

Annual Report 2017
H&R GmbH & Co. KGaA



360°

A Specialist for the World



Company brochure 2017/2018
H&R GmbH & Co. KGaA



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Annual Report

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A SPECIALIST FOR THE WORLD





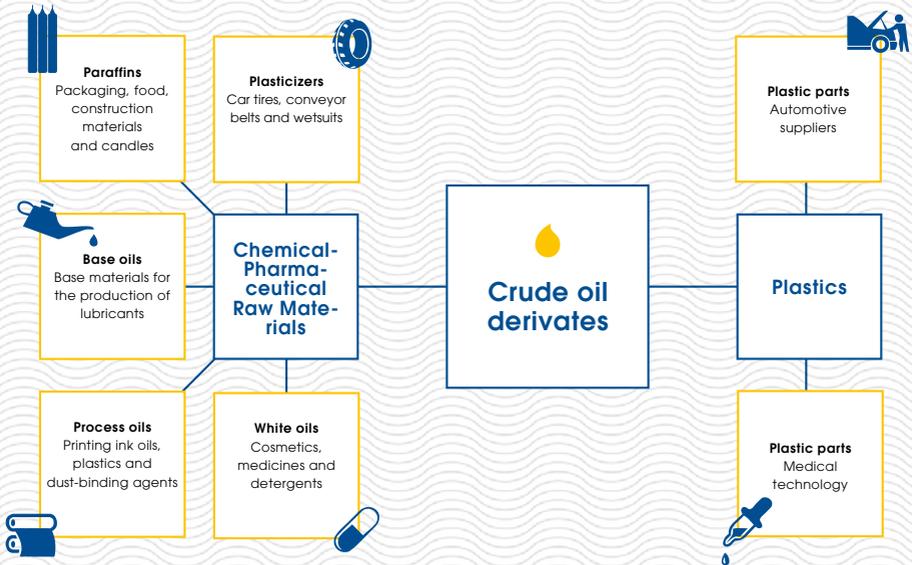
Wherever in the world
new markets and new products
are created:

WE ARE THERE.



A specialist for the world

The name of Hansen & Rosenthal stands for high-quality specialty chemical products. Our state-of-the-art refineries and processes allow us to obtain more than 800 specialty products such as plasticizers, white oils and paraffins from crude oil derivatives. Precision plastic components complete our product portfolio. Our products constitute key components in the processes and products of many industries, ranging from the automotive sector through to cosmetics, the food industry and medical technology. We currently produce and market our products worldwide via an organically grown network.





Dear Reader,

Talking about customer orientation is one thing; actually doing something about it is another matter entirely. We prefer to go for the latter, by taking up the challenge anew every single day. We do this by offering our customers high-quality products that do what it says on the label by offering solutions for tasks that previously had no solution and by being where our customers need us, wherever that might be in the world, either directly as H&R KGaA or via the locations of the Hansen & Rosenthal Group. Thanks to our policy of smart expansion, we now have a presence in 34 different countries spread across six continents. This allows us to provide our customers with what they need at short notice. This is what we understand by customer orientation.

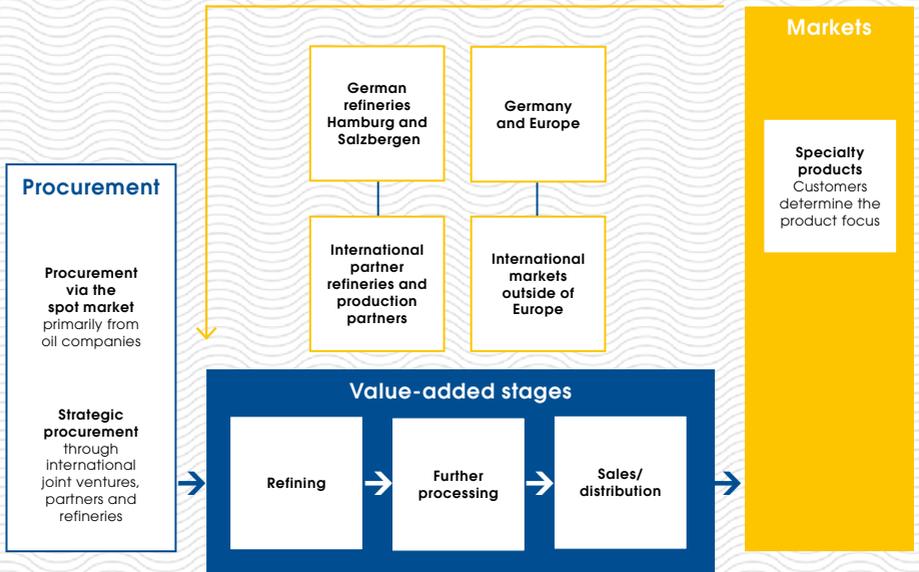
Niels H. Hansen

Detlev Wösten



Focusing on quality

We concentrate on quality by aligning all our activities accordingly along the entire value chain. This begins with procurement, where we use our purchasing experience to acquire the high-quality raw materials needed for further processing. We apply our advanced technological know-how to the different stages of our refinery processes in order to optimize the corresponding outcomes. This allows us to maximize the proportion of our main products, while minimizing the share accounted for by byproducts, with a level of efficiency that allows us to make virtually total use of the input material concerned.







