGaA

as of December 31, 2022

(1) General Information

H&R GmbH & Co. KGaA (hereinafter referred to as “H&R KGaA”), a listed company headquartered at 48499 Salzbergen (Germany), Neuenkirchener Strasse 8, does business in various specialty chemical and plastics markets via its subsidiaries. The Group’s businesses include the production of chemical-pharmaceutical raw materials as well as the manufacture of injection molded precision plastic parts. It is recorded in the Commercial Register at the Osnabrück Municipal Court under number HRB 210689. H&R KGaA is managed by the Executive Board of H&R Komplementär GmbH. The parent company of H&R KGaA is H&R Komplementär GmbH, while Mr. Nils Hansen is considered the “ultimate controlling party” within the meaning of IAS 24.13.

In accordance with Section 315e of the German Commercial Code (HGB), H&R KGaA, as a listed Group parent company, is required to prepare consolidated financial statements in accordance with international accounting standards and rules. The consolidated financial statements of H&R KGaA were prepared based on the accounting rules of the International Accounting Standards Board (IASB), the application of which was mandatory under EU Regulation No. 1606/2002 as of the reporting date, and according to the additionally applicable requirements of Section 315e, paragraph 1 HGB. The requirements of the Standards (IFRS/IAS) and interpretations (IFRIC/SIC), the application of which was mandatory as of the reporting date, were met without exception.

The income statement is prepared in accordance with the total-cost method. The statement of financial position is broken down into current and non-current assets and liabilities. Under this approach, assets and liabilities are shown as current if they are held for trading purposes, are intended for sale within the normal course of the business cycle, or are expected to be sold within twelve months of the reporting date. Pension provisions and deferred tax claims and/or liabilities are in principle treated as being non-current.

The 2022 consolidated financial statements were prepared in euros (€). Unless stated otherwise, all amounts are shown in thousands of euros (in € thousand). Rounding can lead to the amounts mentioned in this report not adding up exactly to the sums stated, and to percentages not exactly matching the amounts reported.

The financial year of H&R KGaA and the subsidiaries included in the consolidated financial statements coincides with the calendar year.

The consolidated financial statements are published in the Bundesanzeiger (Federal Gazette).

(2) Effects of New Accounting Standards

Standards and Interpretations to Be Applied for the First Time in the Current Financial Year

Application of changes to the following standards by the International Accounting Standards Board (IASB) became mandatory for the first time in the current financial year:

STANDARDS AND INTERPRETATIONS TO BE APPLIED FOR THE FIRST TIME

Standard/ Interpretation	Title	IASB effective date	Date of EU endorsement	EU effective date	Material impact on H&R
Amendments	Amendments to IFRS 3 "Business Combinations": Reference to the Conceptual Framework	1/1/2022	28/6/2021	1/1/2022	none
Amendments	Amendments to IAS 16 "Property, Plant and Equipment": Proceeds before Intended Use	1/1/2022	28/6/2022	1/1/2022	none
Amendments	Amendments to IAS 37 "Provisions, Contingent Liabilities and Contingent Assets: Onerous Contracts": Cost of Fulfilling a Contract	1/1/2022	28/6/2021	1/1/2022	none
Amendments	Annual Improvement Project: 2018–2020 Cycle	1/1/2022	28/6/2021	1/1/2022	none

Published Standards and Interpretations That Are Not Yet Being Applied. As of the reporting date, the following accounting standards had already been published by the International Accounting Standards Board (IASB) and the International Financial Reporting Standards Interpretations Committee (IFRS IC) but application of the standards was not yet mandatory.

PUBLISHED STANDARDS AND INTERPRETATIONS THAT ARE NOT YET BEING APPLIED

Standard/ Interpretation	Title	IASB effective date	Date of EU endorsement	EU effective date	Material impact on H&R
Amendments to IFRS 16	Lease Liability in a Sale and Leaseback	1/1/2024	to be determined	to be determined	none
IFRS 17	Insurance Contracts	1/1/2023	11/19/2021	1/1/2023	none
Amendments to IAS 1 and IFRS Practice Statement	Presentation of Financial Statements – Disclosure of Accounting Policies	1/1/2023	3/2/2022	1/1/2023	none
Amendments to IAS 8	Definition of accounting estimates	1/1/2023	3/2/2022	1/1/2023	none
Amendments to IAS 1	Classification of Liabilities as Current or Non-Current	1/1/2024	to be determined	to be determined	none
Amendments to IAS 1	Classification of Liabilities as Current or Non-current – Deferral of Effective Date	1/1/2024	to be determined	to be determined	none
Amendments to IAS 1	Non-current Liabilities with Covenants	1/1/2024	to be determined	to be determined	none
Amendments to IAS 12	Income Taxes – Deferred Taxes That Relate to Assets and Liabilities, Which Result From a Single Transaction	1/1/2023	8/11/2022	1/1/2023	none
Amendments to IFRS 17	Insurance Contracts – First Time Application of IFRS 17 and IFRS 9 – Comparative Information	1/1/2023	9/08/2022	1/1/2023	none

H&R KGaA will not avail itself of the option for early application of the standards and interpretations that are not yet to be applied as a mandatory requirement.

(3) General Accounting and Measurement Methods

Principles of Consolidation

The statements included in the consolidated financial statements are prepared in accordance with uniform accounting and valuation methods. The reporting date is the closing date of the parent company.

Subsidiaries are companies or entities that, according to the criteria listed in IFRS 10, are controlled by H&R KGaA. Accordingly, H&R KGaA controls rights at these companies that give it the ability to direct the relevant activities of these companies in order to influence the companies' returns. Control further requires H&R KGaA to be exposed to variable returns from the subsidiaries and to have the ability to affect those variable returns through its decision-making power. If it loses control over a subsidiary, the subsidiary is no longer included in the scope of consolidation.

All intragroup business transactions and interim results as well as existing receivables and payables between consolidated companies are eliminated in the course of consolidation. Deferred income tax effects arising from the consolidation process are appropriately taken into account.

In accordance with IFRS 3, business combinations are recorded in the financial statements using the acquisition method. The acquirer is deemed to be the entity that obtains control over the acquired company or the acquired business operations in accordance with the rules set forth in IFRS 10. In the case of a company purchase, the pro rata equity of the acquired subsidiary is determined at the time of acquisition, taking into account the fair values of the identifiable assets, debts and contingent liabilities, deferred taxes and any goodwill at that time. If foreign companies are acquired, the acquisition costs are converted into euros at the respective exchange rate on the purchase date.

The acquisition costs correspond to the fair value of the transferred assets, the equity instruments issued and the debts arising/being assumed at the time of the transaction. In addition, they contain the fair values of any reported assets or liabilities resulting from a conditional consideration arrangement. Purchase-related ancillary costs are immediately recorded as a charge against income.

Acquisition costs are offset against the pro rata fair value of the net equity. Net equity is determined by recognizing the identifiable assets, debts, and contingent liabilities of the acquired company or the acquired business operations at their fair value at the time of acquisition. Any amount remaining on the asset side after setoff is treated as goodwill. Pursuant to IFRS 3, any negative amount resulting from an examination of the reassessment of net assets acquired is recognized directly through profit or loss.

Non-controlling interests in fully consolidated companies are valued at the pro rata fair value of the net assets. Transactions with non-controlling interests are treated like transactions with Group equity owners. The difference between the acquired pro rata equity of other shareholders and the purchase price is therefore directly netted against equity.

Shares in Holdings Valued at Equity

Interests in associates and in joint ventures are reported in accordance with the equity method. Joint ventures are companies that H&R KGaA manages jointly with a third party. H&R KGaA's interest in associates ranges from 20% to 50%. Under the equity method, the carrying amount of holdings valued at equity is increased or reduced by the change in equity corresponding to H&R KGaA's interest in the equity of these companies. The Group's interest in associated companies and in joint ventures includes the goodwill arising from the acquisition. The changes in the pro rata equity affecting the income statement are recognized under income from holdings valued at equity.

If there are any objective indications of the need to recognize an impairment loss for holdings valued at equity, the need for an impairment loss is calculated. Impairments are carried out where the recoverable amount is lower than the carrying amount. The recoverable amount is the higher of fair value less costs of disposal and the value in use.

Currency Translation

The annual financial statements of the foreign subsidiaries are converted into euros in accordance with the functional currency principle. As the companies essentially manage their business independently from a financial, economic and organizational point of view, the respective functional currency as a rule is that of the country in which the company is headquartered.

In the separate financial statements of the Group companies, foreign currency transactions are translated into the functional currency at the exchange rates in effect at the time of the transaction. On the statement of financial position, receivables and payables in foreign currencies are valued at the exchange rate on the reporting date; the resulting exchange rate gains and losses are recognized through profit or loss.

In the consolidated financial statements, the assets and liabilities are converted into euros at the exchange rate on the respective reporting date. Any changes taking place during the year, as well as items on the income statement, are converted into euros at the average annual exchange rate. The equity is carried at historical exchange rates and the resulting differences are recognized directly in equity. The same applies to conversion differences in connection with net investments in foreign operations. When Group companies leave the scope of consolidation the conversion differences recognized in equity are released and recognized as income.

The exchange rates used for currency translation have changed as follows:

EXCHANGE RATES FOR THE MAIN CURRENCIES

	Closing rates 12/31/2022	Closing rates 12/31/2021	Average rates 2022	Average rates 2021
US dollar	1.0666	1.1326	1.0539	1.1835
British pound	0.8869	0.84030	0.8526	0.8600
Australian dollar	1.5693	1.5615	1.5174	1.5747
South African rand	18.0986	18.0625	17.2097	17.4794
Thai baht	36.8350	37.653	36.8620	37.8220
Chinese renminbi	7.3582	7.1947	7.0801	7.6340
Czech crown	24.1160	24.858	24.5600	25.6470
Malaysian ringgit	4.6984	4.7184	4.6292	4.9026

Cash and Cash Equivalents

Cash and cash equivalents comprise cash in hand, checks received, and bank balances and have a maximum term of three months at the time of acquisition or investment. Cash and cash equivalents are measured at amortized cost.

Financial Instruments

A financial instrument is a contract that gives rise to a financial asset at one company, while at the same time creating a financial liability or equity instrument at another. Financial assets comprise cash and cash equivalents, loans and receivables issued, equity and debentures acquired, and derivatives with positive fair values. Financial liabilities include liabilities to banks, trade payables, and derivatives with negative fair values as well as other financial liabilities.

In line with IFRS 9, H&R KGaA assigns financial instruments to the categories “measured at amortized cost”, “measured at fair value through other comprehensive income” and “measured at fair value through profit or loss”. H&R KGaA did not make use of the options available for designating a financial instrument as measured at fair value. Financial assets and financial liabilities are not offset, apart from the reimbursement right against BP (see Notes (9) and (20)), since no such offset agreements exist. In cases involving standard market purchases or sales, H&R KGaA selects the trading date as the date of addition/disposal for the purposes of the statement of financial position.

Financial Assets
Financial assets are measured at fair value less transaction costs upon their initial recognition. Subsequent measurement depends on the business model based on which the asset is held. At H&R KGaA, financial assets relate to the categories “at fair value through profit or loss”, “at fair value through other comprehensive income” or “at amortized cost”.

Financial assets are designated as belonging to these measurement categories upon initial recognition. Reclassifications are made to the extent that they are permissible and necessary.

Financial assets with a business model that aims to hold the assets until the contractual cash flows have been collected and which only trigger interest and principal repayments on specified dates are measured at amortized cost. This essentially includes all receivables and financial assets that are not held for sale.

If the business model for financial assets also provides for the sale of the asset over and above defined interest and principal repayments, H&R KGaA recognizes them at fair value through other comprehensive income. The changes in value recognized in other comprehensive income are reclassified to the income statement upon disposal of the financial assets.

Provided that equity instruments are not acquired to be held for trading, they can optionally be valued allocated to the category “measured at fair value through other comprehensive income”. Changes in value are recognized in other comprehensive income, but are not reclassified to the income statement at any time. H&R KGaA has exercised this option for an equity instrument to offset fluctuations in income resulting from changes in the fair value of this asset.

At H&R KGaA, the group of financial assets measured at fair value through profit or loss includes financial assets held for trading. In addition to derivative financial instruments and securities, these include trade receivables intended for factoring.

Impairment of financial assets in the categories “measured at amortized cost”, on the one hand, and “at fair value through other comprehensive income” with recycling of the changes in value recognized in other comprehensive income, on the other, are recognized in accordance with IFRS 9 using the expected credit loss model, which provides for three levels. For Level 1 financial assets, risk provisions are to be set up in the amount of the twelve-month expected credit loss. This will comprise the present value of the expected defaults calculated from the default events within the first twelve months. If a financial asset shows a significant increase in credit risk since the initial recognition date, the impairment is calculated as the present value of the lifetime expected loss and the asset is classed a Level 2 asset. Financial assets showing evidence that an impairment has already occurred are assigned to Level 3. Such evidence includes, among other things, the high probability of insolvency proceedings, significant financial difficulties of a debtor or the disappearance of an active market for financial assets. At Level 3, impairments are recognized in the amount of the expected credit losses over the entire term of the financial asset.

Simplified provisions apply to certain financial assets which H&R KGaA applies to trade receivables. For these, blanket risk provisions are recorded in the amount of the losses expected over the residual term, which are determined on the basis of empirical values and are assigned to Level 2 of the impairment model upon initial recognition. In the event of an impaired credit rating or a default, the receivable in question is moved to Level 3. If a financial asset is overdue by more than 90 days, this objectively indicates an impairment of its credit rating.

Within the scope of real factoring agreements with a term until July 31, 2023, H&R KGaA sells short-term trade receivables to a bank. H&R KGaA is free to decide whether or not, and to what extent, receivables are sold within certain limits. All material opportunities and risks were transferred to the buyer, meaning that the receivables sold were fully derecognized and no continuing involvement was recognized in the statement of financial position. Receivables that qualify for factoring but are not sold to the factor are recognized at fair value through profit or loss.

The credit and default risk from financial assets lies in the danger that a contracting party will fail to pay; it therefore does not exceed the amount of the claims against the respective counterparty for the recognized carrying amounts. H&R KGaA regularly carries out assessments to identify substantial increases in credit risk. In general, these mainly take into account default probabilities and past-due intelligence.

Financial assets are derecognized when there is no longer any contractual right to receive a payment or if this right has been transferred to third parties, meaning that the relevant risks have passed to the buyer of this right. If receivables are subject to enforcement measures, they are not derecognized.

Financial Liabilities
When first reported, financial liabilities are always stated at their fair value and after deduction of transaction costs. In subsequent periods, they are measured at amortized cost using the effective-interest method. These mainly include liabilities to banks, trade payables and other liabilities.

Financial liabilities are derecognized when the contractual obligations are settled, reversed, or have expired.

Derivative Financial Instruments
Derivative financial instruments are used in the form of currency forward contracts and interest rate swaps to reduce currency and interest rate risks. H&R also uses derivative financial instruments in the form of oil derivatives to hedge payment flows from future purchases and sales of oil products, which are conducted by H&R within the context of it business operations. These hedges are recognized as cash flow hedges, i. e., as an underlying transaction of the hedges, the expected highly likely spot purchases/sales and financial floating-to-fixed swaps are designated as hedging transactions.

Derivative financial instruments are carried on the statement of financial position at fair value on each reporting date and, depending on the market value, are shown as financial assets or liabilities. The fair value of the derivatives is calculated using standard market valuation methods, taking into account the market data available on the valuation date. With currency forward contracts, the valuation is carried out on a case-by-case basis at the pertinent forward exchange rate on the reporting date. The fair value of derivative financial instruments for interest rate hedging is determined by discounting future incoming and outgoing cash flows. Standard market interest rates which have been adjusted to reflect their own credit risk and which correspond to the respective time to maturity of the financial instruments are used for discounting. The fair values of the derivative financial instruments for hedging raw materials price risks are determined using the discounted cash flow method in consideration of actively traded forward exchange rates and using market-driven interest rates for discounting to the reporting date.

With the derivatives used to hedge raw materials price risks within the scope of cash flow hedges, changes to the effective part of the fair value are recognized through other comprehensive income. The ineffective part is immediately recognized in the income statement in profit or loss. The amounts accrued in other comprehensive income are transferred to the income statement and recognized expense or income in the period in which the hedged underlying transaction is recognized as profit or loss. For the hedging of raw materials price risks, this occurs in sales revenues/cost of materials.

If a hedging transaction expires, is sold or no longer fulfills the criteria for recognition as a hedging transaction, the cumulative amount recognized until then in other comprehensive income remains in equity and is only transferred to the income statement if the original hedged, future transaction occurs. If the future transaction is no longer expected to occur, the profits/losses recognized in equity must immediately be collected in the income statement in profit or loss.

Inventories

According to IAS 2, inventories include those assets held for sale in the ordinary course of business (finished products and products for sale), assets in the process of production for sale (work in progress), or materials and supplies that are consumed in the production of inventory or in the rendering of services (raw, auxiliary and production materials).

Raw, auxiliary, and production materials are stated at the lower of acquisition or manufacturing cost and the net realizable value, as determined on the basis of the weighted-average-cost method, i. e., at the sales price that can be obtained in the normal course of business less the estimated manufacturing and marketing costs. Finished products and work in progress are measured at acquisition or manufacturing costs, provided that these are lower than the net realizable value. Manufacturing costs comprise the material and production costs directly allocable to the manufacturing process, directly allocable portions of the material and manufacturing overhead costs and production-oriented general and administrative overhead costs. Raw, auxiliary and production materials are not depreciated if the end products can be sold at a profit.

By-products from the production process (joint production) are measured at their selling prices and the remaining manufacturing costs are allocated to the core products. Financing costs are not taken into account.

Property, Plant and Equipment

Property, plant and equipment is valued at cost less cumulative depreciation and impairment losses plus reversals of impairments.

Acquisition costs consist of the price of the acquisition, the ancillary acquisition costs, and subsequent acquisition costs less acquisition price reductions obtained. Borrowing costs that are directly attributable to the construction, acquisition or production of a qualifying asset are capitalized. Expenses for the ongoing repair and maintenance of property, plant and equipment are recognized through profit or loss. Expenses for renewal and maintenance are capitalized as subsequent manufacturing costs only if they result in a substantial extension of the useful life, a significant improvement, or a meaningful change in the use of the respective property, plant or equipment.