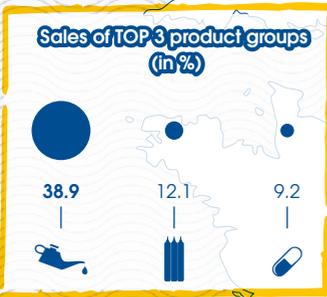
H&R in EUROPE*



Tipton, Great Britain
 Employees: 40
PRODUCTION
SALES
WAREHOUSING
DISTRIBUTION

Salzbergen, Germany
 Employees: 394
PRODUCTION
SALES
WAREHOUSING
DISTRIBUTION

Hamburg, Germany
 Employees: 291
PRODUCTION
SALES
DISTRIBUTION



Nuth, the Netherlands
 Employees: 20
PRODUCTION
SALES
WAREHOUSING
DISTRIBUTION

Coburg, Germany
 Employees: 326
PRODUCTION
SALES
WAREHOUSING
DISTRIBUTION

Lyon, France
 Employees: 1
SALES
DISTRIBUTION

Dačice, Czech Republic
 Employees: 105
PRODUCTION
SALES
WAREHOUSING
DISTRIBUTION

Madrid, Spain
 Employees: 1
SALES
DISTRIBUTION

*Locations of H&R KGaA, as well as partly of Hansen & Rosenthal Group



Madrid



Tipton



Nuth



Salzbergen



Hamburg



Coburg



Dačice

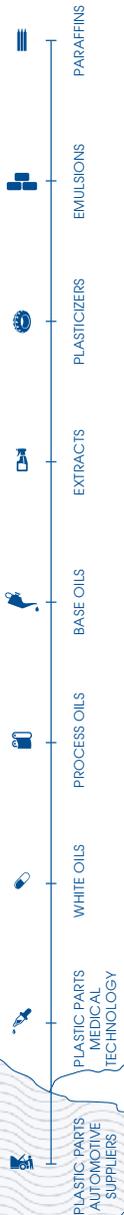


Lyon

Lubricant sector Europe

113,850 Barrels per day

This amount refers solely to the output of Western European producers of lubricants in the 2017 financial year. Between 25% and 30% of the product mix originating in our German plants in Salzbergen and Hamburg – former producers of lubricants that are now classed as specialty refineries – is accounted for by the ingredients for classical lubricants, with the remainder contributing to the refinement of specialty products.



1964
ET SWG.

Consistent development in cooperation with OJS:

- 1981 heavy white oil
- 1988 label-free aromatic process oils



1973

Take-over of Klaus Dahleke KG/specialist in tire and rubber sector



1994

Take-over of the refinery Salzbergen from Wintershall AG and significant capacity increase in the following years

2001

Fusion H&R affiliate SRS Salzbergen with WASAG Chemie AG. Fields of activity: speciality chemistry, plastics, explosives



2010

Increase value added by investments in PDS processing unit (reduction/prevention of waste-product fuel oil and therefore of sulfur and CO₂)

2014

Contribution of the China activities of the H&R Group into the H&R AG

2016

Conversion of the H&R GmbH & Co. KGaA

2018 →

Continuation of the focused strategy of internationalization

Candle making United States

Approx. US\$3 billion

in turnover is accounted for by the candle industry in the United States every year. Some 1 billion pounds of wax are currently required every year to produce the candles sold in the United States, with demand set to rise during the next few years.



15

years is the average time employees at our German sites stay with us



These long periods of employment are an indicator of our ability to retain experience.



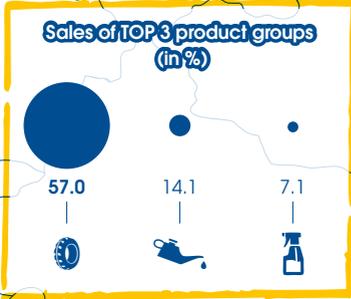
Experienced employees, who regularly hone their respective levels of knowledge, supervise our measuring and control stations.



90° East

COMPANY BROCHURE 2017/2018

H&R in ASIA



Fushun, China
Employees: 78
PRODUCTION
SALES
WAREHOUSING
DISTRIBUTION

Tokyo, Japan
Employees: 1
SALES
DISTRIBUTION

Wuxi, China
Employees: 143
PRODUCTION
SALES
WAREHOUSING
DISTRIBUTION

Mumbai, India
Employees: 1
SALES
DISTRIBUTION

Bangkok, Thailand
Employees: 32
PRODUCTION
SALES
WAREHOUSING
DISTRIBUTION

Ningbo, China
Employees: 69
PRODUCTION
SALES
WAREHOUSING
DISTRIBUTION

Daxie, China
Employees: 42
SALES
WAREHOUSING
DISTRIBUTION

Port Klang, Malaysia
Employees: 10
PRODUCTION
SALES
WAREHOUSING
DISTRIBUTION

Siracha, Thailand
Employees: 18
PRODUCTION
SALES
WAREHOUSING
DISTRIBUTION

Batu Caves, Malaysia
Employees: 11
SALES
WAREHOUSING
DISTRIBUTION

Singapore
Employees: 1
SALES
DISTRIBUTION

H&R GmbH & Co. KGaA

Mumbai

Port Klang

Bangkok

Siracha

Batu Caves

Singapore

Ningbo

Daxie

Wuxi

Fushun

Tokyo

Tire industry Asia

9 of the 20 biggest

tire manufacturers in the world are based in China, India, Indonesia, Taiwan and Korea, with yet more regional suppliers knocking at the door. The Asian market for spare tires (excluding India), for example, accounted for approximately 4% of worldwide growth in this sector in 2017.