Expenses related to scheduled downtime at large facilities are stated separately at the amount of the costs of the shutdown, as part of the facility in question, and are depreciated on a straight-line basis over the period until the next scheduled downtime. To the extent that depreciable fixed assets consist of essential identifiable components with individually different useful lives, such components are carried separately and depreciated over their respective useful lives. Investment subsidies are deferred and recognized as income over the average useful lives of the subsidized assets.

Depreciable fixed assets are subject to straight-line depreciation over their respective useful lives; residual amounts are taken into account. These economic lives are reviewed on each reporting date and adjusted, if necessary. Upon sale or retirement, the acquisition or manufacturing costs and the relevant accumulated depreciation of the facilities are derecognized; the resulting gains or losses are recognized through profit or loss. The useful lives used can be summarized as follows:

ASSETS

	Economic life
Buildings	10 to 36 years
Land use rights	45 to 50 years
Tank farms	25 years
Technical equipment and machinery	10 to 20 years
Other facilities	3 to 6 years
Operating and office equipment	3 to 13 years

Leasing Costs

A lease is an agreement whereby the lessor, in return for a payment or series of payments, conveys to the lessee the right to use an asset for a specific period of time. Accounting takes place in accordance with IFRS 16, which requires the recognition of a right to use the leased assets, and a liability for the payment obligations entered into, for each lease in the statement of financial position.

The lease liability is essentially based on the contractually agreed fixed payments, which are discounted at the interest rate on which the lease is based, insofar as it can be determined. Alternatively, discounting is based on the incremental borrowing rate. Lease liabilities measured at amortized cost are reported under other financial liabilities. The right-of-use assets are recognized at cost, which mainly comprises the lease liabilities and any lease payments made before the leased asset was made available. Subsequent measurement is then at amortized cost, with the right-of-use assets being amortized on a straight-line basis over the term of the lease.

H&R KGaA makes use of the simplified application for short-term leases and leases of low-value assets and recognizes the payments as an expense in the income statement. This does not include lease agreements relating to tank capacities, which are recognized in accordance with IFRS 16 even with a term of up to one year. In cases involving contracts that include non-lease components in addition to lease components, the option of not separating them, and instead accounting for both components as one lease component, is applied.

Some leases include renewal and termination options that give H&R KGaA greater operational flexibility. When determining the term of the contract, all facts and circumstances that create an economic incentive to exercise an extension option, or not to exercise a termination option, are taken into account. Changes in the term due to such options being exercised or not are only taken into account if they are sufficiently probable.

Goodwill
The first time it is reported, the goodwill resulting from business combinations is stated at acquisition cost, which is measured as the surplus of the value of the consideration transferred over the value of the identifiable assets acquired and liabilities assumed. After the initial recognition, goodwill is measured at acquisition cost less accumulated impairment losses.

Goodwill is not subject to amortization, but, rather, is subjected to an impairment test every year. If any events or changed circumstances are identified that indicate a potential impairment loss, the impairment test is also carried out more frequently. In the event of the need to recognize a goodwill impairment loss, it is immediately recognized under depreciation and amortization on the income statement. Reversal of an impairment loss for goodwill in later periods does not take place. Details on the annual impairment tests are provided in the section on impairments.

Other Intangible Assets
Other intangible assets are capitalized at cost. Insofar as they have determinable useful lives, they are subject to amortization on a straight-line basis over their respective useful lives. Impairment is recognized based on the principles set out in the section on impairment. The following useful lives were assumed in determining amortization:

ASSETS

	Useful life
Software	3 to 5 years
Licenses	3 to 5 years
Concessions and patents	3 to 10 years
Customer relationships	15 years
(Production) technologies	10 years

H&R KGaA has received carbon emission rights free of charge in connection with the introduction of emissions trading in the European Union; they are valued at an acquisition cost of zero. Additional carbon emission rights acquired are stated at amortized cost.

Impairment
As of each reporting date, the carrying amounts of goodwill, other intangible assets, and property, plant and equipment are checked for any indications of impairment. In the case of goodwill, an impairment test is performed on an annual basis.

If an asset does not generate cash flows largely independently of other assets, the impairment test is performed at the level of the relevant cash-generating units. H&R KGaA essentially considers both strategic business units under standard management with comparable product portfolios and, occasionally, also individual, legally autonomous companies to be cash-generating units.

The impairment test is performed by comparing the carrying amount of the cash-generating unit or the relevant property, plant and equipment or intangible assets with their recoverable amount. The recoverable amount is the higher of fair value less costs of disposal and the value in use. The recoverable amount here is the value in use determined using the discounted cash flow method. If the carrying amount exceeds the recoverable amount, an impairment equal to the difference must be recognized through profit or loss.

The first step involves writing goodwill off in full. Any remaining impairment is, as a rule, allocated to the remaining non-current assets of the cash-generating unit in proportion to their carrying amounts.

In the event the reasons for impairment no longer apply, the appropriate reversals are effected to the extent that the amortized cost is not exceeded. The reasons for an impairment are reviewed on each reporting date. Goodwill is not subject to reversals of impairment.

The expected cash flows of the cash-generating units are derived from the H&R Group's current five-year plan. As in the previous year, the cash flow for subsequent periods was extrapolated using an expected growth rate of 1% p.a. Average costs of capital were used for the discounted cash flow; these weighted capital costs are calculated based on market values. Differences in the individual cash-generating units' cost of capital result in particular from various assumptions and estimates concerning country risk, credit risk, and price inflation in the country in which the cash-generating unit is headquartered.

The plan is based, in particular, on assumptions concerning the trend in sales revenue, the material usage ratio and investments already initiated as well as on empirical values and market expectations. Pursuant to IAS 36, investments to expand capacity for which no cash outflows have occurred to date are not included.

Research and Development Costs
Research expenses are recognized as expenses in the period in which they are incurred. Development expenses are capitalized only if the requirements of IAS 38 have been satisfied. According to this standard, capitalization is always required when there is reasonable certainty that the development activity will lead to future cash flows that will also cover the relevant development costs. As internal developments are subject to various uncertainties, the conditions for capitalizing costs incurred in bringing a product to market generally are not met.

Other Receivables and Payables
Accruals and deferrals and other non-financial assets and liabilities are initially recognized at cost. Reversal takes place on a straight-line basis or using the percentage of completion method.

Government grants for assets are shown on the statement of financial position as deferrals in the other liabilities section and are reversed and recognized in profit or loss over the average useful life of the subsidized assets. Private subsidies are recognized as other liabilities under both current and non-current liabilities and are reversed over their expected useful lives.

Contract Liabilities
Contract liabilities are commitments of H&R KGaA to transfer goods and services, for which H&R KGaA has already received a consideration, to a customer. At H&R KGaA, contract liabilities comprise advance payments received on customer contracts.

Pensions and Similar Obligations
Company pensions of H&R KGaA are designed based on the legal, tax, and economic circumstances in the respective countries and include both defined-contribution and defined-benefit

plans. Under defined-contribution plans, the Group makes contributions to public or private pension insurance plans based on a statutory or contractual obligation, or even voluntarily. The Group has no further payment liabilities beyond payment of the contributions. Contributions are recognized under personnel expenses when due.

The present value of the pension commitments under defined-benefit pension plans (defined-benefit obligations, DBOs) and of the associated past service expense is calculated using the projected unit credit method. Under this method, the valuation is based on actuarial calculations for which specific assumptions must be made concerning salary and pension payment trends, turnover rates, death and interest rates. Due to changing conditions, the actual future expenses and liabilities can differ significantly from the estimates in the actuarial reports.

Under defined-benefit pension plan accounting rules, interest expense is recognized under net interest income on the income statement. Past service expenses are recorded as personnel expenses. Effects from the remeasurement of defined-benefit pension plans are recognized directly in equity and on the statement of comprehensive income, where deferred taxes are taken into account. The fair value of the plan assets is deducted from the present value of the pension commitments recorded on the statement of financial position. The plan assets consist of a reinsurance policy for the pension commitment to a former member of the Executive Board that is measured at fair value. If the plan assets exceed the corresponding pension commitment, the excess amount is shown under other receivables, subject to the upper limit stipulated in IAS 19.

Other Provisions
Other provisions are established in accordance with IAS 37 if, on the basis of a past event, a current, legal or factual obligation exists, settlement is likely to result in an outflow of resources with economic benefits, or a reliable estimate of the amount of the liability is possible. The amount set up as a provision represents the best estimate of the amount required to settle the current obligation as of the reporting date. In the event of a significant interest rate effect, the present value of the expected expenses is used.

The anniversary provisions are valued according to the projected unit credit method pursuant to IAS 19. Contractual obligations under lease agreements (e. g. demolition, renovation, or eviction) are recognized on the statement of financial position as provisions, insofar as the expected utilization of resources with an economic benefit is likely. Provisions for impending losses resulting from unfavorable contracts are set up when the expected economic benefit resulting from the contract is lower than the costs that are unavoidable in order to satisfy the contractual obligations.

The annual obligations to return emission rights based on the actual carbon emissions of the production site are at first covered by the emission certificates received free of charge and are valued at their acquisition cost, which is equal to zero. In the event that the emissions rights assigned free of charge should not suffice, provisions for the additional emissions rights that will have to be acquired will be set up at (expected) acquisition cost.

Recognition of Revenue
The proceeds from products sold and services rendered as part of the company's usual business activities are recognized as sales revenues. Other operating earnings are shown as other operating income.

Sales revenue is realized when control over distinct goods or services passes to the customer and the customer is able to direct the use of the transferred goods or services and obtain the remaining benefit from the goods or services. The preconditions are that a contract with enforceable rights and duties exists and that receipt of a consideration is probable. Sales revenues are equal to the transaction price. If a contract contains several definable goods and services, the actual transaction price is split on the basis of the relative stand-alone selling price and the performance obligation. Contracts containing a significant financing component are not used by H&R KGaA. Contracts with a variable consideration are of minor importance for H&R KGaA and have no significant impact on transaction prices. In general, contracts are payable once the customer has power of disposition on them; this usually means that contracts are payable within 30 days. In principle, sales revenue from products and services is only recognized at a particular point in time. Frequently, they are current payables. Due to the nature of these payables, revenue recognition leaves very little room for discretionary decisions or estimation uncertainties.

Income Taxes
Income taxes comprise both the taxes levied in the individual countries on taxable profits and changes in deferred taxes that have an effect on profit or loss. The current tax expense is based on the taxable income for the year determined in accordance with the tax regulations of the respective country, taking into account the applicable tax rate in that jurisdiction. Pursuant to IAS 12, deferred taxes reflect temporary differences between assets and liabilities reported in the consolidated financial statements under accounting rules and the amounts reported under tax rules governing the determination of taxable income. Current and deferred taxes are essentially recognized in profit or loss, unless they are related to circumstances recognized in other comprehensive income or directly in equity. In that case, the current and deferred taxes are also recognized in other comprehensive income or directly in equity.

Deferred tax assets pertaining to deductible temporary differences and loss carryforwards are recognized to the extent it is probable that either sufficient taxable profit or deferred tax liabilities will be available against which the temporary differences and still unused loss carryforwards can be utilized. The amount of deferred tax assets recognized for loss carryforwards is determined on the basis of future taxable income over a five-year forecast period. In Germany, the unlimited carryforward option for domestic losses is limited by the minimum taxation level. For foreign loss carryforwards, there are often country-specific time limitations on the carryforward option and restrictions on the use of profits from operating activities.

Deferred tax liabilities arising from temporary differences relating to holdings in subsidiaries and joint ventures are recognized unless the date of the reversal of the temporary differences can be determined by the Group and it is probable that the temporary differences will not be reversed within a foreseeable period of time due to this influence.

When determining the deferred taxes, the expected tax rates in the respective countries at the time of the expected realization are assumed.

Actual and deferred tax receivables and payables are netted if the tax receivables and payables refer to income taxes levied by the same tax authority for either the same taxpayer or for different taxpayers intending to effect settlement on a net basis.

Contingent Liabilities and Contingent Assets
Contingent liabilities are potential obligations toward third parties or current commitments in which a cash outflow is unlikely and/or its amount cannot be determined in a reliable manner. Contingent assets normally arise from unplanned or unexpected developments from which the possibility of an inflow of economic benefits is probable. As a rule, contingent liabilities and contingent assets are not recognized in the statement of financial position. The liability amounts stated in the notes under contingent liabilities match the scope of liability in effect on the reporting date.

(4) Discretionary Decisions and Estimates

In preparing the consolidated financial statements, a certain amount of assumptions and estimates must be made that will affect the amount and presentation of the assets and liabilities, income and expenses, and contingent liabilities recognized in the reporting period. Estimates are based on empirical values and other assumptions that are deemed to be appropriate given the circumstances, and are based on the best information that is currently available. In addition, the trends in the economic environment in the industries and regions in which the Group does business, which are currently assumed to be realistic, were also taken into account in regard to expected future business developments.

H&R KGaA operates in a complex geopolitical environment which is subject to a significant amount of macroeconomic uncertainty. In addition to the impact of the COVID-19 pandemic, the consequences of the war between Russia and Ukraine had a significant impact on the economy in the fiscal year, leading to an increased level of uncertainty in our forecasts and discretionary decisions. As a result, actual results may differ from estimates and discretionary decisions; this could have a material impact on the net assets, financial position and results of operations of H&R KGaA.

The following significant matters are affected by such estimates and discretionary decisions.

Impairment Tests/Impairment
Testing intangible assets and property, plant and equipment for impairment, and identifying signs of an impairment, requires estimates in order to determine the recoverable amount of a cash-generating unit. In particular, assumptions must be made with regard to future net cash inflows, the underlying interest rates and the expected useful lives and residual amounts.

The substantial rise in interest rates in the fourth quarter of 2022 prompted a review of the valuation interest rates (WACC) which serve as key parameters in the annual impairment tests of the cash-generating unit to which goodwill is allocated (performed at the end of Q3) and production sites (performed at the end of the year). However, this review found that the parameters did not meet the standard of an objectified value. As a result, the valuation interest rate as of September 30, 2022, was taken to be the best estimate for the year-end impairment calculations. The impairment tests were updated as of December 31, 2022.

For sensitivity analyses, a possible fluctuation range of 10% is assumed. Additional information can be found in Note (12).

Where financial investments valued at equity provide objective indications of an impairment or reversal of impairment loss, estimates and evaluations must be made in order to determine the recoverable amount. In this context, assumptions about future business trends must be made in order to derive the expected future cash flows of these financial investments.

Pensions and Other Provisions
The calculation of pension provisions and similar commitments and the related pension expenses is based on actuarial models. These models are based on various actuarial assumptions, such as the discount rate, the underlying mortality tables, turnover, etc. Sensitivities are used to determine the possible financial impacts of deviations in the key factors. Details on sensitivity analyses and the bases for estimates in the area of pension provisions can be found in Note (20).

In the case of other provisions, estimates relating to future expenses are necessary in addition to the discount rate. This also applies to the possibility of a cash outflow due to dismantling obligations, which is described in greater detail in Note (41).

Property, Plant and Equipment/Leases
In accounting for property, plant and equipment, discretionary decisions and estimates, which are based on estimates by management, are required in determining economic lives uniformly throughout the Group. The accounting of leases requires discretionary decisions with regard to the determination of interest rates and the lease term. To determine the incremental borrowing rate, reference interest rates are derived from risk-free interest rates with appropriate maturities, increased by credit risk premiums and adjusted by a liquidity and country risk premium.

Income Taxes
In order to calculate deferred tax assets, future taxable income and the dates on which the deferred tax assets can be realized must be estimated. This is based on the planned income from the respective units.

Inventories
In valuing inventories, discretionary decisions and estimates must be made, in particular when determining overhead surcharges.

Uncertainties Related to the War in Ukraine
Following the outbreak of Russia's war of aggression against Ukraine, H&R KGaA saw an increase in the cost of raw materials, transport, logistics and energy. The war in Ukraine had a negligible impact on consolidated income and the company's net assets, financial position and results of operations during the financial year as the majority of additional expenses could be passed on to the market.

In addition, the war contributed to increased inflation and rising interest rates, which had an impact on the impairment tests of intangible assets and property, plant and equipment, among other items.

(5) Scope of Consolidation and Holdings

The consolidated financial statements of H&R KGaA include all material domestic and foreign subsidiaries that H&R KGaA controls according to the criteria stipulated in IFRS 10 and for which H&R KGaA controls existing rights that give it the ability to direct the relevant activities of these companies.

The addition in financial year 2022 relates to the newly formed company H&R West Africa Ltd, Lagos, Nigeria.

To expand IT capacities, H&R KGaA acquired a further 50% of the shares in HRI IT Consulting GmbH, Münster in the previous year, increasing its share to 100%. The company is allocated to the Other Activities segment, as are the 50% holdings in P2X-Europe GmbH & Co. KG and P2X-Europe Management GmbH acquired in the previous year. Other additions in the previous year relate to start-ups at the Coburg site in the Plastics segment.

The table below shows the changes to H&R KGaA's consolidated group during the financial year:

CHANGE IN THE NUMBER OF CONSOLIDATED COMPANIES

H&R KGaA and consolidated companies	Germany	Abroad	Total
1/1/2021	**20**	**24**	**44**
Additions	3	–	3
Disposals	–	–	–
12/31/2021	**23**	**24**	**47**
Additions	–	1	1
Disposals	–	–	–
12/31/2022	**23**	**25**	**48**

CHANGE TO THE NUMBER OF JOINT VENTURES

	Germany	Abroad	Total
1/1/2021	**4**	**–**	**4**
Additions	2	–	2
Disposals	-2	–	-2
12/31/2021	**4**	**–**	**4**
Additions	–	–	–
Disposals	–	–	–
12/31/2022	**4**	**–**	**4**

H&R KGaA holds shares in some companies via trust companies. These indirect shares are also fully consolidated whenever H&R GmbH & Co. KGaA exercises control. The holdings are shown in the list of shareholdings. WAFA Kunststofftechnik GmbH & Co. KG, i.K, Augsburg, and WAFA Kunststofftechnik Verwaltungs- GmbH, i.K., Augsburg, previously reported as unconsolidated subsidiaries, were removed from the Commercial Register in the 2022 financial year.

The following table provides an overview of the companies included in the consolidated financial statements of H&R KGaA. The holdings are unchanged compared to the previous year, with the exception of H&R West Africa Ltd, Lagos, Nigeria, which was founded during the financial year.