- PARAFFINS
- EMULSIONS
- PLASTICIZERS
- EXTRACTS
- BASE OILS
- PROCESS OILS
- WHITE OILS
- PLASTIC PARTS
MEDICAL
TECHNOLOGY
- PLASTIC PARTS
AUTOMOTIVE
SUPPLIERS





Approx. 79 billion cars were newly registered across the world in 2017, 24 million of them in China alone.

In the chemical-pharmaceutical sector we cooperate closely with local partners in Asia – in terms of both production and sales/distribution. We intend to reinforce existing synergies and break into additional markets on the basis of this intensified cooperation. The setting-up of a new Japanese subsidiary during this year of 2018 constitutes one more step in the underpinning of our presence in Asia.

In the Middle East, the long-standing relationships between the industrialized nations and the oil-producing countries of the region are opening up possibilities of technical cooperation in the field of development relating to specialty refinery construction. This will allow us to establish new supplier relationships in the raw-materials sector.

Construction sector Oceania

Approx. 9%

of Australia's GDP is accounted for by the construction sector. After a decline in construction activity in the past three years, the period up to 2019 is now set to see a recovery in the sector, with a growth in turnover of up to 7.1% in the period 2017/2018 and of 6.8% in the years 2018 and 2019.



- PLASTIC PARTS
AUTOMOTIVE
SUPPLIERS
- PLASTIC PARTS
MEDICAL
TECHNOLOGY
- WHITE OILS
- PROCESS OILS
- BASE OILS
- EXTRACTS
- PLASTICIZERS
- EMULSIONS
- PARAFFINS



G.A.T.E. – our gateway to the future



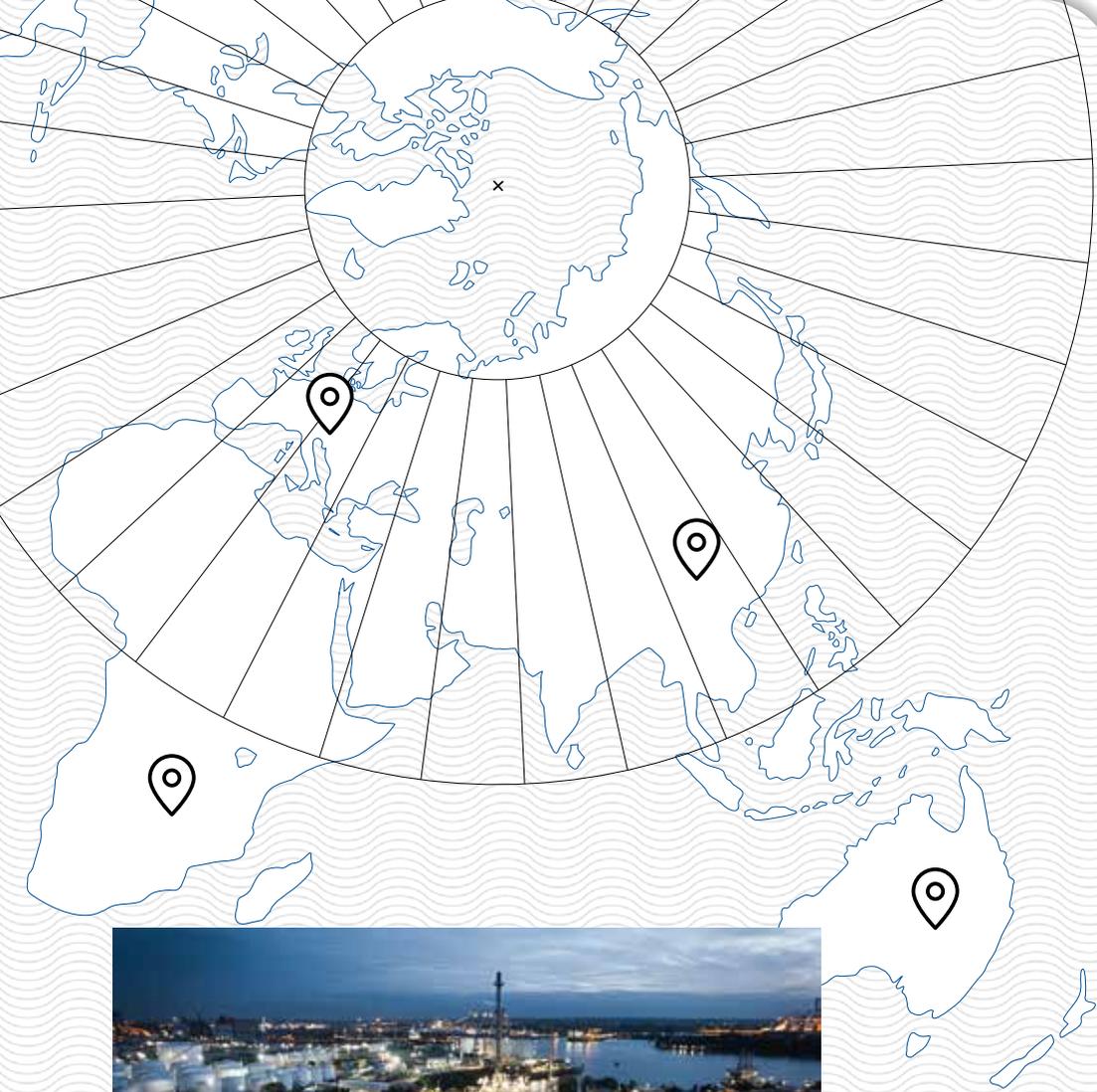
We have defined a strategic path in parallel to our economic objectives, dubbed “the Gateway to the Future” and summarized by the acronym G.A.T.E.