FULLY CONSOLIDATED SUBSIDIARIES

Company name	Company headquarters	Seg-ment	Interest held by H&R GmbH & Co. KGaA in %
H&R Chemisch-Pharmazeutische Spezialitäten GmbH	Salzbergen, Germany	a	100
H&R Lube Blending GmbH	Salzbergen, Germany	a	100
H&R ChemPharm GmbH	Salzbergen, Germany	a	100
H&R LubeTrading GmbH	Salzbergen, Germany	a	100
H&R International GmbH	Hamburg, Germany	b	100
H&R Ölwerke Schindler GmbH	Hamburg, Germany	a	100
H&R OWS Chemie GmbH & Co. KG	Hamburg, Germany	a	100
H&R OWS Beteiligungsgesellschaft mbH	Hamburg, Germany	a	100
H&R InfoTech GmbH	Hamburg, Germany	d	100
HRI IT-Consulting GmbH	Münster, Germany	d	100
H&R Benelux B.V.	Nuth, Netherlands	b	100
H&R ChemPharm (UK) Ltd.	Tipton, UK	b	100
H&R ANZ Pty Ltd.	Victoria, Australia	b	100
H&R Singapore Pte. Ltd.	Singapore, Singapore	b	100
H&R Global Special Products Co. Ltd.	Bangkok, Thailand	b	100[1)]
H&R Malaysia Sdn. Bhd.	Port Klang, Malaysia	b	100[1)]
H&R ChemPharm (Thailand) Limited	Bangkok, Thailand	b	100
H&R Wax Malaysia Sdn. Bhd.	Batu Caves, Malaysia	b	100
H&R Japan K.K.	Tokyo, Japan	b	100
H&R ChemPharm Asia Sdn. Bhd.	Lumut, Malaysia	b	100
H&R Group Vietnam Company Limited	Ho Chi Minh City, Vietnam	b	100
PT HUR Sales Indonesia	Jakarta, Indonesia	b	100
H&R India Sales Private Limited	Mumbai, India	b	100
Dunrose Investments 148 (Proprietary) Limited	Sandton, South Africa	b	100
H&R Africa Holdings (Pty) Limited	Durban, South Africa	b	100
H&R South Africa (Pty) Limited	Durban, South Africa	b	100
H&R South Africa GmbH	Hamburg, Germany	b	100
H&R Africa Proprietary Limited	Durban, South Africa	b	100
H&R West Africa Ltd.	Lagos, Nigeria	b	100
H&R China Holding GmbH	Hamburg, Germany	b	51
H&R China (Hong Kong) Co., Ltd.	Hong Kong	b	51
H&R China (Ningbo) Co., Ltd.	Ningbo, China	b	51
H&R China (Fushun) Co., Ltd.	Fushun, China	b	51
H&R China (Daxie) Co., Ltd.	Daxie, China	b	51
H&R Grundstücksverwaltungs GmbH	Salzbergen, Germany	a	98.68
H&R Grundstücksverwaltungs-Beteiligungsgesellschaft mbH	Salzbergen, Germany	a	74.04
GAUDLITZ GmbH	Coburg, Germany	c	100
GAUDLITZ Precision Technology (Wuxi) Co. Ltd.	Wuxi, China	c	100
GAUDLITZ Precision s.r.o.	Dačice, Czech Republic	c	100
GAUDLITZ Grundstücksverwaltungs-Beteiligungsgesellschaft mbH	Coburg, Germany	c	100
GAUDLITZ Management GmbH	Coburg, Germany	c	100
GAUDLITZ INC	Delaware, USA	c	100
GAUDLITZ Verwaltungs-GmbH	Coburg, Germany	c	100
GAUDLITZ Plastics Technologies GmbH & Co. KG	Coburg, Germany	c	100
H&R Group Finance GmbH	Hamburg, Germany	d	100
SYTHENGRUND Wasagchemie Grundstücksverwertungsges. Haltern mbH	Haltern, Germany	d	100
B.-H. Beteiligungs- und Handelsges. mbH	Salzbergen, Germany	d	100

OTHER INTERESTS

Company name	Company headquarters	Segment	Interest held by H&R GmbH & Co. KGaA in %	Income after tax in € thousand	Equity in € thousand
Joint ventures					
Westfalen Chemie GmbH & Co. KG	Salzbergen, Germany	a	50	487	26
Westfalen Chemie Verwaltungs-gesellschaft mbH	Salzbergen, Germany	a	50	2	74
P2X-Europe GmbH & Co. KG	Hamburg, Germany	d	50	-1,990	5,697
P2X-Europe Management GmbH	Hamburg, Germany	d	50	–[2]	–[2]
Other interests					
SRS EcoTherm GmbH	Salzbergen, Germany	a	10	3,572	25,069

Segment: a) ChemPharm Refining b) ChemPharm Sales c) Plastics d) Other Activities

[1] Including holdings held in trust: The holdings in the following companies are only indirectly held via trust companies: H&R KGaA holds 49% of the shares in H&R Global Special Products Co. Ltd., Bangkok, Thailand, via subsidiaries; 51% of the shares are managed for the Group by trust companies. H&R Global Special Products Co. Ltd. in turn holds 61.02% in H&R ChemPharm (Thailand) Limited, Bangkok, Thailand. A further 38.976% are held by a subsidiary whose shares are wholly owned by H&R KGaA. The remaining 0.004% are managed on behalf of the Group by trustees. The Group directly holds 30% of the shares in H&R Malaysia Sdn. Bhd., Port Klang, Malaysia. The remaining 70% are held on behalf of the Group by trustees.

[2] No financial statements are available for these companies.

Notes to the Consolidated Statement of Financial Position

(6) Cash and Cash Equivalents

IN € THOUSAND	12/31/2022	12/31/2021
Cash in hand	29	21
Bank balances	55,968	48,903
Total	**55,997**	**48,924**

As of December 31, 2022, €1,797 thousand (previous year: €1,693 thousand) was recognized as cash and cash equivalents, which was deposited in pledged accounts as part of a factoring program or as security for loan agreements and therefore subject to access restrictions.

(7) Trade Receivables

IN € THOUSAND	12/31/2022	12/31/2021
Trade receivables (gross)	126,383	127,542
Impairment	-1,956	-1,908
Total	**124,427**	**125,634**

No trade receivables were pledged as credit guarantees (previous year: €0 thousand). Receivables from related parties are listed under Note (43).

As of December 31, 2022, the carrying amount of the receivables transferred through factoring amounted to €28,150 thousand (previous year: €19,411 thousand). Overall, H&R KGaA had factoring lines of €30,000 thousand at its disposal. As of December 31, 2022, there are receivables that qualify for factoring, which are to be allocated to the category at fair value through profit or loss in the amount of €3,493 thousand (previous year: €6,334 thousand).

In the Group, risk provisions for trade receivables based on impairments can be summarized as follows:

CHANGES IN IMPAIRMENTS OF TRADE RECEIVABLES

IN € THOUSAND	2022	2021
As of 1/1	**1,908**	**2,291**
Additions	214	64
Utilization	–	-132
Reversals	-160	-343
Currency translation differences	-6	28
As of 12/31	**1,956**	**1,908**

(8) Inventories

IN € THOUSAND	12/31/2022	12/31/2021
Raw, auxiliary and production materials	81,589	67,282
Work in progress	33,138	21,717
Finished products and products for sale	114,737	82,110
Advance payments on inventories	5,587	5,935
Total	**235,051**	**177,044**

Individual downward valuation adjustments were taken in all cases where the proceeds that could foreseeably be realized from selling the inventories were lower than their carrying amount (lower of cost or market principle). The foreseeable sales proceeds less any costs still incurred up to the time of sale were recognized as the net realizable value.

The carrying amount of inventories recognized at the lower net realizable value amounted to €5,022 thousand in the reporting year (previous year: €7,200 thousand).

Impairment of net realizable values in the amount of €896 thousand (previous year: €889 thousand) was recognized as an expense in the reporting period in accordance with IAS 2.34. This affected the ChemPharm Refining and Plastics segments. For more information on expenditures relating to inventories, please consult Note (29).

(9) Other Financial Assets

IN € THOUSAND	12/31/2022 Total	12/31/2022 of which non-current	12/31/2021 Total	12/31/2021 of which non-current
Receivables from granted subsidies	7,532	6,994	9,410	7,658
Derivatives	9,671	–	8,051	–
Other interests	4,269	4,269	6,971	6,971
Bills receivable	8,291	–	5,286	–
Receivables due from BP	1,227	1,227	1,466	1,466
Other financial assets	1,777	87	871	88
Total	**32,767**	**12,577**	**32,055**	**16,183**

The subsidies relate to support provided for investment projects at the production sites. The derivatives relate to raw material price hedging and currency forward contracts. Additional information can be found in Note (38.2).

Other interests are the shares in SRS EcoTherm GmbH, Salzbergen. Bills receivable refer to receivable claims in China secured by bills of exchange.

During the course of the takeover of the BP special business in 2004, mutual release agreements were made in regard to those retirees who were allocated either economically or contractually to one of the contractual partners, but who, for purposes of employment law, remained with the other partner. According to the overall contractual arrangements with BP, which included all release claims and liabilities, and taking into account the contractual parties' goal of achieving a total setoff of all payables and receivables, the liabilities and claims based on the same legal grounds because of the economic and legal substance of the business transaction were combined and shown as a single balance.

The claims to compensation were as shown in the following table:

IN € THOUSAND	2022	2021
As of 1/1	**10,659**	**11,163**
Interest income	117	123
Reassessment of compensation claims	-2,120	9
Claims paid	-642	-636
As of 12/31	**8,014**	**10,659**

The net receivable can be broken down as follows:

IN € THOUSAND	12/31/2022	12/31/2021
Compensation claims	**8,014**	**10,659**
Liability	6,787	9,193
Net receivable	**1,227**	**1,466**

Additional information can be found in Note (20).

Other financial assets include loans and receivables as well as current securities.

(10) Other Assets

IN € THOUSAND	12/31/2022 Total	12/31/2022 of which non-current	12/31/2021 Total	12/31/2021 of which non-current
Other tax receivables	11,540	–	11,012	–
Accruals and deferrals	2,419	211	3,121	97
Reinsurance policies	1,310	1,310	1,331	1,331
Other assets	3,404	214	1,199	242
Total	**18,673**	**1,735**	**16,663**	**1,670**

Other tax receivables mainly refer to VAT receivables. The current accruals and deferrals comprise prepaid amounts for which the pertinent expense is to be allocated to the following year. This item mainly includes insurance premiums paid, advance rent payments and accrued IT maintenance fees.

(11) Property, Plant and Equipment

CHANGES IN 2022

IN € THOUSAND	Land and buildings	Technical equipment/ machinery	Other facilities/ operating and office equipment	Advance payments and construction in progress	Total
Acquisition and production costs					
As of 12/31/2021	**166,933**	**646,600**	**38,634**	**20,427**	**872,594**
Additions	2,711	30,002	3,045	38,268	74,026
Disposals	-936	-11,496	-1,063	-73	-13,568
Currency translation	-1,049	-812	-113	120	-1,854
Reclassifications	7,656	6,684	3,675	-18,471	-456
As of 12/31/2022	**175,315**	**670,978**	**44,178**	**40,271**	**930,742**
Cumulative depreciation					
As of 12/31/2021	**58,455**	**353,318**	**28,460**	**3**	**440,236**
Depreciation	7,302	39,502	4,153	–	50,957
Impairment	864	–	–	–	864
Disposals	-351	-11,252	-1,038	-3	**-12,644**
Currency translation	-468	-645	-87	–	**-1,200**
Reclassifications	342	-2,458	2,116	–	**–**
As of 12/31/2022	**66,144**	**378,465**	**33,604**	**–**	**478,213**
Carrying amounts					
As of 12/31/2022	**109,171**	**292,513**	**10,574**	**40,271**	**452,529**
As of 12/31/2021	108,478	293,282	10,174	20,424	432,358

CHANGES IN 2021

IN € THOUSAND	Land and buildings	Technical equipment/ machinery	Other facilities/ operating and office equipment	Advance payments and construction in progress	Total
Acquisition and production costs					
As of 12/31/2020	**154,107**	**613,586**	**32,560**	**12,428**	**812,681**
Additions	6,142	34,357	5,620	20,085	66,204
Disposals	-416	-13,775	-793	-364	-15,348
Currency translation	4,630	3,828	432	206	9,096
Reclassifications	2,470	8,604	815	-11,928	-39
As of 12/31/2021	**166,933**	**646,600**	**38,634**	**20,427**	**872,594**
Cumulative depreciation					
As of 12/31/2020	**50,563**	**325,665**	**24,204**	**3**	**400,435**
Depreciation	6,656	37,418	4,010	–	48,084
Disposals	-194	-12,305	-783	–	-13,282
Currency translation	1,430	2,540	1,029	–	4,999
As of 12/31/2021	**58,455**	**353,318**	**28,460**	**3**	**440,236**
Carrying amounts					
As of 12/31/2021	**108,478**	**293,282**	**10,174**	**20,424**	**432,358**
As of 12/31/2020	103,544	287,921	8,356	12,425	412,246

Land and buildings are essentially the Group companies' production sites and the technical equipment and machinery are production facilities. The capital expenditure relates primarily to the two production sites in Hamburg and Salzbergen, and includes additions from lease agreements as per IFRS 16. Right-of-use assets under leases are allocated to the categories according to the type of leased assets. Further information on leases can be found in Note (39).

Macroeconomic developments in South Africa resulted in impairments of €864 thousand (previous year: €0). The impairments relate to land and buildings in the Sales segment and are recorded as depreciation, impairments and amortization of property, plant and equipment in the income statement. The recoverable amount of the assets is €2.7 million and corresponds to fair value less costs to sell. The fair value is allocated to level 2 in the fair value hierarchy set out in IFRS 13.

The items advance payments and construction in progress include expenses incurred before the completion of the corresponding property, plant and equipment in the amount of €35,235 thousand (previous year: €17,707 thousand). Borrowing costs amounting to €173 thousand were capitalized in the 2022 financial year (previous year: €0).

(12) Goodwill and Other Intangible Assets

The table below shows changes in intangible assets during financial year 2022:

CHANGES IN 2022

IN € THOUSAND	Goodwill	Other intangible assets: Distribution and similar rights	Software	Licenses/product rights	Patents (production) technology	Other rights	Subtotal	Total
Acquisition and production costs								
As of 12/31/2021	**55,593**	**20,302**	**13,995**	**5,295**	**14,484**	**1,248**	**55,324**	**110,917**
Currency translation	849	-400	-11	1	-316	–	-726	123
Additions	–	–	111	4,626	–	466	5,203	5,203
Disposals	–	–	-3,696	-203	–	–	-3,899	-3,899
Reclassifications	–	–	469	–	–	-13	456	456
As of 12/31/2022	**56,442**	**19,902**	**10,868**	**9,719**	**14,168**	**1,701**	**56,358**	**112,800**
Cumulative amortization								
As of 12/31/2021	**38,201**	**13,110**	**12,973**	**3,186**	**10,950**	–	**40,219**	**78,420**
Currency translation	848	-292	-9	1	-288	–	-588	260
Amortization	–	871	623	390	1,306	–	3,190	3,190
Impairment	–	311	–	–	–	–	311	311
Disposals	–	–	-3,699	–	–	–	-3,699	-3,699
Reclassifications	–	–	–	–	–	–	–	–
As of 12/31/2022	**39,049**	**14,000**	**9,888**	**3,577**	**11,968**	–	**39,433**	**78,482**
Carrying amounts								
As of 12/31/2022	**17,393**	**5,902**	**980**	**6,142**	**2,200**	**1,701**	**16,925**	**34,318**
As of 12/31/2021	17,392	7,192	1,022	2,109	3,534	1,248	15,105	32,497

CHANGES IN 2021

IN € THOUSAND	Goodwill	Other intangible assets: Distribution and similar rights	Software	Licenses/ product rights	Patents (production) technology	Other rights	Subtotal	Total
Acquisition and production costs								
As of 12/31/2020	**54,729**	**17,611**	**13,739**	**4,423**	**13,013**	**604**	**49,390**	**104,119**
Currency translation	864	1,881	76	13	1,471	–	3,441	4,305
Additions	–	373	132	1,528	–	717	2,750	2,750
Disposals	–	–	-36	-259	–	-1	-296	-296
Reclassifications	–	437	84	-410	–	-72	39	39
As of 12/31/2021	**55,593**	**20,302**	**13,995**	**5,295**	**14,484**	**1,248**	**55,324**	**110,917**
Cumulative amortization								
As of 12/31/2020	**37,353**	**11,141**	**12,286**	**3,007**	**8,691**	**–**	**35,125**	**72,478**
Currency translation	848	1,171	84	11	1,047	–	2,313	3,161
Amortization	–	798	639	207	1,212	–	2,856	2,856
Disposals	–	–	-36	-39	–	–	-75	-75
Reclassifications	–	–	–	–	–	–	–	–
As of 12/31/2021	**38,201**	**13,110**	**12,973**	**3,186**	**10,950**	–	**40,219**	**78,420**
Carrying amounts								
As of 12/31/2021	**17,392**	**7,192**	**1,022**	**2,109**	**3,534**	**1,248**	**15,105**	**32,497**
As of 12/31/2020	17,376	6,470	1,453	1,416	4,322	604	14,265	31,641

Goodwill

The Executive Board has to make future-oriented valuation assumptions when testing the cash-generating units for impairment, taking both internal company experience and external economic data into account. Basically, these valuation assumptions, which are made in the face of uncertainty, may differ from values measured later, which can cause the recoverable amount to drop below the respective carrying amount of the cash-generating unit, thereby triggering recognition of an impairment loss. The cash-generating units' recoverable amounts are equal to their values in use.

The following table provides an overview of the carrying amounts and the interest rates applied to impairment tests:

Reporting segment	Cash-generating unit (CGU)	Carrying amounts in € thousand		Discount rate after tax in %		Discount rate before tax in %	
		12/31/2022	12/31/2021	2022	2021	2022	2021
ChemPharm Refining	Salzbergen CGU	16,738	16,738	6.6	5.2	9.2	7.2
ChemPharm Sales	H&R ChemPharm (UK) CGU	282	282	8.4	6.1	10.1	7.2
ChemPharm Sales	Asia CGU	373	372	8.7	6.5	10.7	8.0
Total		**17,393**	**17,392**				

The impairment tests carried out during the reporting period did not result in any goodwill impairments.