The “G” stands for **Global**, corresponding to the ongoing internationalization of our corporate group. It also embraces our approach to the regions concerned and our commitment to action at a local level.

The main driver of our commercial approach is proximity to the market, with the “A” standing for “**Acting**” with a deep understanding of our customers’ specifications and needs.

TechnoVative accounts for the “T” and our commitment to always keeping our locations on the cutting edge of technology and searching for innovative process and product solutions.

The final “E” has a double meaning in that it stands for our successful linking of Economy and Ecology. We act in an economically viable way, while ensuring the conscientious use of valuable resources. This allows us to extract maximum potential from both of these aspects of our activities, as summarized by **Eco²**, i.e., “Ecology X Economy”; another step toward achieving the goal of a “green refinery”.



Cosmetics industry Africa

4.6% is the average
annual growth rate

of the African cosmetics market since 2015. The largest categories within this sector are make-up and skin and nail care products, export volumes of which have increased by 45% since 2013.



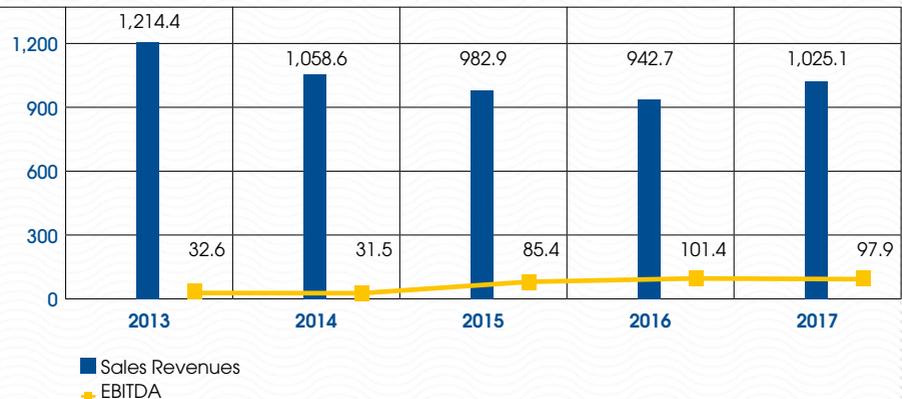


Key business data

Developments during the 2017 financial year largely measured up to our expectations. Sales volumes matched the high level of the previous year thanks to robust customer demand, with highly satisfactory financial performance once more despite a slight drop in terms of EBITDA. These good overall figures can be regarded as a direct consequence of the strategic decisions of the last few years.

SALES REVENUES AND EBITDA 2017

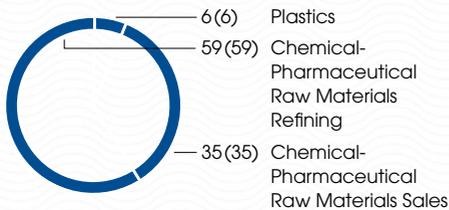
IN € MILLION



H&R continues to maintain a strong financial position: The equity ratio rose significantly in spite of the higher balance sheet total to stand at 51.7% as of the reporting date (31 December 2016: 49.0%). Net gearing (i.e., the ratio of net financial debt to equity) increased slightly by 0.9 percentage points, from 15.1% to 16.0%.

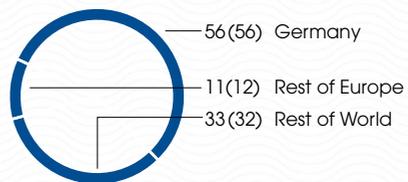
SALES BY SEGMENT IN 2017

IN % (PREVIOUS YEAR'S FIGURES)



SALES BY REGION IN 2017

IN % (PREVIOUS YEAR'S FIGURES)





Operational since 2017:
the world's largest dynamic
hydrogen electrolysis plant

Our long-term aim is to replace fossil fuels with renewable sources and synthesized products, thereby achieving the goal of sustainable energy production. We will then have arrived at our destination: "the 100% green refinery".



Forecast for 2018

| KEY FIGURE | Financial year 2017, actual values | Forecast for 2018 financial year |
|--------------|---------------------------------------|--|
| Group sales | € 1,025.1 million | € 950.0 million to € 1,100.0 million |
| Group EBITDA | € 97.9 million | approx. € 94.0 million to € 106.0 million |

We aim to maintain the revenue levels of the previous year in the current year 2018 and to improve them in the event of good conditions.

We will be implementing modernization and expansion measures in the Chemical-Pharmaceutical Refining business of our Hamburg site in 2018 in order to meet the future challenges of the sector.

We will also be reinforcing production partnerships as a supplement to our own production operations in the Chemical-Pharmaceutical Sales segment.