In the sensitivity analyses performed on the cash-generating units to which goodwill has been allocated, the effects of reducing future cash flows by

10% and increasing the weighted cost of capital by 10% were analyzed. No impairment risk is identifiable for goodwill on the basis of these analyses.

Other intangible assets
The other intangible assets mainly consist of customer relationships with a residual carrying amount of €5.9 million (previous year: €7.2 million) and (production) technologies with a residual carrying amount of €2.2 million (previous year: €3.5 million). The additions in financial year 2022 primarily refer to the acquisition of new software licenses.

Impairment of €311 thousand (previous year: €0) relates to the full write-down of customer relationships in the Other segment and is recorded as depreciation, impairments and amortization of intangible assets and property, plant and equipment in the income statement.

(13) Shares in Holdings Valued at Equity

Disclosures on holdings valued at equity consolidated into the H&R Group are based on the Group's uniform accounting and measurement principles. The financial year of the joint ventures is the calendar year, as is the case with H&R KGaA. The following table shows the aggregate financial information of these joint ventures that are classified as immaterial under IFRS 12:

IN € THOUSAND	12/31/2022	12/31/2021
Assets		
Non-current assets	1,255	1,797
Current assets	7,086	3,825
Liabilities		
Non-current liabilities	–	–
Current liabilities	2,519	2,812
Cumulative equity	**5,822**	**2,810**
Income	7,885	3,881
Expenses	-9,387	-3,923
Earnings after income taxes	**-1,502**	**-42**
Other comprehensive income	–	–
Total comprehensive income	**-1,502**	**-42**

The following table shows the changes in the carrying amounts of holdings valued at equity:

IN € THOUSAND	2022	2021
Carrying amounts as of 1/1	**2,430**	**2,922**
Additions	2,500	1,518
Proportionate share in income	-668	-137
Impairment	–	-1,130
Distribution	–	-153
Disposal	–	-590
Carrying amounts as of 12/31	**4,262**	**2,430**

The additions in the financial year are the result of a capital contribution paid into P2X-Europe GmbH & Co. KG that had been received in the previous year together with P2X Europe Management GmbH.

The impairments in the previous year relate to HRI IT Consulting GmbH, Münster, as a consequence of the adjustment of the shares to the fair value in advance of the transition to full consolidation. The impairments were recognized under financing expenses. The depreciation and amortization were largely the result of structural changes in the focus of the holdings.

The disposals in the previous year relate to HRI IT Service GmbH, Berlin, and HRI IT Consulting GmbH, Münster. HRI IT Consulting GmbH, Münster, has been included in the consolidated financial statements as a subsidiary since May 2021.

(14) Liabilities to Banks

Liabilities to banks include the following items:

IN € THOUSAND	Carrying amount as of 12/31/2021	Residual term up to one year	Residual term 2024 to 2027	as of 2028
Loans under KfW programs	81,584	17,866	49,717	14,001
Syndicated loan	56,502	57,360	-858	–
Other loans	53,921	52,999	922	–
Total	**192,007**	**128,225**	**49,781**	**14,001**
of which secured	11,205	283	10,922	–

IN € THOUSAND	Carrying amount as of 12/31/2021	Residual term up to one year	Residual term 2023 to 2026	as of 2027
Loans under KfW programs	68,829	12,150	54,623	2,056
Syndicated loan	19,997	20,189	-192	–
Other loans	52,949	21,816	30,989	144
Total	**141,775**	**54,155**	**85,420**	**2,200**
of which secured	11,414	282	10,988	144

Loans Under KfW Programs. The KfW funds arranged by various banks were, or will be, used for capital expenditures that qualify for subsidies under various KfW programs. The KfW funds were provided in the form of fixed-interest loans with interest rates of between 1.5% and 3.6%. The lenders may terminate the loans depending on covenants (net gearing and the equity ratio) or in the event of a change in control. The KfW Entrepreneur Loans taken up in January 2021 are subject to the conditions of the special coronavirus program.

Syndicated Loan. A new syndicated loan was agreed on December 8, 2022, with an initial maximum volume of €230 million, an option of an additional €40 million and an initial term of five years, including two options to extend the loan by one year in each case. The newly agreed loan replaced the syndicated loan of €240 million agreed in 2018 before the end of its term. The syndicated loan serves to secure the Group's financing in the event, for example, of an increase in working capital requirements triggered by rising oil prices. The syndicated loan is utilized by H&R KGaA and by Group companies via branch lines.

The availability and conditions are linked to certain ratios (financial covenants). In the event of a breach of covenant, the syndicate banks are entitled to terminate the syndicated loan. The syndicated loan is subject to a variable interest rate (EURIBOR + margin). The margin percentage is dependent on certain financial covenants (net debt/EBITDA). The adjustment always takes place after the filing of the quarterly and/or annual reports.

Other Loans. Other loans mainly include a loan taken up by H&R KGaA in December 2021 with variable interest and final maturity with a two-year term, a loan redeemable through scheduled installments at fixed interest rates, as well as subsidiaries' variable-rate working capital loans, including drawdowns under branch lines of the syndicated loan secured by credit requests and guarantees.

Financial Covenants. Financial covenants such as net gearing and the equity ratio have been agreed for the syndicated loans and for bilateral loans of H&R KGaA. The financial covenants were fully met both at the reporting date and also during the course of the year.

Collateral. Collateral assignments have been provided for a redeemable loan in South Africa originally totaling the equivalent of €2 million and for the loans taken up as KfW Entrepreneur Loans (special coronavirus program) in the form of property, plant and equipment for a total of €10 million. No collateral has been provided for the other KfW loans and the syndicated loan.

(15) Trade Payables

Trade payables have a term of up to one year and, as in the previous year, are collateralized by the customary retention of title.

(16) Contract Liabilities

The contract liabilities amounted to €2,519 thousand as of December 31, 2022. The carrying amount on December 31, 2021, was €3,679 thousand. This amount included €3,679 thousand that was recognized as revenue in the reporting period.

(17) Other Provisions

Changes in other provisions in 2022 were as follows:

OTHER PROVISIONS

IN € THOUSAND	HR provisions (17.1)	Emission rights (17.2)	Trade-related commitments (17.3)	Miscellaneous provisions (17.4)	Total
As of 1/1/2022	**21,165**	**201**	**1,326**	**1,140**	**23,832**
of which non-current	3,610	–	–	–	3,610
Utilization	-16,413	-201	-876	-593	-18,083
Reversal	-963	–	-115	-70	-1,148
Additions	12,304	1,984	912	1,748	16,948
Compounding/discounting	24	–	–	–	24
Currency translation differences	-15	–	-4	-15	-34
As of 12/31/2022	**16,102**	**1,984**	**1,243**	**2,210**	**21,539**
of which non-current	2,759	–	–	–	2,759

The following cash outflows are expected in connection with the provisions shown on the statement of financial position as of December 31, 2022:

EXPECTED CASH OUTFLOWS FOR OTHER PROVISIONS

IN € THOUSAND	HR provisions	Emission rights	Trade-related commitments	Miscellaneous provisions	Total
2023	13,343	1,984	1,243	2,210	18,780
2024	966	–	–	–	966
2025-2027	692	–	–	–	692
2028-2032	674	–	–	–	674
2033 and later	427	–	–	–	427
Total	**16,102**	**1,984**	**1,243**	**2,210**	**21,539**

(17.1) HR Provisions

The short-term HR provisions primarily concern directors' fees, profit sharing, performance bonuses, deferred leave, flex-time credits and professional association contributions.

The long-term HR provisions consist of obligations to grant long-service bonuses.

(17.2) Emission rights

The provision for emission rights relates to the production sites in Hamburg-Neuhof and Salzbergen.

(17.3) Trade-related Commitments

Provisions for trade-related commitments primarily include provisions for volume discounts and warranties.

(17.4) Other Provisions

Miscellaneous provisions primarily include provisions for legal and consulting fees and other obligations.

(18) Other Financial Liabilities

IN € THOUSAND	12/31/2022 Total	12/31/2022 of which non-current	12/31/2021 Total	12/31/2021 of which non-current
Lease liabilities	52,234	41,025	54,504	44,551
Liabilities arising from derivatives	3,253	–	7,496	–
Miscellaneous financial liabilities	445	66	389	87
Total	**55,932**	**41,091**	**62,389**	**44,638**

Further information on leases can be found in Note (39). The derivatives predominantly relate to raw material price hedging contracts. Additional information can be found in Note (38.2).

(19) Other Liabilities

IN € THOUSAND	12/31/2022 Total	12/31/2022 of which non-current	12/31/2021 Total	12/31/2021 of which non-current
Accruals and deferrals	25,251	22,181	26,879	23,627
Tax liabilities	19,308	–	18,188	–
Other liabilities	1,268	–	2,014	–
Total	**45,827**	**22,181**	**47,081**	**23,627**

Accruals and deferrals mainly include public and private subsidies for investments in H&R KGaA. A substantial amount of these relate to subsidies for the construction of a flood protection wall and investments in various production facilities at the production site in Hamburg. Further subsidies were granted for investments in production facilities at the Salzbergen production site.

Tax liabilities primarily concern the current VAT and payroll tax liabilities as well as import VAT still due.

(20) Pension Provisions

The Group has both defined-contribution and defined-benefit company retirement plans.

In the case of the defined-contribution plans, the Group pays contributions to state or private pension schemes on the basis of legal or contractual provisions or on a voluntary basis. Once it has made the contributions, the Group has no further obligations in this area. Defined-contribution pension plans exist mainly in the international companies of the Chemical-Pharmaceutical division.

All other retirement plans are defined-benefit plans and are the result of various takeovers of business divisions and activities. These benefits apply exclusively to companies based in Germany. All of the H&R Group's pension plans are closed or frozen, meaning that H&R KGaA is only exposed to risks arising from pension and salary trends and from demographic changes, based on already existing commitments. With the exception of a reinsurance policy for the pension of a former member of the Executive Board, there are no plan assets, so there is currently no strategy for offsetting risks arising from either assets or liabilities.

H&R KGaA was formed from the merger of Schmierstoffraffinerie Salzbergen GmbH (SRS

GmbH) and H&R KGaA in 2001. Due to the works agreement dated October 7, 1986, all employees transferred over from Wintershall by SRS GmbH have a right to a company pension in accordance with the Wintershall pension agreement dated January 1, 1987. The works agreement dated March 9, 1994, terminated the works agreement of October 7, 1986, effective June 30, 1994, thereby closing the pension agreement to newly hired employees. The level of benefits promised mainly depends on the length of service and the last salary drawn. After the termination of the works agreement of October 7, 1986, the entitlements earned were frozen. The pension entitlements of some pensioners are based on the older Wintershall pension charter.

All employees at H&R KGaA have a right to a company pension in accordance with the version of the pension agreement dated January 1, 1986, last amended by the works agreement of June 4, 1998. For those drawing pensions, their rights in some cases are based on earlier versions of the pension agreement. The amount of the pension depends on the number of pensionable years of service and the pensionable salary in the last year before leaving the company. Individual employees receive contract pensions based on individual contractual commitments. The benefit requirements and calculations differ in individual agreements.

Pursuant to the December 18, 1978, version of GAUDLITZ GmbH's pension agreement, all employees who joined the company up to June 10, 1978, and whose employment agreements have not been terminated have the right to a company pension. The amount of the pension depends on the number of pensionable years of service and the pensionable salary in 1978. For those drawing pensions, in some cases their rights are based on earlier versions of the pension agreement.

At SYTHENGRUND Wasagchemie Grundstücksverwertungsgesellschaft Haltern mbH, there is a pension agreement dating from January 1, 1986, in the June 4, 1998, version of Chemie Sythen GmbH's works agreement. The pension amounts depend on the number of pensionable years of service and on the pensionable salary. The pension scheme was closed in 1992 to people joining the company after July 31, 1991.

Pension commitments for a total of 183 employees were transferred to H&R Ölwerke Schindler GmbH effective January 2, 2004, with the takeover of BP's specialty product activities. Due to various mergers and takeovers, there are a total of 13 different sets of rules and addenda that may apply to these 183 employees. The basic principles are set forth in the following pension agreements, charters, pension schemes, retirement plans, etc.:

- Pension agreement for employees of Aral AG on non-union rates dated June 24, 1991
- Pension scheme for employees of Aral AG on union rates dated October 15, 1985
- Aral AG 1999 pension agreement
- Pension charter dated January 1, 1980, pursuant to the central works agreement dated November 30, 1979
- Additional pension for shift work in accordance with letter f of the pension charter of January 1, 1980, pursuant to the central works agreement dated November 30, 1979
- 1988 pension charter based on the central works agreement dated December 2, 1987
- Pension charter dated January 1, 1988, Section 13 (Sections 40–46), pension for shift work on the basis of the central works agreement dated December 2, 1987
- Retirement plan of Burmah Oil (Deutschland) GmbH dated January 1, 1992
- Salary conversion in accordance with the 1999 ARAL pension agreement model
- Raab Karcher transitional pension scheme dated March 1, 1989
- Central works agreement dated February 1, 1993 (1975 pension plan)
- Central works agreement dated January 1, 1993 (1986 pension plan)
- Central works agreement dated February 1, 1993 (1990 pension plan)

The pension amount in the aforementioned plans is determined based on the pensionable years of service and on the pensionable monthly remuneration, taking into account the minimum number of years of eligible service.

From BP, H&R Ölwerke Schindler GmbH has not only assumed pension commitments for eligible employees of the company (Group 1), but has also agreed an indemnity obligation for some former employees of BP Lubes Services GmbH (pensioners and employees who left the company, Group 3). The company is entitled to reimbursement from BP of the sum posted for the commitments to the aforementioned categories of qualified individuals [see also Note (9)].

H&R Ölwerke Schindler GmbH's obligations to the individual groups as of December 31, 2022, are shown in the following table:

IN € THOUSAND	12/31/2022	12/31/2021
Group 1	28,010	43,928
Group 3	8,014	10,659

Another category (Group 2) comprises employees of BP who were not taken on by H&R Ölwerke Schindler. For the people in Group 2, H&R Ölwerke Schindler has agreed to reimburse BP for the relevant pension obligations which remain with BP, in the amount of €6,787 thousand (previous year: €9,193 thousand). Pursuant to IAS 1.32, these commitments were netted against a receivable from BP arising from a reimbursement claim for pension commitments assumed amounting to €8,014 thousand (previous year: €10,659 thousand), which also arose as part of the takeover of the specialty business [see Note (9)]. The net receivable of €1,227 thousand (previous year: €1,466 thousand) is shown in receivables from BP under other non-current assets. The amount of the obligation may vary due to changes in actuarial assumptions.

The change in the liability under defined-plan benefits is shown below:

IN € THOUSAND	2022	2021
As of 1/1	**83,084**	**84,036**
Current service cost	716	733
Interest expense	888	905
Reassessments	-25,137	73
of which due to changes in financial assumptions	-20,110	349
of which due to empirical adjustments	-1,107	-276
of which due to demographic assumptions	-3,921	–
Payments made	-3,240	-3,258
Change to the scope of consolidation	–	595
As of 12/31	**56,311**	**83,084**

The plan assets of H&R KGaA consist of a reinsurance policy for the pension commitment to a former member of the Executive Board that has already been paid up in full and is measured at fair value. The plan assets are not listed on any active market. H&R KGaA does not have any specific risk exposure from these plan assets beyond the normal risk.

The following table shows the changes in the fair value of plan assets:

IN € THOUSAND	2022	2021
As of 1/1	**1,865**	**1,825**
Interest income	21	20
Reassessments	113	20
As of 12/31	**1,999**	**1,865**

The following table shows changes in the carrying amount of the net debt related to defined-benefit retirement plans:

IN € THOUSAND	2022	2021
As of 1/1	**81,219**	**82,211**
Current service cost	716	733
Interest expense	867	885
Payments made	-3,239	-3,258
Reassessments	-25,251	53
of which return on plan assets	-113	-20
of which due to changes in financial assumptions	-20,110	349
of which due to empirical adjustments	-1,107	-276
of which due to demographic assumptions	-3,921	–
Change to the scope of consolidation	–	595
As of 12/31	**54,312**	**81,219**

The following valuation parameters were used to determine the pension commitments:

	12/31/2022	12/31/2021
Interest rate	3.9%	1.1%
Salary trend	0.6%–3%	0.6%–2.8%
Pension trend	2.2%–2.5%	1.0%–2.0%
Retirement age	60–65	60–65

The likelihood of leaving is based on the 2018G Heubeck guideline tables. An age-dependent staff turnover probability has been built into the pension provision for employees of H&R Ölwerke Schindler GmbH; it was calculated by the independent expert using tables drawn up by internal experts. For employees at other sites, to simplify matters, by ignoring the likelihood of turnover, the assumption is made that no employee will leave the company before the vesting periods have been met and that thereafter the vested claim will be exactly financed by the existing provision in each case.

There were no plan changes, curtailments or settlements in financial year 2022.

Payments totaling €3,346 thousand are expected for the next financial year (previous year: €3,390 thousand). The average duration of the benefit obligations is 11.9 years.

If the indicators in the table below change as shown, this would cause the following changes in the pension commitment:

CHANGE IN PENSION OBLIGATIONS

		12/31/2022		12/31/2021	
	Change in parameter by	Change in obligation if increased in € thousand	Change in obligation if decreased in € thousand	Change in obligation if increased in € thousand	Change in obligation if decreased in € thousand
Change in discount rate	0.50%	-3,180	3,522	-6,000	6,802
Change in expected salary trend	0.50%	387	-371	860	-822
Change in expected pension trend	0.50%	733	-646	1,261	-1,136
Change in expected mortality	1 year	367	-403	-3,782	3,793

The above sensitivity analyses are based on the assumption of a change in one parameter while all other parameters remain constant. These are individual scenarios from a broad spectrum of possibilities, so the actual pension commitment trend will most certainly deviate from these forecasts. In addition, it is unlikely that only one parameter will change. In reality, several indicators can be expected to change and effect one another simultaneously. The same method used to calculate the benefit obligations reported on the statement of financial position was used in this sensitivity analysis. It is the same method as that which was used last year.

All pension plans within the H&R Group are closed; no new employees are admitted. There are active employees with a pension claim at the Hamburg and Salzbergen production sites and at GAUDLITZ Plastics Technologies GmbH & Co. KG.