In the Plastics segment meanwhile, we will be concentrating on the sustainable growth of new business, with the focus on North America, Korea and Thailand.



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:

H&R GMBH & CO. KGAA

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GERMANY
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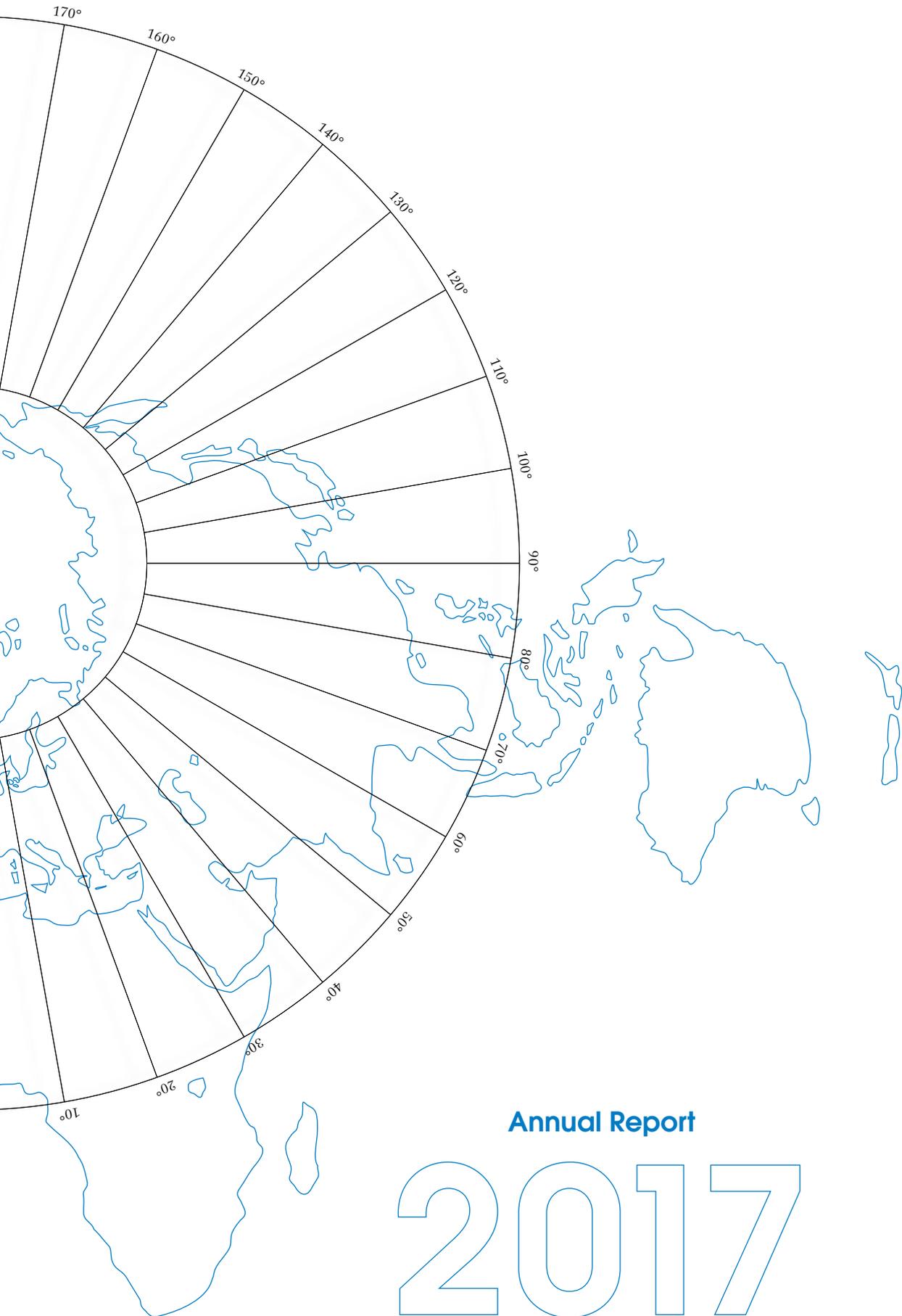
GUTENBERG BEUYS FEINDRUCKEREI GMBH

PHOTOS:

H&R
YAVUZ ARSLAN, PLAINPICTURE

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Annual Report

2017

H&R GmbH & Co. KGaA



OUR FINANCIAL YEAR 2017

We further increased our sales to €1.03 billion during the 2017 financial year. Our operating income is based on the success of the 2016 financial year, and, at €97.9 million, is the best ever result in our Company's history. The Company continues to be firmly established in its markets in 2017, with good earnings contributions from all the business segments in which it operates.

T. 01 THE H&R GROUP IN FIGURES

| IN € MILLION | 2017 | 2016 | Change in absolute terms |
|---|---------|-------|--------------------------|
| Sales revenue | 1,025.1 | 942.7 | 82.4 |
| of which Chemical and Pharmaceutical Raw Materials Refining | 616.8 | 567.2 | 49.6 |
| of which Chemical and Pharmaceutical Raw Materials Sales | 357.2 | 328.0 | 29.2 |
| of which Plastics | 59.6 | 56.5 | 3.1 |
| Reconciliation | -8.5 | -9.1 | 0.6 |
| Operating income (EBITDA) | 97.9 | 101.4 | -3.5 |
| of which Chemical and Pharmaceutical Raw Materials Refining | 63.7 | 64.5 | -0.8 |
| of which Chemical and Pharmaceutical Raw Materials Sales | 34.4 | 39.4 | -5.0 |
| of which Plastics | 3.7 | 2.6 | 1.1 |
| Reconciliation | -3.8 | -5.1 | 1.3 |
| EBIT | 54.8 | 64.2 | -9.4 |
| Earnings before income tax | 46.2 | 54.2 | -8.0 |
| Consolidated income (before minority interests) | 29.5 | 39.3 | -9.8 |
| Consolidated income (after minority interests) | 32.1 | 38.4 | -6.3 |
| Consolidated income per share (undiluted, in €) | 0.88 | 1.05 | -0.17 |
| Operating cash flow | 46.2 | 75.5 | -29.3 |
| Equity ratio (in %) | 51.7 | 49.0 | 2.7 |
| Employees as of 31 December (absolute) | 1,692 | 1,628 | 64 |

T. 02 NON-FINANCIAL PERFORMANCE INDICATORS OF H&R GROUP

| KG PER TON OF FEEDSTOCK | 2017 | 2016 | 2011 (Reference value) |
|---------------------------|-------|-------|------------------------|
| CO ₂ emissions | 335.8 | 350.3 | 398.1 |
| Waste | 2.97 | 2.93 | 3.09 |
| Wastewater | 621.5 | 600.9 | 861.2 |

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FURTHER INFORMATION



Informative notes



Link to the H&R homepage



Information to sustainability



Useful information



Niels H. Hansen
Chairman of the Executive Board



Detlev Wösten
Member of the Executive Board

Dear Shareholders,
Dear Ladies and Gentlemen,
Dear Employees,

The memory of financial year 2017 will undoubtedly remain with all of us for some time to come. And some of the issues that occupied us over the past 15 months will also leave unmistakable traces on our future.

January had barely begun when German companies were faced with challenges that had almost become unimportant in recent economic history. First and foremost, the new U.S. President threatened to impose a new policy of isolationism: Suddenly, there was talk of punitive tariffs on German products and the possibility of terminating important agreements was mooted. The new agenda – “America First” – and the search for advantageous deals by the United States set up unusual confrontations with other countries. It soon became clear that previous U.S. administrations’ reliability as a transatlantic partner would now be replaced by a new economic and customs policy.

There has also been little reason to relax in the European domestic market. The EU, which for decades has been a guarantor of stability, also came under pressure from nationalistic tendencies in East and West. In particular, the halting preparations for Britain’s departure from the European Union resulted in numerous uncertainties. Moreover, there was the G20 summit in Hamburg, which clearly exposed the divergence of national interests; the diesel-emissions scandal, which badly damaged Germany’s economic reputation; and parliamentary elections in Germany, which resulted in less stability, not more.

You may be wondering whether we are not casting the net a bit too wide for “little H&R KGaA”. On the contrary:

We are directly affected by many of these issues. We see ourselves as a company with Hanseatic dependability, regional ties, and a global reach. For us, Hamburg is quite literally the gateway to a world in which we intend to actively take advantage of our opportunities through a network of German locations and international production and sales offices. But for this to succeed, the world must be stable and predictable. If it is not, the economic risks will be higher for everyone, including us.

In view of the many uncertainties facing us, we will have to rely more than ever on our own strengths in the future. With this in mind, we have intensified our focus on our basic strategy: Our gateway to the future is called G.A.T.E. Our most important success factors are our global orientation and our corresponding network. We plan to remain “TechnoVative” through partnerships and our own organization, as well as through proximity to the market and to our customers’ applications and requirements. We have already invested more in future-proof, state-of-the-art technologies in 2017 than in any previous year. We believe this will bring us economic success – without losing sight of issues such as ecology and sustainability.

What we accomplished in 2017 is impressive and it demonstrates that we are on the right track. Once again, we generated EBITDA of nearly €98 million, a very positive figure which – even if we did not set a new record high – was at the upper end in terms of our company’s earnings history. Every segment contributed to this figure by posting positive results. The biggest contribution came from the Refining business, followed by the Sales segment. We should also highlight the Plastics Division, which has delivered good earnings contributions for several consecutive quarters and continues to show an upward trend.

Of course, it would have been nice to repeat the triple-digit results of 2016. However, that was only partly to be expected, given the extensive maintenance work at the Hamburg site scheduled for the last quarter. This is why, we started financial year 2017 with an initial minimum earnings forecast of €86 million.

However, as the year progressed we were able to revise our minimum expectation upward. Not least thanks to the support of up to 400 outside workers, we ultimately managed the timeframe of several weeks for maintenance work at several plants so well that our 2017 earnings need not fear comparison with the 2016 figure.

Although earnings were impacted by higher depreciation and amortization charges – among other things due to increased investing activities – and the positive result of operations resulted in higher income taxes, we posted solid consolidated income attributable to shareholders of €32.1 million, with a notional earnings per share of €0.88.

This result also means that for the first time in years, H&R KGaA is again able to pay a dividend. We plan to make a distribution to its shareholders so that they can participate in the company's success.