(21) Subscribed Capital

As of the reporting date, the subscribed capital totaled €95,156 thousand as in the previous year, divided into 37,221,746 ordinary no-par bearer shares. This corresponds to a notional value of €2.56 per share (previous year: €2.56). There are no different classes of shares; all shares are ordinary shares. The subscribed capital was fully paid up. Each share conveys one voting right.

Approved Capital

The general partner with full personal liability is authorized – with the Supervisory Board's approval – to increase the company's share capital by May 23, 2027, by a maximum of €47.6 million by issuing new ordinary no-par bearer shares. The issue may be effected in one or more tranches in return for cash and/or contributions in kind (2022 Approved Capital). Within this context, the number of shares must increase in proportion to the share capital. In principle, shareholders must be granted a subscription right; however, the Executive Board may, with the Supervisory Board's approval, exclude the subscription right on one or more occasions under certain conditions.

(22) Capital Reserve

The capital reserve includes the amounts by which the proceeds from the issuance of preferred and ordinary shares exceed their face value. In the current financial year, the capital reserve amounts to €46,427 thousand (previous year: €46,427 thousand).

In 2017, the periods prior to the contribution of H&R China Holding to H&R KGaA in 2014 resulted in a tax expense of €864 thousand, which under the agreement relating to the contribution of capital (Einbringungsvertrag) was reimbursed by the seller and current minority shareholder and transferred to the capital reserve of China Holding GmbH. Of this amount, 51% was attributable to the shareholders of H&R KGaA; this led to a €440 thousand increase in the Group's capital reserve. The tax equalization payments made were refunded on the basis of the amended trade tax assessments for the years 2011 to 2016 available in 2021. The reimbursement led to a corresponding reduction in the Group's capital reserve in the previous year.

(23) Retained Earnings

On the reporting date, retained earnings totaled €272,789 thousand (previous year: €212,342 thousand). The reassessed net liability under defined benefit pension plans recorded under other comprehensive income totaled €-10,385 thousand (previous year: €-28,122 thousand). Other retained earnings totaled €2,293 thousand as of the reporting date (previous year: €2,293 thousand).

Dividend

At the Annual Shareholders' Meeting held on May 24, 2022, a decision was made not to pay a dividend for financial year 2021. The Executive Board and the Supervisory Board intend to propose to the Annual Shareholders' Meeting on May 23, 2023, that a dividend of €0.10 be distributed for each share for the financial year 2022, equating to a total amount of €3,722 thousand, and that, in addition, the distributable profit be carried forward. This proposal is subject to approval by the shareholders at the Annual Shareholders' Meeting.

(24) Other Reserves

The other reserves amount to €9,269 thousand (previous year: €8,676 thousand) and relate to cumulative other comprehensive income. They comprise the currency translation adjustment of €1,753 thousand (previous year: €2,861 thousand) and the difference resulting from the fair value measurement of equity instruments of €3,172 thousand (previous year: €5,834 thousand) and the reserve from cash flow hedging (€4,344 thousand, previous year: €-19 thousand).

(25) Non-Controlling Interests

Non-controlling interests include shares of earnings and capital held by shareholders outside the Group. During the reporting period these changed as follows:

IN € THOUSAND	2022	2021
As of 1/1	**45,875**	**39,299**
Currency translation differences	-1,006	4,641
Capital reduction	–	-423
Proportionate share of net profit or loss	2,654	2,358
As of 12/31	**47,523**	**45,875**

Most of the non-controlling interests are attributable to H&R China Holding GmbH and its subsidiaries. The non-controlling interest in H&R China Holding GmbH totals 49%.

The table below shows a summary of financial data for the H&R China Group:

IN € THOUSAND	12/31/2022	12/31/2021
Current assets	97,380	90,936
Non-current assets	41,560	46,358
Current liabilities	39,457	40,565
Non-current liabilities	2,439	3,013
Cumulative equity	**97,044**	**93,716**
of which proportionate share of net assets of non-controlling interests	**47,552**	**45,921**

IN € THOUSAND	2022	2021
Income	237,936	199,624
Expenses	-232,554	-194,818
Profit/loss	**5,382**	**4,806**
of which proportionate share in income of non-controlling interests	2,637	2,354
Other comprehensive income	**-2,055**	**9,474**
of which other comprehensive income of non-controlling interests	-1,006	4,641
Total comprehensive income	**3,327**	**14,280**
of which non-controlling interests' proportionate share of total comprehensive income	1,631	6,996
Cash flow from operating activities	**4,929**	**-8,252**
of which proportionate share of cash flow from operating activities of the non-controlling interests	2,415	-4,043
Cash flow from investing activities	**-1,531**	**-1,040**
of which proportionate share of cash flow from investing activities of non-controlling interests	-750	-510
Cash flow from financing activities	**1,382**	**2,369**
of which proportionate share of cash flow from financing activities of non-controlling interests	677	1,161

Notes to the Consolidated Income Statement

(26) Research and Development Costs

In financial year 2022, research and development activities in the Chemical-Pharmaceuticals division focused on the continued improvement of product quality in the product areas of formulated oils, paraffins and white oils. Research and development costs were incurred in the Plastics division for testing and experiments on new materials in the plastics area as well as research relating to the possibility of the increased use of plastic parts in various sectors.

In the current financial year, expenses in this area totaled €2,030 thousand (previous year: €2,520 thousand). For further information regarding research and development costs, please consult the pertinent section in the combined management report.

27) Sales Revenue

Segment reporting gives an overview of the trend in sales revenue by division, type of product and geographical segment [see Note (36)].

No contractual costs or contractual performance costs were capitalized.

(28) Other Operating Income

IN € THOUSAND	2022	2021
Exchange rate gains from foreign currency items	13,190	6,233
Income from cost transfers	9,024	7,011
Income from services	7,996	3,798
Income from the reversal of provisions	2,658	948
Own work capitalized	613	1,015
Income from the disposal of intangible assets	40	592
Income from insurance compensation	14	5,705
Miscellaneous	3,601	4,261
Total	**37,136**	**29,563**

Income from cost transfers results mainly from the reinvoicing of consumption taxes, project-related costs and current costs to the companies in which there is a participating interest, Westfalen Chemie KG and SRS EcoTherm GmbH. Income from insurance compensation in the previous year primarily relates to compensation paid out as a result of the fire at our Salzbergen site in financial year 2020. Income from services mainly refers to IT services provided.

(29) Cost of Materials

IN € THOUSAND	2022	2021
Raw materials	939,015	665,538
Auxiliary and production materials	20,124	17,992
Products for sale	231,687	165,501
Cost of raw materials, auxiliary and production materials and merchandise purchased	**1,190,826**	**849,031**
Energy costs	80,466	50,386
Other external services	2,666	2,176
Total expenditures on purchased services	**83,132**	**52,562**
Total	**1,273,958**	**901,593**

(30) Personnel Expenses

IN € THOUSAND	2022	2021
Wages and salaries	84,105	83,930
Social security payments	13,425	12,775
Defined-benefit pension plan expenses	723	1,067
Defined-contribution pension plan expenses	661	555
Other social security expenses	649	896
Total	**99,563**	**99,223**

Amounts arising from compounding the interest on personnel provisions, particularly pension provisions, are not reported as personnel expenses. They are reported as part of the financial income under net interest income.

AVERAGE NUMBER OF EMPLOYEES

	2022	2021
ChemPharm Refining	511	713
ChemPharm Sales	723	463
Plastics	316	350
Other	71	68
Total	**1,621**	**1,594**

(31) Other Operating Expenses

IN € THOUSAND	2022	2021
Freight costs, dispatch systems and other distribution costs	40,163	30,827
Third-party goods and services	26,982	22,826
Third-party repairs and maintenance	18,553	16,322
Exchange rate loss from foreign currency items	14,682	6,056
Insurance premiums, fees and contributions	8,874	7,002
Cost transfers	8,152	3,787
Legal and consulting fees, expenses for annual financial statements and Annual Shareholders' Meeting	5,330	5,794
IT costs	4,717	4,898
Other personnel expenses	2,483	2,415
Other taxes	2,233	1,934
Expenses for short-term leases and leases of low-value assets	2,060	1,107
Commission	2,044	1,678
Travel expenses	1,090	600
Miscellaneous	12,791	10,376
Total	**150,154**	**115,622**

(32) Financial Income

IN € THOUSAND	2022	2021
Interest income from short-term bank deposits	236	262
Income from loans	19	19
Other interest and similar income	–	425
Total interest income	**255**	**706**
Miscellaneous financing income	–	1
Other financing income	**–**	**1**
Financing income	**255**	**707**

(33) Financing Expenses

IN € THOUSAND	2022	2021
Interest expense relating to loan interest	4,036	3,713
Interest expense relating to lease liabilities	1,205	1,174
Interest expense from the compounding of pension provisions	867	885
Commitment commission	731	580
Other interest and similar expenses	945	1,449
Total interest expense	**7,784**	**7,801**
Impairment of holdings valued at equity	–	1,130
Total other financing expenses	**–**	**1,130**
Financing expenses	**7,784**	**8,931**

Further information on leases can be found in Notes (39).

(34) Income Taxes

Since January 1, 2009, the net income of German companies has been subject to a uniform corporation tax rate of 15% plus a solidarity surcharge of 5.5%. In conjunction with a trade tax burden of 14.09% (previous year: 14.09%), this amounts to a combined income tax rate for the Group in Germany of 29.91% (previous year: 29.91%). As in the previous year, income tax rates for significant companies abroad are between 17% and 30%. Any interest on tax arrears is reported under interest expense. Deferred income tax expense includes changes in deferred tax assets and liabilities.

Income taxes paid or owed in individual countries as well as tax accruals and deferrals are shown as income taxes.

These can be broken down as follows:

IN € THOUSAND	2022	2021
Current income tax expenses	-13,610	-11,487
Current income tax refunds	203	1,199
Total current taxes	**-13,407**	**-10,288**
Deferred taxes from temporary differences	138	-936
Deferred taxes from loss carryforwards	-3,396	-9,600
Total deferred taxes	**-3,258**	**-10,536**
Total	**-16,665**	**-20,824**

Current income tax expenses fell by €4,914 thousand in the financial year (previous year: €10,058 thousand) due to the utilization of loss carryforwards.

In accordance with IAS 12.34, a deferred tax asset is recognized for a tax loss carryforward available as of the reporting date if it is considered probable that there will be sufficient future taxable profit against which the loss carryforward can be utilized. At H&R KGaA, domestic tax loss carryforwards led to the recognition of €81 thousand (previous year: €4,352 thousand) in deferred taxes, with €1,106 thousand (previous year: €231 thousand) being recognized for foreign tax loss carryforwards. Overall, in Group companies that reported a loss in the previous year or the current year, a surplus of deferred tax assets totaling €849 thousand was recognized (previous year: €4,761 thousand). Recognition of the deferred tax assets is justified due to the fact that positive tax income is expected in the future due, among other things, to new corporate strategies, which will exceed the impact on earnings caused by the reversal of the temporary differences.

In addition to the deferred tax assets recognized for loss carryforwards, there are also domestic corporation tax losses in the amount of €2,475 thousand (previous year: €1,855 thousand) and trade tax losses of €2,648 thousand (previous year: €1,823 thousand), the realization of which is not sufficiently guaranteed and for which therefore no deferred tax claims have been recognized. Based on current laws, the loss carryforwards cannot expire. As of the reporting date, foreign loss carryforwards for which no deferred tax assets have been recognized totaled €701 thousand (previous year: €9,119 thousand) and essentially may be utilized without restriction within one to five years. No deferred tax claims were recognized for deductible temporary differences totaling €3,560 thousand (previous year: €4,656 thousand).

Deferred tax assets of €7,171 thousand were reversed for the remeasurement of defined-benefit pension plans (previous year: €296 thousand) and were recognized in other comprehensive income. This includes €1 thousand in reversals of deferred tax assets whose recoverability can no longer be guaranteed (previous year: €459 thousand). The change in equity instruments measured at fair value through other comprehensive income led to a change in the deferred taxes recognized in other comprehensive income (with no effect on profit or loss) in the amount of €40 thousand (prior year: €4 thousand). Expenses related to changes in deferred tax assets of €1,862 thousand (previous year: €8 thousand) were recognized in other comprehensive income in connection with cash flow hedges.

For €9,219 thousand in temporary differences in the retained earnings of subsidiaries (previous year: €12,653 thousand), no deferred tax liabilities were recognized because of existing control in accordance with IAS 12.39.

The expected income tax expense and the reported income tax expense can be reconciled as follows:

IN € THOUSAND	2022	2021
Earnings before income tax	**62,029**	**73,358**
Theoretical income tax rate: 29.91% (previous year: 29.91%)	**18,554**	**21,940**
Effects from tax rate differences	-1,644	-1,492
Effects from previous years' taxes	-2,107	-555
Non-deductible expenses	1,279	689
Tax-free income	-476	-580
Foreign withholding tax	163	126
Effects from changes in tax rates	120	-287
Unrecognized deferred tax assets for loss carryforwards	303	453
Effects from holdings valued at equity	200	467
Other tax effects	273	63
Income tax expense as per consolidated income statement	**16,665**	**20,824**

The deferred tax items were attributable to the following individual statement of financial position items:

IN € THOUSAND	12/31/2022 Deferred tax assets	12/31/2022 Deferred tax liabilities	12/31/2021 Deferred tax assets	12/31/2021 Deferred tax liabilities
Intangible assets	3	3,165	13	2,775
Property, plant and equipment	1,033	32,343	506	32,458
Financial assets	57	3,452	88	439
Inventories	2,321	–	721	47
Receivables and other assets	157	78	220	154
Pension provisions	3,913	–	10,899	–
Other provisions	626	28	949	12
Liabilities	20,708	557	20,812	286
Tax loss carryforwards	1,187	–	4,583	–
Total	**30,005**	**39,623**	**38,791**	**36,171**
Netting	-26,903	-26,903	-32,569	-32,569
Total	**3,102**	**12,720**	**6,222**	**3,602**

(35) Earnings per Share

Earnings per share are calculated according to IAS 33 by dividing consolidated income by the average number of outstanding ordinary shares during the reporting period.

The number of ordinary shares in circulation is 37,221,746, as in the previous year.

Accordingly, the earnings per share figure is calculated as follows:

	2022	2021
Consolidated income attributable to shareholders in € thousand	42,710	50,176
Average number of shares in circulation	37,221,746	37,221,746
Earnings per ordinary share (undiluted) in €	1.15	1.35
Earnings per ordinary share (diluted) in €	1.15	1.35

The diluted earnings per share ratio is equal to the basic earnings per share ratio, because H&R KGaA has not issued any potentially dilutive equity instruments.

Additional Notes

(36) Segment Reporting

The business segments subject to reporting requirements under IFRS 8 were identified on the basis of the divisions monitored in the internal reporting system, whose performance data form the basis for management decisions.

The aggregation of business segments subject to separate, internal reporting is performed in accordance with IFRS 8.12, which stipulates that all of the following must be comparable within each segment: the nature of products and services; the types of production processes; the class or category of customers for products and services as well as the methods used to market products and services.

The ChemPharm Refining segment includes both of the chemical production sites in Germany, whose production processes, organizational structures and distribution networks are closely interlinked. This segment's core products are paraffins, white oils, plasticizers, base oils, lubricants and other crude-oil-based specialty products. In addition to bitumen, by-products of the production process include feedstocks and bunker fuel. Revenue was achieved from contract manufacturing as part of this production process.

The ChemPharm Sales segment encompasses foreign companies that process chemical-pharmaceutical raw materials and distribute these new products and other products for sale. These are mainly paraffins, plasticizers, wax emulsions and other crude-oil-based specialty products.

The Plastics division develops, manufactures and sells high-precision plastic parts produced using the injection molding method.

Other activities are those associated with non-operating companies, as well as segments exempt from mandatory reporting. This includes H&R KGaA, which as the holding company is responsible for the strategic leadership of the Group companies comprising the various segments and for deciding how to efficiently allocate funds within the Group. The Other Activities segment also generates income from IT services.

	Chemical-Pharmaceutical Raw Materials			
	ChemPharm Refining		ChemPharm Sales	
IN € THOUSAND	2022	2021	2022	2021
External sales	1,000,408	732,639	526,673	412,042
Consolidated sales	20,197	12,656	61	138
Sales revenue by segment	1,020,605	745,295	526,734	412,180
Depreciation and amortization	-39,496	-36,664	-11,111	-9,983
of which impairments	–	–	-864	–
Interest income	93	148	227	590
Interest expense	-5,694	-5,358	-3,193	-2,269
Earnings before income tax	47,561	61,571	19,342	17,383
EBIT	53,161	66,780	22,308	19,062
EBITDA	92,657	103,444	33,419	29,045
Capital expenditure	62,061	47,328	9,278	14,918
Income from holdings valued at equity	328	192	–	–
Shares in holdings valued at equity	1,402	1,074	–	–

The list of shareholdings shows which segment each Group company belongs to.

The segments' operating performance and further information on their products are described in the combined management report.

Remarks Concerning Segment Data
Intercompany sales indicate the level of sales between the segments. Sales and revenues between the segments are always accounted for on an arm's-length basis. The segment sales figure is equal to the sum of external and internal sales.

The column "Consolidation/reconciliation" contains eliminations of all intragroup transactions as well as intradivisional receivables and payables.

The valuation principles for H&R KGaA's segment reporting are based on the IFRS guidelines applied in the consolidated financial statements. The geographical distribution of external sales is calculated according to the locations of the respective customers. The assets and investments are assigned to the regions on the basis of the company's domicile.