After a long "period of drought" and the launch of a new dividend policy in the previous year (keyword: bonus shares), we would like to take this opportunity to explicitly thank you for your support. Your commitment as co-owners of the company provides an important framework for our success and motivates us to augment the company's performance. This path will not necessarily get any easier.

Most of the global political challenges and economic uncertainties from the previous year will still be with us in 2018. Thanks to our good position, our strong and extensive network, and a high degree of technological expertise, we believe that we are well equipped to succeed, even in this environment. As an innovative company producing petroleum-based specialty products, we benefit from a stable shareholder structure, can rely on a good financing and liquidity base, and have plenty of investment opportunities to expand our competitiveness. At the same time, we are thinking beyond this and are working on renewable and synthesized raw materials for our production sites.

Thus, the excitement continues. We are pleased that you continue to stand by us.

Best regards,

Executive Board of H&R KGaA



Niels H. Hansen
Chairman of the
Executive Board



Detlev Wösten
Member of the
Executive Board

Salzbergen, March 2018

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.

Executive Board

As the general partner with full personal liability, H&R Komplementär GmbH is responsible for managing H&R KGaA. Its two managing directors are also the managing directors of H&R KGaA. Each member of the Executive Board is responsible for one or more functions within the H&R Group.

Niels H. Hansen

Chairman of the Executive Board

Detlev Wösten

Member of the Executive Board

The Supervisory Board

The Supervisory Board of H&R KGaA is responsible for the supervision of the Executive Board. In the financial year 2017, 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
 Managing Director of
 H&R Beteiligung GmbH

Sven Hansen
 Managing Partner of the H&R
 Group

Dr. Hartmut Schütter
 Certified Engineer,
 Freelance Consultant

Reinhold Grothus
 Group Works Council Chairman
 for the current H&R GmbH &
 Co. KGaA,
 Works Council Chairman of
 H&R ChemPharm GmbH

Members of the Supervisory Board

Roland Chmiel
 Certified Public/Chartered
 Accountant, Partner in the law
 and accounting firm of Weiss
 Walter Fischer-Zernin

Dr. jur. Rolf Schwedhelm
 Tax Attorney and Partner
 in the law firm of Streck Mack
 Schwedhelm

Dr. Ing. Peter J. Seifried
 Chemical Engineer,
 Independent Consultant

Holger Hoff
 Works Council Chairman of
 H&R Ölwerke Schindler GmbH

Harald Januszewski
 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.

Harald Baumgart
 Managing Director of
 KG Deutsche Gasrußwerke GmbH & Co

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

Eckbert von Bohlen und Halbach
 Managing Director of Bohlen Industrie GmbH

Wilhelm Scholten
 Managing Director of Ölfabrik Wilhelm Scholten
 GmbH

Sabine Dietrich
 Member of the Supervisory Board of
 Commerzbank AG; former member of the Board
 of Directors of BP Europa SE

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

Dr. Erwin Grandinger
 Businessman



Dr. Joachim Girg
Chairman of the Supervisory Board

Supervisory Board Report

Dear Shareholders,

We can look back on a satisfactory financial year 2017:

- I. We achieved €97.9 million of earnings (EBITDA), around the same positive level as in the previous year.
- II. After completely exhausting the loss carry-forwards accumulated in 2013 and 2014, we were once again in a position to pay dividends.
- III. Major investments in the refinery sites in Hamburg and Salzbergen will ensure the future viability of our company in a sustainable manner.

Macroeconomic conditions in our domestic market remained positive. Overall, we have been in an upswing for the past 10 years. Five years ago, in our Refinery Segment, we discovered that not every industry is able to benefit from this to the same extent. In the labor market, there is a serious shortage of skilled technical employees. For a medium-sized company such as H&R GmbH & Co KGaA, it is becoming harder and harder to attract and retain new employees over the long term, even though we offer a good, comprehensive package of pay and benefits. Looking at the details of the new coalition agreement in Berlin, it is rather reasonable to doubt that the trend will reverse any time soon. The opposite is more likely to be the case. As an observer, one gets the impression that lots of political decision-makers at the national and state levels are no longer capable of imagining that the country could slip back into recession. Expenditures in Germany and for Europe are to be increased more and more. There is a fear that, in the end, small and medium-sized companies will end up paying the bill. In parallel with the latter development, there is a steady increase in the volume of management work that has nothing to do with managing operations or maintaining contacts with customers. I will discuss this in greater detail in the sections on flood protection and non-financial reporting.

We are all the more pleased that the Executive Board would like to offer you, dear Shareholders, a proposed dividend of €0.40 per share for financial year 2017. The years 2013 and 2014 were difficult ones for the industry that starkly highlighted past weaknesses and mistakes as well as missed opportunities; having put these behind us, we are now returning to normality. In order to minimize the cash outflow for the company in the event the stock dividend is approved by the Annual Shareholders' Meeting, the Executive Board and the Supervisory Board are discussing to offer the option of receiving the dividend in the form of shares or as a cash payment. Moreover, the Supervisory Board is in dialog with the majority shareholder, who has already announced that he will opt for the former, if given the possibility.

Key Focal Points of Supervisory Board Work

During the past year, the Supervisory Board focused on five issues in particular.