Plastics							
Plastics		Other activities		Consolidation/ Reconciliation		Total	
2022	2021	2022	2021	2022	2021	2022	2021
48,962	43,753	–	–	–	–	1,576,043	1,188,434
–	–	–	–	-20,258	-12,794	–	–
48,962	43,753	–	–	-20,258	-12,794	1,576,043	1,188,434
-2,378	-2,543	-2,337	-1,750	–	–	-55,322	-50,940
–	–	-312	–	–	–	-1,176	–
10	7	5,273	4,255	-5,348	-4,293	255	707
-355	-433	-3,902	-4,035	5,360	4,293	-7,784	-7,802
2,311	885	-6,138	-6,552	-1,047	71	62,029	73,358
2,656	1,311	-7,508	-5,642	-1,059	71	69,558	81,582
5,034	3,854	-5,171	-3,892	-1,059	71	124,880	132,522
5,721	1,742	2,170	3,969	–	–	79,230	67,957
–	–	-996	-329	–	–	-668	-137
–	–	2,860	1,356	–	–	4,262	2,430

H&R KGaA generated €782.2 million in sales (previous year: €566.1 million), or more than 10% of consolidated sales, with one customer in the ChemPharm Refining segment. The following table shows how external sales revenue is broken down by region, products and services:

IN € THOUSAND	ChemPharm Refining		ChemPharm Sales		Plastics		Other		Total	
	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021
Germany	848,412	647,306	15,988	9,806	11,446	13,100	–	–	875,846	670,212
Rest of Europe	140,454	77,147	58,127	39,362	18,271	14,123	–	–	216,852	130,632
Rest of world	11,542	8,186	452,558	362,874	19,245	16,530	–	–	483,345	387,590
Total	**1,000,408**	**732,639**	**526,673**	**412,042**	**48,962**	**43,753**	**–**	**–**	**1,576,043**	**1,188,434**
Chemical-pharmaceutical products – core products	499,835	401,016	526,118	411,662	–	–	–	–	1,025,953	812,678
Chemical-pharmaceutical products – by-products	393,950	241,393	555	380	–	–	–	–	394,505	241,773
Precision plastics	–	–	–	–	48,912	43,702	–	–	48,912	43,702
Provision of services	106,623	90,230	–	–	50	51	–	–	106,673	90,281
Total	**1,000,408**	**732,639**	**526,673**	**412,042**	**48,962**	**43,753**	**–**	**–**	**1,576,043**	**1,188,434**

The following table shows how non-current assets are broken down by region:

NON-CURRENT ASSETS

IN € THOUSAND	2022	2021
Germany	399,433	378,778
Rest of Europe	14,095	9,677
Rest of world	73,319	76,400
of which China	43,059	49,046
Group	**486,847**	**464,855**

RECONCILIATION OF OPERATING INCOME TO CONSOLIDATED INCOME

IN € THOUSAND	2022	2021
Operating income (EBITDA) of H&R KGaA	**124,880**	**132,522**
Depreciation, amortization and impairments of intangible assets and property, plant and equipment	-55,322	-50,940
Financing income	255	707
Financing expenses	-7,784	-8,931
Income taxes	-16,665	-20,824
Consolidated income	**45,364**	**52,534**

(37) Notes to the Consolidated Cash Flow Statement

The cash flow statement has been prepared in accordance with the requirements of IAS 7. It shows the origin and use of cash flows.

The statement of cash flows divides the payment streams into three areas: cash flow from operating activities, cash flow from investing activities and cash flow from financing activities.

Cash and cash equivalents include bank balances, cash in hand, and checks, which are identified on the statement of financial position. As of December 31, 2022, €1,797 thousand (previous year: €1,693 thousand) was recognized as cash and cash equivalents; this was deposited in pledged accounts as collateral and therefore subject to access restrictions.

Non-cash operating expenses and earnings and gains from disposals of property, plant and equipment are eliminated from cash flow from operating activities. Interest received, interest paid and income taxes paid and received are allocated to this area. Cash flow from operating activities is calculated using the indirect method.

Cash flow from investing activities includes cash investments in intangible assets, property, plant and equipment and financial investments.

Cash flow from financing activities includes new borrowings, repayments of financial liabilities and advance payments received from customers, as well as dividend payments.

For additions to fixed assets in the amount of €6,752 thousand (previous year: €5,896 thousand) no cash outflow took place; trade payables in the same amount therefore exist.

CHANGE IN LIABILITIES FROM FINANCING ACTIVITIES

IN € THOUSAND	Liabilities to banks	Advance payments received	Lease liabilities	Total
1/1/2021	**130,455**	**2,210**	**47,065**	**179,730**
Changes affecting cash flow				
Repayments	-185,623	–	-10,929	-196,552
Borrowings	195,195	3,679	–	198,874
Non-cash changes				
Leasing costs	–	–	18,158	18,158
Changes due to fluctuations in exchange rates	2,149	181	210	2,540
Change in accrued/deferred interest	-401	–	–	-401
Netting against trade receivables	–	-2,391	–	-2,391
12/31/2021	**141,775**	**3,679**	**54,504**	**199,958**
Changes affecting cash flow				
Repayments	-206,359	–	-11,713	-218,072
Borrowings	257,067	2,519	–	259,586
Non-cash changes				
Leasing costs	–	–	9,502	9,502
Changes due to fluctuations in exchange rates	-535	-2	-59	-596
Change in accrued/deferred interest	59	–	–	59
Netting against trade receivables	–	-3,677	–	-3,677
12/31/2022	**192,007**	**2,519**	**52,234**	**246,760**

The general form in which the statement of cash flows is presented and the reporting options are exercised has not changed since the previous period.

(38) Financial Instruments

(38.1) General Information

The fair values of financial assets are derived from stock market prices or are calculated on the basis of recognized valuation methods. In the case of other financial assets, it is assumed that the fair value is equal to the carrying amount. The carrying amount of the financial assets corresponds to the maximum default risk. If default risks of financial assets can be identified, such risks are recognized in the form of impairment losses.

On the liabilities side, financial instruments mainly include liabilities measured at amortized cost.

As an international company, H&R KGaA is exposed to risks relating to prices of commodities and raw materials, currency fluctuations, and changes in interest rates in the course of its ordinary business activities. Details concerning the risk management system used to deal with these risks can be found in Note (47), Risk Management Policy, Capital Management and Hedging Measures.

(38.2) Information Concerning Derivatives

Derivative financial instruments are employed to hedge currency fluctuations and raw materials price risks from the operating business. The types of instruments employed are primarily currency forward contracts and raw material price hedging contracts (swaps). The latter are designated as cash flow hedges. Within the scope of raw material price hedging, only those risk components are included that relate to the Brent or Platts Fuel Oil listing. The starting point for the analysis of the raw materials price risk are the planned purchases of raw materials, as well as planned sales of products, the sale prices of which also depend on raw materials market prices. The average prices secured under raw material price hedges over the financial year were US$ 63.69 per barrel of Brent Crude (previous year: US$ 63.69 per barrel) and US$ 340.02 per metric ton in relation to Platts fuel oil assessments (previous year: US$ 340.02 per metric ton).

Other comprehensive income from cash flow hedges went up by €6,225 thousand (previous year: €-27 thousand) due to changes to the fair market values of the derivatives, the amounts transferred in the income statement and the basis adjustments. In financial year 2022, the income from financial instruments measured at fair value through profit or loss totaled €15 thousand (previous year: €23 thousand).

The following table shows the development of the reserve for cash flow hedges from raw material price hedging contracts:

DEVELOPMENT OF THE RESERVE FOR CASH FLOW HEDGES

IN € THOUSAND	2022	2021
As of 1/1	**-27**	**–**
Changes in fair value	15,172	1,051
Amount transferred to the income statement	15,775	3,242
Amount transferred to inventories	-24,723	-4,320
As of 12/31	**6,197**	**-27**

As in the previous year, no inefficiencies due to cash flow hedges occurred in the reporting year.

The following tables show the reported fair values of the derivative financial instruments as of December 31, 2022, and December 31, 2021.

NOMINAL AND MARKET VALUES OF DERIVATIVES IN 2022

			Fair values	
IN € THOUSAND	Nominal value	Maturity	positive	negative
Raw material price hedging contracts	89,977	until 2023	9,516	-3,113
Currency forward contracts	20,130	until 2023	155	-140

NOMINAL AND MARKET VALUES OF DERIVATIVES IN 2021

			Fair values	
IN € THOUSAND	Nominal value	Maturity	positive	negative
Raw material price hedging contracts	76,212	until 2022	8,042	-7,447
Currency forward contracts	16,864	until 2022	9	-49

The nominal value shows the gross volume. Positive market values are recognized under other financial assets and negative market values under other financial liabilities.

(38.3) Maturity Analysis

H&R KGaA's liquidity risk consists of contractually agreed obligations to make future interest and redemption payments on financial liabilities and derivative financial instruments.

The maturities of these undiscounted payment streams are shown in the table below:

2022

IN € THOUSAND	Carrying amount	2023	2024	2025–2027	2028–2032	2033 and later
Liabilities to banks	192,007	132,011	15,945	38,366	14,660	–
Lease liabilities	52,234	11,624	9,833	14,496	11,083	11,319
Liabilities arising from derivatives with hedge accounting items	3,113	3,113	–	–	–	–
Liabilities arising from derivatives without hedge accounting items	140	140	–	–	–	–
Other financial liabilities	445	379	66	–	–	–

2021

IN € THOUSAND	Carrying amount	2022	2023	2024–2026	2027–2031	2032 and later
Liabilities to banks	141,775	55,413	48,653	38,676	2,216	–
Lease liabilities	54,504	10,072	8,841	18,601	11,038	13,600
Liabilities arising from derivatives with hedge accounting items	7,447	7,447	–	–	–	–
Liabilities arising from derivatives without hedge accounting items	49	49	–	–	–	–
Other financial liabilities	389	302	87	–	–	–

(38.4) Information on Categories of Financial Instruments

According to IFRS 7, financial assets and liabilities have to be grouped in such a way that a distinction can be made between financial instruments stated at fair value and those valued at amortized cost.

The table below shows the carrying amounts of the separate financial assets and liabilities for each category of financial instrument.

IN € THOUSAND	Valuation category according to IFRS 9	12/31/2022 Carrying amount	12/31/2022 Fair value (for information)	12/31/2021 Carrying amount	12/31/2021 Fair value (for information)
Financial assets					
Cash and cash equivalents	Measured at amortized cost	55,997	55,997	48,924	48,924
Trade receivables	Measured at amortized cost	120,934	120,934	119,300	119,300
Trade receivables	Measured at fair value through profit or loss	3,493	3,493	6,334	6,334
Other financial assets					
Financial investment in equity instruments	Measured at fair value through other comprehensive income	4,269	4,269	6,971	6,971
Derivatives with hedge accounting item	Measured at fair value through other comprehensive income	9,516	9,516	8,042	8,042
Derivatives without hedge accounting item	Measured at fair value through profit or loss	155	155	9	9
Other current securities	Measured at fair value through profit or loss	31	31	41	41
Other financial assets	Measured at amortized cost	18,796	18,796	16,992	16,992
Financial liabilities					
Trade payables	Measured at amortized cost	99,392	99,392	94,625	94,625
Liabilities to banks	Measured at amortized cost	192,007	189,412	141,775	141,883
Other financial liabilities					
Lease liabilities	Measured at amortized cost	52,234	52,234	54,504	54,504
Derivatives with hedge accounting items	Measured at fair value through other comprehensive income	3,113	3,113	7,447	7,447
Derivatives without hedge accounting item	Measured at fair value through profit or loss	140	140	49	49
Miscellaneous financial liabilities	Measured at amortized cost	445	445	389	389

Since trade receivables, trade payables, other financial assets, other financial liabilities and cash and cash equivalents generally have short-term maturities, their carrying amounts do not deviate significantly from their fair values on the reporting date. The fair values of other long-term receivables and payables with remaining maturities of more than one year are equal to the present value of the payments associated with the assets and are subject to the relevant current discount rates.

Net Results by Valuation Category.
The expenses, income, gains and losses from financial instruments can be broken down into the following categories:

2022

IN € THOUSAND	Financial assets measured at amortized cost	Financial liabilities measured at amortized cost	Financial instruments measured at fair value through other comprehensive income	Financial instruments measured at fair value through profit or loss	Total
Interest income	250	–	–	–	250
Interest expense	–	-5,079	–	-474	-5,553
Impairment/ reversals of impairments	-54	–	–	–	-54
Fees recorded as expenses	–	-1,303	–	–	-1,303
Other financial expenses/income	–	–	3,728	19	3,747
Net income/loss	**196**	**-6,382**	**3,728**	**-455**	**-2,913**

2021

IN € THOUSAND	Financial assets measured at amortized cost	Financial liabilities measured at amortized cost	Financial instruments measured at fair value through other comprehensive income	Financial instruments measured at fair value through profit or loss	Total
Interest income	380	–	–	–	380
Interest expense	–	-5,003	–	-350	-5,353
Impairment/ reversals of impairments	279	–	–	–	279
Fees recorded as expenses	–	-1,233	–	–	-1,233
Other financial expenses/income	–	–	-293	24	-269
Net income/loss	**659**	**-6,236**	**-293**	**-326**	**-6,196**

Interest expenses of financial liabilities measured at amortized cost exclusively include effects from using the effective-interest method. €4,334 thousand of income and expenses from financial instruments measured at fair value through other comprehensive income relate to liabilities arising from derivatives with hedge accounting items. €2,096 thousand relate to assets arising from derivatives with hedge accounting items, with €-2,702 thousand relating to valuation effects arising from an equity instrument.

(38.5) Additional Disclosures on Financial Instruments

At the first level, fair value measurement is based on quoted prices in active markets for identical assets or liabilities. If this is not possible, second-level measurement is based on observable market transactions for comparable assets or liabilities. At the third level, fair values are measured by models that use parameters that are based on non-observable market data to value assets and liabilities.

The financial instruments of H&R KGaA measured at fair value are allocated to the levels described above by category as follows:

12/31/2022

IN € THOUSAND	Level 1	Level 2	Level 3
ASSETS			
Financial assets measured at fair value through other comprehensive income	–	–	4,269
Financial assets measured at fair value through profit or loss	3,524	–	–
Derivatives with hedge accounting item	–	9,516	–
Derivatives without hedge accounting item	–	155	–
Total	**3,524**	**9,671**	**4,269**
LIABILITIES AND SHAREHOLDERS' EQUITY			
Derivatives with hedge accounting item	–	3,113	–
Derivatives without hedge accounting item	–	140	–
Total	**–**	**3,253**	**–**

12/31/2021

IN € THOUSAND	Level 1	Level 2	Level 3
ASSETS			
Financial assets measured at fair value through other comprehensive income	–	–	6,971
Financial assets measured at fair value through profit or loss	6,375	–	–
Derivatives with hedge accounting item	–	8,042	–
Derivatives without hedge accounting item	–	9	–
Total	**6,375**	**8,051**	**6,971**
LIABILITIES AND SHAREHOLDERS' EQUITY			
Derivatives with hedge accounting item	–	7,447	–
Derivatives without hedge accounting item	–	49	–
Total	**–**	**7,496**	**–**

Derivatives with hedge accounting item include financial instruments for hedging raw materials price risks. The fair value of these Level 2 commodity derivatives is determined as the present value of the expected cash flows from these contracts. The calculation of the expected cash flows of the commodity derivatives takes place on the basis of the forward price curves for liquid oil futures/forwards, which are adjusted by markups for deviating delivery locations/qualities. The discounting takes place using market-driven interest rates.

The Level 2 derivatives without hedge accounting item relate to currency forward contracts, which are recognized at fair value. The fair values are determined using observable market interest rate curves. Further information about derivatives can be found in Note (38.2).

The Level 3 financial asset relates to an equity instrument measured at fair value through other comprehensive income. The measurement is completed using the discounted cash flow method on the basis of the best information available on the reporting date, with a weighted average cost of capital of 4.25% (previous year: 4.25%) used as a basis. A 10% decrease in expected future cash flows would result in a reduction in equity of €452 thousand (previous year: €724 thousand) as of the balance sheet date, while a 10% increase in the cost of capital would result in a reduction in equity of €404 thousand (previous year: €132 thousand).

The following table shows the allocation of the financial instruments' fair values, which are reported on the statement of financial position at their carrying amounts, to the different levels:

ALLOCATION OF FAIR VALUES OF FINANCIAL INSTRUMENTS

IN € THOUSAND	12/31/2022			12/31/2021		
	Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
Liabilities and shareholders' equity						
Liabilities to banks	–	189,412	–	–	141,883	–

The fair values are determined using observable market interest rate curves. The expected cash flows were discounted accordingly.

Financial assets and financial liabilities are not offset, apart from the reimbursement right against BP (see Notes (9) and (20)), since no such offset agreements exist. There were no reclassifications among the individual levels in financial year 2022.

In the operating business, the outstanding balances are continuously monitored at the divisional level, i.e., locally. Insofar as the Hansen & Rosenthal Group handles sales and distribution, details are also integrated into its monitoring systems. Default risks are addressed through accounting for risk prevention. Non-recoverable receivables are derecognized and the impairment is reversed. When a doubtful receivable is collected, the previous impairment is reversed. The maximum default risk is reflected in the carrying amounts of the financial assets reported on the statement of financial position, including free-standing derivatives with a positive market value. As of the reporting date, there were no material agreements in place that reduce the maximum default risk.

(39) Leases

The right-of-use assets recognized in the balance sheet relate, in particular, to longer-term leases for land and buildings, as well as for the rental of tank capacities and tank wagons. The lease agreements are negotiated individually and contain various different conditions.

Property, plant and equipment includes right-of-use assets under leases as follows:

RIGHT-OF-USE ASSETS UNDER LEASES

IN € THOUSAND	12/31/2022	12/31/2021
Land/buildings	28,390	30,455
Technical equipment/ machinery	24,582	25,045
Other facilities/operating and office equipment	3,000	3,764
Total	**55,972**	**59,264**

The additions to right-of-use assets amounted to €8,452 thousand (previous year: €17,480 thousand) in the financial year 2022.

Depreciation and amortization on right-of-use assets is comprised as follows:

DEPRECIATION AND AMORTIZATION ON RIGHT-OF-USE ASSETS UNDER LEASES

IN € THOUSAND	2022	2021
Land/buildings	2,907	2,397
Technical equipment/ machinery	6,678	6,338
Other facilities/operating and office equipment	1,809	1,831
Total	**11,394**	**10,566**

The amortization of right-of-use assets is included in the depreciation, impairments and amortization of intangible assets item in the income statement.

The following table shows liabilities from leases:

LIABILITIES FROM LEASES

IN € THOUSAND	12/31/2022	12/31/2021
Current lease liabilities	11,209	9,953
Non-current lease liabilities	41,025	44,551
Total	**52,234**	**54,504**

The following table shows the contractually agreed undiscounted cash outflows:

MATURITIES OF LEASE PAYMENTS

IN € THOUSAND	12/31/2022	12/31/2021
Up to one year	11,624	10,072
One to five years	24,328	27,441
> five years	22,402	24,638
Total	**58,354**	**62,151**

Lease liabilities amounting to €11,713 thousand were repaid in the 2022 financial year (previous year: €10,929 thousand).

The following amounts in relation to leases were recognized in the income statement, in addition to amortization on right-of-use assets under leases:

P&L EFFECT FROM LEASES

IN € THOUSAND	2022	2021
Interest expense	1,205	1,174
Expenses for short-term leases	1,671	761
Expenses for low-value leases	390	347
Total	**3,266**	**2,282**

Prospective future cash outflows in the amount of €1,637 thousand (previous year: €3,622 thousand) exist from leases already entered into as of the reporting date, which begin after December 31, 2022, and are not short-term leases.

(40) Other Financial Liabilities

Other financial liabilities comprise order commitments for investments in the amount of €18,408 thousand (previous year: €15,444 thousand) and other financial liabilities in the amount of €6,978 thousand (previous year: €4,692 thousand).

(41) Contingent Liabilities and Receivables

On the reporting date, H&R KGaA had joint liability for pension commitments totaling €24 thousand (previous year: €28 thousand).

A portion of the production sites is rented. Obligations to clean up and restore the property to its original condition will apply when the rental agreement expires. In the very unlikely event that a lessor gives notice of extraordinary termination or does not renew the long-term rental agreement, this would give rise to claims against the lessor for compensation; in this case no cash outflow would be anticipated and therefore no provision has been set up to cover the obligations to restore the property to its original condition. This situation is regularly monitored by the management.

To supply the refinery in Salzbergen with power and steam, H&R CPS (company)/its legal predecessors had a proportional right-of-use to the generation capacity of the industrial power plant with power until the end of 2018. The transmission grid operator, on the other hand, assumes that SRS Ecotherm GmbH (SRS) has been operating the industrial power plant in the energy industry sense since January 1, 2003, and that SRS was therefore supplying the company with electricity subject to an EEG [Renewable Energy Sources Act] levy.

A settlement was reached between SRS and the transmission grid operator in according to Section 104, paragraph 4 of the EEG 2021 in the 2021 financial year. The financial impact of this settlement as of the reporting date was reflected in the balance sheet. No further material financial impact is expected.

(42) Governance Bodies of H&R GmbH & Co. KGaA

EXECUTIVE BOARD OF H&R KOMPLEMENTÄR GMBH

	Membership of Supervisory and Advisory Boards
Niels H. Hansen Sole Member of the Executive Board, Hamburg	–

SUPERVISORY BOARD OF H&R GMBH & CO. KGAA

	Membership of Supervisory and Advisory Boards
Dr. Joachim Girg Chairman of the Supervisory Board Managing Director of H&R Beteiligung GmbH, Hamburg	–
Roland Chmiel Deputy Chairman – CPA/Chartered Accountant, Munich	Member of the Supervisory Board of TW Beteiligung AG, Munich
Sven Hansen Managing Partner of the H&R Group, Managing Director of Tudapetrol Mineralölerzeugnisse Nils Hansen KG	–
Dr. Rolf Schwedhelm Tax lawyer and partner at Streck Mack Schwedhelm, Cologne	Chairman of the Supervisory Board of German Lawyer Academy Society for Education, Training and Services (Deutsche Anwalt Akademie Gesellschaft für Aus- und Fortbildung sowie Serviceleistungen mbH), Berlin
Sabine U. Dietrich Chartered engineer, Mülheim an der Ruhr Member of the Supervisory Board of MVV Energie AG, Mannheim	Member of the Supervisory Board of Commerzbank Aktiengesellschaft, Frankfurt am Main
Dr. Hartmut Schütter Chartered process engineer, freelance consultant, Schwedt/Oder	–

SUPERVISORY BOARD OF H&R GMBH & CO. KGAA (EMPLOYEE REPRESENTATIVES)

	Membership of Supervisory and Advisory Boards
Patrick Ewels (from May 24, 2022) Group works council chairman of H&R GmbH & Co. KGaA, works council chairman H&R ChemPharm GmbH, Salzbergen	–
Dominik Franz (from May 24, 2022) Group works council chairman of GAUDLITZ GmbH and GAUDLITZ Plastic Technologies GmbH & Co. KG, Coburg	–
Thomas Merting (from May 24, 2022) Employee of H&R ChemPharm GmbH, Salzbergen	–
Reinhold Grothus (until May 24, 2022) Former group works council chairman of H&R GmbH & Co. KGaA, former works council chairman of H&R ChemPharm GmbH, Salzbergen	–
Holger Hoff (until May 24, 2022) Former works council chairman of H&R Ölwerke Schindler GmbH, Hamburg	–
Harald Januszewski (until May 24, 2022) Former employee and works council chairman of GAUDLITZ GmbH, Coburg	–

(43) Disclosures of Relationships With Related Parties

Related party transactions were carried out at arm's length. There were no transactions of material significance with unconsolidated subsidiaries. Related party transactions involve the companies of the Hansen family (hereinafter referred to as Hansen & Rosenthal) and joint ventures.
There is a mutual business relationship with Hansen & Rosenthal. The supply of goods for chemical-pharmaceutical products from the Salzbergen site takes place under a long-term distribution and supply contract, by which the relevant Hansen & Rosenthal company purchases the products and then resells them to its end customers in its own name and for its own account. Furthermore, deliveries are made on the basis of a long-term commission contract for the marketing of certain products from the Hamburg site, for which Hansen & Rosenthal receives a commission. Moreover, H&R KGaA subsidiaries provide production, IT and staffing services to the Hansen & Rosenthal Group and vice versa.

Sales revenue from goods and services to Hansen & Rosenthal totaled €789,652 thousand in financial year 2022 (previous year: €566,073 thousand). Most of this amount was for supplies of chemical-pharmaceutical products in 2022 (€667,687 thousand; previous year: €479,020 thousand) and for contract manufacturing services in 2022 (€114,532 thousand; previous year: €87,053 thousand). Goods and services purchased from Hansen & Rosenthal in financial year 2022 amounted to €151,902 thousand (previous year: €109,675 thousand). The bulk of this amount was for purchases of chemical-pharmaceutical products (€141,330 thousand; previous year: €101,615 thousand).

As of December 31, 2022, receivables due from Hansen & Rosenthal amounted to €37,918 thousand (previous year: €48,892 thousand); liabilities owed to Hansen & Rosenthal came to €14,092 thousand (previous year: €21,468 thousand). Receivables are handled in line with normal commercial conditions and customary retention of title.

Goods and services provided to joint ventures generated €501 thousand in sales revenue in financial year 2022 (previous year: €782 thousand). Goods and services purchased from joint ventures in financial year 2022 amounted to €6,183 thousand (previous year: €3,048 thousand). These relate primarily to the purchase of energy and IT services.

As of December 31, 2022, receivables due from joint ventures amounted to €15 thousand (previous year: €9 thousand); as in the previous year, there were no liabilities owed to joint ventures.

Supervisory Board and Executive Board
Key management positions are limited to the Supervisory Board and Executive Board of H&R KGaA. Management of the company is provided by the Executive Board of H&R Komplementär GmbH. For performing their tasks, members of the Executive Board received total remuneration of €901 thousand in the financial year, due in the near future (previous year: €885 thousand). Members of the Executive Board receive no share-based remuneration and no pension commitments. There were no expenses associated with terminating the employment agreements of managing directors. As of the reporting date, there was a liability of €152 thousand (previous year: €136 thousand) owed to H&R Komplementär GmbH.

Former members of the Executive Board and their survivors received post-employment benefits totaling €278 thousand during the financial year (previous year: €301 thousand). For former members of the Executive Board and their survivors, pension commitments amounted to €2,379 thousand (previous year: €3,359 thousand).

Remuneration for members of the Supervisory Board included basic remuneration plus additional compensation for committee work and fees for attending meetings and totaled €515 thousand (previous year: €515 thousand). This remuneration will be due in the near future.

In addition to their Supervisory Board remuneration, the employee representatives on the Supervisory Board receive fees not related to their work for the Supervisory Board, in the near future. These fees resulted from the respective employment contracts and totaled €192 thousand in financial year 2022 (previous year: €172 thousand).

As in the previous year, no members of the Executive Board or members of the Supervisory Board had received loans from the company as of December 31, 2022.

Data on the remuneration of members of the Executive Board and the Supervisory Board are provided in the remuneration report, which is published at www.hur.com.

H&R KGaA has an Advisory Board that provides advice to the Executive Board. Expenses of €119 thousand were incurred in the financial year for the activities of the Advisory Board in 2022 (previous year: €103 thousand). In financial year 2022, fees paid to members of the governing bodies of H&R KGaA within the scope of consultancy contracts amounted to €75 thousand (previous year: €75 thousand). As of December 31, 2022, liabilities owed to Board members totaled €515 thousand (previous year: €515 thousand). These amounts are due in the short term.

(44) Statement of Compliance Pursuant to Section 161 of the German Stock Corporation Act (AktG)

The Statement of Compliance with the German Corporate Governance Code required by Section 161 of the German Stock Corporation Act (AktG) was submitted in December 2022. It is published online at www.hur.com.

(45) Group Audit Fees

The following fees for the services provided by Grant Thornton AG Wirtschaftsprüfungsgesellschaft were recognized for the financial year:

IN € THOUSAND	12/31/2022	12/31/2021
Audits	480	434
of which relating to the previous year	38	44
Other certification or valuation services	68	41
Tax counseling	–	–
Other services	–	–
Total	**548**	**475**

The 2022 fee for auditing services charged by the auditors covers, in particular, the statutory audit of the annual financial statements and the consolidated financial statements of H&R KGaA, and the statutory and voluntary audits of the annual financial statements. The other certification services primarily refer to the audit of the non-financial Group report and audits under the German Renewable Energy Sources Act for subsidiaries of H&R KGaA.

(46) Exemption From Disclosure Under Section 264, Paragraph 3 HGB

For the following fully consolidated subsidiaries, the company has elected to make use of the option to be exempted from the disclosure requirement in accordance with Section 264, paragraph 3 and Section 264b, in conjunction with Section 325 of the German Commercial Code (HGB), and partly made use of concessions regarding the preparation of financial statements:

- H&R Ölwerke Schindler GmbH
- H&R OWS Chemie GmbH & Co. KG
- H&R Chemisch-Pharmazeutische Spezialitäten GmbH
- H&R Lube Blending GmbH
- H&R ChemPharm GmbH
- H&R Lube Trading GmbH
- H&R International GmbH
- H&R InfoTech GmbH
- H&R South Africa GmbH
- H&R Group Finance GmbH
- Gaudlitz Plastics Technology GmbH & Co. KG

(47) Risk Management Policy, Capital Management and Safeguards

The operating business and the financing of H&R KGaA are exposed to various financial and market price risks, in particular liquidity and refinancing risks, counterparty default risk as well as risks associated with fluctuations in raw material prices, currency exchange rates, and interest rates. A systematic risk management system is in place to limit these risks. Hedging transactions, among other things, are used to counter them.

H&R KGaA has implemented a Group-wide risk management system which identifies, analyzes and measures these risks so that informed decisions can then be made about actions to take to prevent or limit such risks. The key components of the risk management system are the planning and controlling process, internal Group rules and regulations, and the reporting function. The Group companies are subject to strict risk management. Dealing authorizations, responsibilities and supervision procedures are established on a binding basis in internal guidelines.

The company holds regular conferences on business performance at which the results of operations and potential risks and opportunities are highlighted and targets and control measures are agreed. Derivative financial instruments are also utilized in this context. In this respect, derivative financial instruments may not, as a matter of principle, be implemented for speculative purposes, but instead serve to hedge against risks in connection with the operating business.

The Executive Board defines the Group's equity ratio as the basic parameter for capital management, which in turn is aimed at ensuring that the Group will continue to be able to cover its financing needs for capital expenditures and debt service obligations in the future. At the same time, H&R KGaA strives to maintain a capital structure that optimizes the costs of capital provided by our investors and our lenders, while retaining strategic flexibility. Other key control parameters include net debt and net gearing, i. e., the ratio of net debt to operating income (EBITDA).

A syndicated loan and the bilateral loans require the company to meet financial covenants that also relate to its capital base and net gearing. The financial covenants were fully met both at the reporting date and also during the course of the year.

CAPITAL STRUCTURE

	2022	2021	2020	2019	2018
Net debt/EBITDA	1.52	1.13	2.25	2.42	1.39
Equity ratio (in %)	49.0	46.7	46.5	43.3	48.9
Net gearing	42.9	39.9	35.3	37.4	28.9

Uncertainty Related to COVID-19 and the War in Ukraine. Following the outbreak of Russia's war of aggression against Ukraine, H&R KGaA quickly needed to find alternatives to raw materials which were previously sourced from Russia. This led to an increase in the cost of raw materials, transport, logistics and energy in the year under review. The war in Ukraine had a negligible impact on consolidated income and the company's net assets, financial position and results of operations during the financial year as the majority of additional expenses could be passed on to the market.

However, unforeseeable repercussions of the war in Ukraine and the COVID-19 pandemic may lead to increased risks with regard to value added or the recoverability of assets, particularly goodwill and intangible assets. Suppliers, customers and other business partners could be hard hit, which may lead to defaults or disruptions to services. H&R KGaA will continue to track events carefully, monitor their effects and prepare countermeasures.

Liquidity Risks. H&R KGaA ensures that it has sufficient liquidity by monitoring its liquidity status daily, by maintaining financing facilities that have not been utilized in full and by refinancing expiring loan agreements in a timely manner. Compliance with financial covenants is a crucial part of the financing agreements. If these covenants were to be breached and could not be renegotiated or if alternative sources of financing could not be found on short notice, this would jeopardize the continued existence of the Group. H&R KGaA counters this risk by maintaining a financing structure that includes sufficient equity as well as through measures designed to ensure the sustainability and stability of earnings, such as switching the Salzbergen site to a contract-processing model.

Default Risks. Our risks from delays in payment and/or defaults on the part of our customers are limited by our broadly diversified customer base and the low level of dependence on individual debtors. Strict receivables management by our sales/distribution partner, Hansen & Rosenthal, reduces these risks even more. Based on the information currently available, existing del credere risks are covered through impairments.

We counter the default risk of banks with which we have arranged credit lines, entered into hedging transactions or invested funds by only entering into larger, long-term financial transactions with banks that have good credit ratings and by spreading larger transactions among several banks.

Raw Materials Price Risks. H&R KGaA is exposed to price fluctuation risks in, among other things, purchases of raw materials, particularly purchases of atmospheric residue and vacuum gas oil. Most supply agreements concluded with customers for specialty products manufactured by the Chemical-Pharmaceutical Raw Materials division's specialty production sites specify fixed prices for a period of three months at most. Moreover, the production process at a specialty production site can require up to eight weeks from the date on which raw materials arrive to the date when the finished product has been manufactured. This means that rapid increases in raw materials costs cannot be passed on to the markets immediately, but only with a delay. The relevant price trends are constantly monitored and analyzed. Changes in prices of raw materials can result in the recognition of windfall losses and windfall profits, which generally balance out over time. The raw materials price risk mainly affects sales revenues and cost of materials in the ChemPharm Refining and ChemPharm Sales segments (see Note (36)). To counteract the raw materials price risk, H&R KGaA concludes raw materials forward transactions, which are designated as cash flow hedges.

Currency Risks. The international orientation of H&R KGaA means that its operating activities give rise, among other things, to currency risks resulting from fluctuations between the company's functional currency and other currencies. In particular, these are encountered in the area of procurement as a result of US dollar transactions. In the trading business, these risks are partially hedged through forward transactions. Hedging is not performed in the production process, as the length of time entailed in the production process means that the intended hedge may be reversed by the time the currency forward contracts are concluded.

For the presentation of market risks, IFRS 7 requires sensitivity analyses showing the impact of hypothetical changes in relevant risk variables on earnings and equity. It is assumed that the portfolio as of the reporting date is representative of holdings for the entire year.

The following table shows the net exposure in the most significant foreign currency as of the reporting date:

NET EXPOSURE

IN € THOUSAND	US$
12/31/2022	2,112
12/31/2021	1,692

The net exposure consists of statement of financial position items in the respective currency, which is not the functional currency, less derivatives used to hedge the foreign currency effects of the respective item on the statement of financial position. An increase in the US dollar rate by 10% would burden the income and equity with €192 thousand (previous year: €154 thousand), while a decline in the US dollar rate by 10% would cause the income and equity to rise by €235 thousand (previous year: €188 thousand).

Interest Rate Risks. H&R KGaA employs variable interest rate facilities, among other things, as part of its financing activities. Interest rate swaps are used as interest hedging instruments to limit risks arising from changes in market interest rates.

A sensitivity analysis for interest rate risk is performed on financial liabilities with variable interest rates, including interest income on cash in hand. As of the December 31, 2022, reporting date, a hypothetical 50 basis points or 0.5% increase in the interest rate would have lowered interest income to €-284 thousand (previous year: €19 thousand) and would have reduced the amount of equity shown accordingly.

(48) Events After the Reporting Date

Between December 31, 2022, and the time of approval of the consolidated financial statements, there were no events with a concrete material impact on the net assets, financial position and results of operations. However, it is possible that the developments of the war in Ukraine may have significant consequences during the further course of the year. However, due to the volatility of the situation, it is not currently possible to predict how much of an impact they will have with any degree of certainty. Further information on these topics can be found in the Risk and Forecast Report in the management report.

(49) Approval of the Financial Statements

The financial statements were approved and released for publication by the management of the general partner with full personal liability on March 17, 2023.

Salzbergen, March 17, 2023

The Executive Board

Niels H. Hansen
Sole Managing Director

Independent Auditor's Report

To the H&R GmbH & Co. KGaA, Salzbergen

Report on the Audit of the Consolidated Financial Statements and of the Group Management Report

Audit Opinions

We have audited the consolidated financial statements of H&R GmbH & Co. KGaA, Salzbergen, and its subsidiaries (the Group), which comprise the consolidated statement of financial position as at 31 December 2022, the consolidated statement of comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows for the financial year from 1 January 2022 to 31 December 2022, and notes to the consolidated financial statements, including a summary of significant accounting policies. In addition, we have audited the group management report which is combined with the management report of H&R GmbH & Co. KGaA, Salzbergen, (referred to the subsequently as "group management report") for the financial year from 1 January 2022 to 31 December 2022. In accordance with German legal requirements, we have not audited the content of the Statement of corporate governance pursuant to section 289f HGB and section 315d HGB [Handelsgesetzbuch: German Commercial Code] referred to in the group management report and the subsection "Report on the Internal Control and Risk Management System and on the Main Opportunities and Risks" in the section "Main Features of the Internal Control and Risk Management System and Opinion on the Adequacy and Effectiveness of These Systems" in the group management report. Similarly, we will not audit the content of the separate non-financial group report referred to in the group management report, which is intended to be published on the company's website, in accordance with German legal requirements.

In our opinion, on the basis of the knowledge obtained in the audit,

- the accompanying consolidated financial statements comply, in all material respects, with the IFRSs as adopted by the EU, and the additional requirements of German commercial law pursuant to section 315e paragraph 1 HGB and, in compliance with these requirements, give a true and fair view of the assets, liabilities, and financial position of the Group as at 31 December 2022 and of its financial performance for the financial year from 1 January 2022 to 31 December 2022, and
- the accompanying group management report as a whole provides an appropriate view of the Group's position. In all material respects, this group management report is consistent with the consolidated financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development. Our audit opinion on the group management report does not cover the above mentioned unaudited parts of the group management report and the above mentioned separate non-financial group report.

Pursuant to section 322 paragraph 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 group management report.

Basis for the Audit Opinions

We conducted our audit of the consolidated financial statements and of the group management report in accordance with 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 [Institute of Public Auditors in Germany] (IDW). [Where compliance with ISAs is also relevant add: We performed the audit of the consolidated financial statements in supplementary compliance with the International Standards on Auditing (ISAs).] Our responsibilities under those requirements and principles are further described in the "Auditor's Responsibilities for the Audit of the

Consolidated Financial Statements and of the Group Management Report" section of our auditor's report. We are independent of the group entities in accordance with the requirements of European law and German commercial and professional law, and we have fulfilled our other German professional responsibilities in accordance with these requirements. In addition, in accordance with Article 10 (2) point (f) of the EU Audit Regulation, we declare that we have not provided non-audit services prohibited under Article 5 (1) of the EU Audit Regulation. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions on the consolidated financial statements and on the group management report.

Key Audit Matters in the Audit of the Consolidated Financial Statements

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements for the financial year from 1 January 2022 to 31 December 2022. 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 audit matters that we consider to be of particular significance. We have structured our presentation of these key audit matters as follows:

① Risk to the financial statements
② Auditor's Response
③ Reference to related disclosures

Impairment of Goodwill

① Risk to the financial statements
In the consolidated financial statements of H&R GmbH & Co. KGaA, goodwills with a book value of EUR 17.4 million are recognised. Of this amount, EUR 16.7 million is attributable to the goodwill of the cash-generating unit Salzbergen. The goodwill is subject to an annual or occasion related impairment test. In this process the value in use is compared to the book value of the cash-generating unit. The discounted cash flow method is used to determine the value in use of the cash-generating unit. The future cash flows to be discounted are derived from the current planning of the H&R Group. The discount rate is determined by using the weighted average cost of capital of the respective cash-generating unit.

As an estimated value, the value in use is essentially influenced by the estimation of future cash flows and the discount rate used and is subject to considerable estimation uncertainties. Against this background, this matter was of particular importance from our point of view within the scope of our audit.

② Auditor's Response
As part of our audit, we traced the Company's methodology of performing the impairment test and assessed the determination of the weighted average cost of capital. To do this, we first obtained an understanding of the underlying planning process.

Furthermore, we received the derivation of the projected cash flows from the operating budget planning (2023) approved by the Supervisory Board and the medium-term planning (2024-2027) of the Group approved by the legal representatives. We assessed the consistency and reasonableness of the planning assumptions in light of current and expected conditions in the relevant markets and our understanding of the respective economic environment of the cash-generating unit. In addition, we inquired the management about this. Due to the sensitivity of the calculated value in use to changes in the discount rate used, we examined the parameters used with the assistance of our internal valuation specialists and understood the calculation schemes used to derive the discount rate. In addition, we reviewed and analysed the sensitivity analyses prepared by the management for the cash-generating unit.

③ Reference to related disclosures
The disclosures of H&R GmbH & Co. KGaA on goodwill and its recoverability are contained in sections 3, 4 and 12 of the notes to the consolidated financial statements.

Other Information

The legal representative or the supervisory board is responsible for the other information. This other information includes

- the declaration on corporate governance pursuant to § 289f HGB and § 315d HGB to which reference is made in the group management report,
- the non-audited contents of the subsection "Report on the Internal Control and Risk Management System and on the Main Opportunities and Risks" in the section "Main Features of the Internal Control and Risk Management System and Opinion on the Adequacy and Effectiveness of These Systems" in the group management report, we have not audited the contents in accordance with German legal requirements.
- the responsibility statement given by the legal representative in accordance with section 297 (2) sentence 4 HGB and section 315 (1) sentence 5 HGB on the consolidated financial statements and the group management report,
- the other parts of the annual report which are expected to be available to us after the date of this auditor's report, and
- the separate non-financial group report pursuant to § 315b HGB, which is expected to be made available to us after the date of this auditor's report and to which reference is made in the group management report,
- but not the consolidated financial statements, not the audited content of the group management report and not our audit opinion thereon.

The legal representative and the Supervisory Board are responsible for the declaration pursuant to § 161 of the German Stock Corporation Act (AktG) on the German Corporate Governance Code, which is part of the corporate governance declaration. The Supervisory Board is responsible for the Report of the Supervisory Board. In all other respects, the legal representative is responsible for the other information.

Our audit opinions on the consolidated financial statements and on the group management report do not cover the other information, and consequently we do not express an audit opinion or any other form of assurance conclusion thereon.

In connection with our audit, our responsibility is to read the other information and, in so doing, to consider whether the other information

- is materially inconsistent with the consolidated financial statements, with the group management report information audited for content or our knowledge obtained in the audit, or
- otherwise appears to be materially misstated.

If, based on the work we have performed prior to the date of the audit opinion, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of the Executive Director and the Supervisory Board for the Consolidated Financial Statements and the Group Management Report

The executive director is responsible for the preparation of the consolidated financial statements that comply, in all material respects, with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to section 315e paragraph 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 director is responsible for such internal control as they have determined necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud (i.e., fraudulent financial reporting and misappropriation of assets) or error.

In preparing the consolidated financial statements, the executive director is responsible for assessing the Group's ability to continue as a going concern. They also have the responsibility for disclosing, as applicable, matters related to going concern. In addition, he 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 director is responsible for the preparation of the group management report that, as a whole, provides an appropriate view of the Group's position and is, in all material respects, consistent with the consolidated financial statements, complies with German legal requirements, and appropriately presents the opportunities and risks of future development. In addition, the executive director is responsible for such arrangements and measures (systems) as they have considered necessary to enable the preparation of a group management report that is in accordance with the applicable German legal requirements, and to be able to provide sufficient appropriate evidence for the assertions in the group management report.

The supervisory board is responsible for overseeing the Group's financial reporting process for the preparation of the consolidated financial statements and of the group management report.

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Group Management Report

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and whether the group management report as a whole provides an appropriate view of the Group's position and, in all material respects, is consistent with the consolidated financial statements and the knowledge obtained in the audit, complies with the German legal requirements and appropriately presents the opportunities and risks of future development, as well as to issue an auditor's report that includes our audit opinions on the consolidated financial statements and on the group management report. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with 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 group management report.

We exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements and of the group management report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our audit opinions. The risk of not detecting a material misstatement resulting from fraud is higher than the risk of not detecting a material misstatement resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit of the consolidated financial statements and of arrangements and measures (systems) relevant to the audit of the group management report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an audit opinion on the effectiveness of these systems.
- Evaluate the appropriateness of accounting policies used by the executive director and the reasonableness of estimates made by the executive director and related disclosures.
- Conclude on the appropriateness of the executive directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we

conclude that a material uncertainty exists, we are required to draw attention in the auditor’s report to the related disclosures in the consolidated financial statements and in the group management report or, if such disclosures are inadequate, to modify our respective audit opinions. Our conclusions are based on the audit evidence obtained up to the date of our auditor’s report. However, future events or conditions may cause the Group to cease to be able to continue as a going concern.

- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements present the underlying transactions and events in a manner that the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Group in compliance with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to section 315e paragraph 1 HGB.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express audit opinions on the consolidated financial statements and on the group management report. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinions.
- Evaluate the consistency of the group management report with the consolidated financial statements, its conformity with German law, and the view of the Group’s position it provides.
- Perform audit procedures on the prospective information presented by the executive director in the group management report. On the basis of sufficient appropriate audit evidence we evaluate, in particular, the significant assumptions used by the executive director 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 actions taken or safeguards applied to eliminate independence threats related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor’s report unless law or regulation precludes public disclosure about the matter.

Other Legal and Regulatory Requirements

Report on the Assurance of Electronic Rendering, of the Consolidated Financial Statements and the Group Management Report, Prepared for Publication Purposes in Accordance with Section 317 Paragraph 3a HGB

Assurance Opinion

We have performed assurance work in accordance with section 317 paragraph 3a HGB to obtain reasonable assurance about whether the rendering of the consolidated financial statements and the group management report (hereinafter the “ESEF documents”) contained in in the electronic file 529900NCRGGS5E0MGL93-2022-12-31-de.zip, with the Hash-Value 4d78e58b8f8d8bc25f41571e8e4448fcee52348b5cc2de32d09c1a44c6fbfdc5, calculated by means of SHA256 and prepared for publication purposes complies in all material respects with the requirements of section 328 paragraph 1 HGB for the electronic reporting format ("ESEF format"). In accordance with German legal requirements, this assurance only extends to the conversion of the information contained in the consolidated financial statements and the group management report into the ESEF format and therefore relates neither to the information contained within these renderings nor to any other information contained in the file identified above.

In our opinion, the rendering of the consolidated financial statements and the group management report contained in the electronic file identified above and prepared for publication purposes complies in all material respects with the requirements of section 328 paragraph 1 HGB for the electronic reporting format. Beyond this assurance opinion and our audit opinion on the accompanying consolidated financial statements and the accompanying group management report for the financial year from 1 January 2022 to 31 December 2022 contained in the "Report on the Audit of the Consolidated Financial Statements and of the Group Management Report" above, we do not express any assurance opinion on the information contained within these renderings or on the other information contained in the file identified above.

Basis for the Assurance Opinion

We conducted our assurance work on the rendering, of the consolidated financial statements and the group management report, contained in the file identified above in accordance with section 317 paragraph 3a HGB and the IDW Assurance Standard "Assurance on the Electronic Rendering, of Financial Statements and Management Reports, Prepared for Publication Purposes in Accordance with Section 317 Paragraph 3a HGB" (IDW AsS 410) (06.2022). Our responsibility in accordance therewith is further described in the "Auditor's Responsibilities for the Assurance Work on the ESEF Documents" section. Our audit firm applies the IDW Standard on Quality Management 1 "Requirements for Quality Management in the Audit Firm" (IDW QMS 1 (09.2022)).

Responsibilities of the Executive Director and the Supervisory Board for the ESEF Documents

The executive director of the company is responsible for the preparation of the ESEF documents with the electronic renderings of the consolidated financial statements and the group management report in accordance with section 328 paragraph 1 sentence 4 no. 1 HGB and for the tagging of the consolidated financial statements in accordance with section 328 paragraph 1 sentence 4 no. 2 HGB.

In addition, the executive director of the company is responsible for such internal control as they have considered necessary to enable the preparation of ESEF documents that are free from material intentional or unintentional non-compliance with the requirements of section 328 paragraph 1 HGB for the electronic reporting format.

The supervisory board is responsible for overseeing the process for preparing the ESEF documents as part of the financial reporting process.

Auditor's Responsibilities for the Assurance Work on the ESEF Documents

Our objective is to obtain reasonable assurance about whether the ESEF documents are free from material intentional or unintentional non-compliance with the requirements of section 328 paragraph 1 HGB. We exercise professional judgment and maintain professional skepticism throughout the assurance work. We also:

- Identify and assess the risks of material intentional or unintentional non-compliance with the requirements of section 328 paragraph 1 HGB, design and perform assurance procedures responsive to those risks, and obtain assurance evidence that is sufficient and appropriate to provide a basis for our assurance opinion.
- Obtain an understanding of internal control relevant to the assurance on the ESEF documents in order to design assurance procedures that are appropriate in the circum-stances, but not for the purpose of expressing an assurance opinion on the effectiveness of these controls.
- Evaluate the technical validity of the ESEF documents, i.e., whether the file containing

the ESEF documents meets the requirements of the Delegated Regulation (EU) 2019/815, in the version in force at the date of the financial statements, on the technical specification for this electronic file.

- Evaluate whether the ESEF documents enables a XHTML rendering with content equivalent to the audited consolidated financial statements and to the audited group management report.
- Evaluate whether the tagging of the ESEF documents with Inline XBRL technology (iXBRL), in accordance with the requirements of Articles 4 and 6 of the Delegated Regulation (EU) 2019/815, in the version in force at the date of the financial statements, enables an appropriate and complete machine-readable XBRL copy of the XHTML rendering.

Further Information pursuant to Article 10 of the EU Audit Regulation

We were elected as group auditor by the annual general meeting on 24 May 2022. We were engaged by the supervisory board on 14 December 2022. We have been the group auditor of the H&R GmbH & Co. KGaA, Salzbergen, without interruption since the financial year 2015.

We declare that the audit opinions expressed in this auditor's report are consistent with the additional report to the audit committee pursuant to Article 11 of the EU Audit Regulation (long-form audit report).

Other Matter – Use of the Auditor's Report

Our auditor's report must always be read together with the audited consolidated financial statements and the audited group management report as well as the assured ESEF documents. The consolidated financial statements and the group management report converted to the ESEF format – including the versions to be published in the Federal Gazette – are merely electronic renderings of the audited consolidated financial statements and the audited group management report and do not take their place. In particular, the ESEF report and our assurance opinion contained therein are to be used solely together with the assured ESEF documents made available in electronic form.

German Public Auditor Responsible for the Engagement

The German Public Auditor responsible for the engagement is Eric Pritsch.

Hamburg, 20 March 2022

Grant Thornton AG
Wirtschaftsprüfungsgesellschaft

Prof. Dr. Senger	Pritsch
Wirtschaftsprüfer	*Wirtschaftsprüfer*
[German Public Auditor]	*[German Public Auditor]*

Attestation by the Legal Representatives

We hereby affirm that, to the best of our knowledge and according to the applicable accounting standards, the consolidated financial statements convey a true picture of the net assets, financial position and results of operations of the Group and that the combined management report pre-sents the course of business, including the Group's business income and situation, in a way that presents a true and fair view while describing the material opportunities for and risks to the Group's expected development.

Salzbergen, March 17, 2023

The Executive Board

Niels H. Hansen
Sole Managing Director

Further Information

List of Graphics and Tables*

* The tables in the consolidated financial statements are not listed.

Six-year Overview H&R Group Key Figures (IFRS)

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		2022	2021	2020	2019	2018	2017
Sales volume (core products)[1]	KT	811	869	805	815	836	832
Sales revenue	€ MILLION	1,576.0	1,188.4	873.0	1,075.3	1,114.2	1,025.1
Operating income (EBITDA)	€ MILLION	124.9	132.5	55.8	52.9	74.7	97.9
EBIT	€ MILLION	69.6	81.6	-0.3	7.4	40.6	54.3
Earnings before income tax	€ MILLION	62.0	73.4	-10.4	-1.2	33.7	46.2
Consolidated net income	€ MILLION	45.4	52.5	-7.8	0.1	22.3	29.5
Consolidated income attributable to shareholders	€ MILLION	42.7	50.2	-9.0	-1.4	21.6	32.1
Consolidated income per share (undiluted) in €	€	1.15	1.35	-0.24	-0.04	0.59	0.88
Dividend per share	€	0	0	0	0	0	0.4
Market capitalization on December 31	€ MILLION	224.1	261.3	203.6	194.3	226.7	553.4
Balance sheet total	€ MILLION	962.1	874.4	745.7	838.6	730.4	662.6
Net working capital	€ MILLION	260.1	208.1	106.9	105.9	174.5	153.3
Equity	€ MILLION	471.2	408.5	346.9	363.4	357.4	342.7
Equity ratio	%	49.0	46.7	46.5	43.3	48.9	51.7
Net debt	€ MILLION	136.0	92.9	75.4	86.8	103	53.7
Net gearing	%	42.9	39.9	35.3	37.4	28.9	16.0
Cash flow from operating activities	€ MILLION	38.0	37.4	60.1	95.9	23.3	46.2
Free cash flow	€ MILLION	-34.5	-11.1	22.0	20.8	-46.4	-11.9

[1] Chemical-Pharmaceutical Raw Materials division.

Financial Calendar

Our financial calendar is updated on an ongoing basis. Please visit our website www.hur.com in the Investor Relations section for the latest events.

March 31, 2023	Publication of Annual Report 2022
May 12, 2023	Publication of Q1 2023
May 23, 2023	Annual Shareholders' Meeting in Hamburg
August 18, 2023	Publication of Q2 2023
November 17, 2023	Publication of Q3 2023

Contact

If you have further questions concerning our company or if you would like to sign up for the company mailing list, please contact our Investor Relations Team:

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This annual report was published on March 31, 2023.

Disclaimer

Forward-looking statements

This document contains forward-looking statements that reflect management's current views with respect to future events. Such statements are subject to risks and uncertainties that are beyond H&R's ability to control or estimate precisely, such as future market and economic conditions, the behavior of other market participants, the ability to successfully integrate acquired businesses and achieve anticipated synergies and the actions of government regulators. If any of these or other risks and uncertainties occur, or if the assumptions underlying any of these statements prove incorrect, actual results may be materially different from those expressed or implied by such statements. H&R does not intend or assume any obligation to update any forward-looking statements to reflect events or circumstances after the date of these materials.

Variances for technical reasons

For technical reasons (e. g., conversion of electronic formats) there may be variances between the accounting documents contained in this annual report and those submitted to the electronic Federal Gazette (Bundesanzeiger). In this case, the version submitted to the electronic Federal Gazette shall be binding.

This English version of the annual report is a translation of the original German version; in the event of variances, the German version shall take precedence over the English translation.

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