First and foremost, we should mention planning and implementation of extensive work on **investment and maintenance**. The most obvious example was the inauguration of the world's biggest dynamic hydrogen electrolysis plant using so-called PEM (Proton Exchange Membrane) technology, which was placed into operation on 24 November 2017 at the Hamburg-Neuhof refinery site. The five-megawatt plant represents a big step toward realization of the Green Refinery. More than €10 million has been invested to build the plant, which will generate hydrogen from electricity and water. In addition, more than €40 million has been invested in a broad range of other projects. In close coordination with our sales partner we focused primarily on producing better products for our customers, further pruning by-products with negative margins, and making our production process more environmentally friendly. In terms of the environment, the public still has a negative perception of refineries. H&R's goal is to be a good neighbor in every respect.

Closely monitoring **new markets** was another important component of the Supervisory Board's work during the past year. After the sanctions against Iran were lifted, the Executive Board and regional managers made several trips to the country, as well as to the neighboring countries of Saudi Arabia and the United Arab Emirates. As the world's largest producer of natural gas and No. 4 in oil reserves worldwide, Iran in particular deserved particular attention. The Supervisory Board Chairman also took part in three of these trips. Working jointly with the Executive Board, we comprehensively examined the situation. We concluded that, due to political realities, the time has not yet come for technological partnerships or even investments. Nevertheless, we will continue to monitor developments in the region closely. At the same time, H&R will try to establish trade ties with the country on a small scale, while continuing to rigorously monitor the existing obstacles.

In addition to reviewing relevant markets, we also held intensive discussions on the trends in our important international locations in Thailand and China. In China, in particular, current business performance is not entirely positive.

Another topic discussed in depth was the upgrading of the **flood-protection wall at the Hamburg-Neuhof refinery site**. The current wall was built mainly using public funds after the storm surge in 1976 that totally flooded the site. The existing wall needs to be renovated and raised due to age, rising sea levels, and the faster current of the Elbe River. While coastal protection measures for our domestic and international competitors are paid for with public funds, the Freie und Hansestadt Hamburg wants port users to bear half of the costs. This would leave an amount in the double-digit millions for H&R GmbH & Co. KGaA to pay – a big disadvantage, both competitively and in terms of location! Both the Executive Board and the Supervisory Board are currently involved in intensive dialog with the Hamburg Senate and with government offices in Berlin to keep the costs to the company as low as possible.

The fourth major focus of our Supervisory Board work during the past year was on **system monitoring and process optimization**. The Executive Board and the Supervisory Board have intensively discussed and approved a revised, well-rounded Compliance Management System. Interested parties can find more information about this on our website under <https://hur.com/en/investor-relations/corporate-governance>. A new Tax Compliance Management System was also discussed in detail and implemented. Following a recommendation from the 2016 audit of the annual financial statements, a review of due diligence and compliance-related processes was conducted with an outside consultant at the Hamburg-Neuhof site. Nothing in particular stood out. Another recurring issue in 2017 was ensuring the independence of the auditors in line with tougher legislation. Following a thorough discussion, all the necessary resolutions were passed by the Audit Committee.

H&R GmbH & Co. KGaA must publish a **Non-Financial Report** for the first time for 2017. In addition to a brief description of the business model, this report must also address environmental, employee, and social concerns as well as respect for human rights and the fight against corruption and bribery. The Non-Financial Report must be reviewed by the Supervisory Board. We will be happy to satisfy any legitimate requests for information by shareholders and other stakeholders, without reservations. However, imposing the burden of preventing violations of human rights on a company that obtains multiple comprehensive certifications on an annual basis is going too far. This is not the only instance in which one gets the impression that lawmakers, and thus politicians, would like to outsource as many unsolved problems as possible to third parties

In our Supervisory Board Report in the 2015 Annual Report, we laid out **five core company goals** for the Refinery and International Sales/Distribution segments. In addition to general supervisory and control functions, we consider one of our primary missions to be helping the Executive Board to achieve these five objectives. The following goals were achieved in 2017:

T. 03 PERFORMANCE GOALS, GOALS ACHIEVED IN 2017

| Performance Goals | Targets Achieved in 2017 |
|--|---|
| i) Reducing low-margin and negative-margin by-products and converting these into high-grade specialty products |  Continuous improvement through capital expenditures and product innovations, as well as cross-company cooperation |
| ii) Securing and improving our competitive position |  New Solomon study shows we have top position in terms of margins, while at the same time pointing out areas for potential improvement |
| iii) Improving performance of international sales/distribution |  Share of sales revenues constant; share of earnings decreased slightly |
| iv) Safety and environmental protection |  Safety record at industry standard but room for improvement |
| |  Investments in environmental protection (e.g., PEM plant) |
| v) EBITDA margin in the ChemPharm Refining segment of > 10% |  2017 EBITDA margin: 10.1% |

Even though the EBITDA margin in the ChemPharm Refining segment of 10.1% just barely exceeded our target and is slightly below the prior-year figure, we are satisfied with the level of earnings. As is the case at all technical plants, H&R’s refineries also have to undergo inspections and **maintenance work** at regular intervals. The most comprehensive in the five-year test cycle took place at our Hamburg OWS site during the fourth quarter of 2017. A process which ten years ago led to major complications, including the occasional shutdown of the entire plant, went almost unnoticed in 2017 and was completed within the scheduled timeframe and in line with projected costs. Thanks to extensive preparatory work and close coordination with our sales partners, business with our customers was virtually unaffected. Still, the maintenance work did impact the results of the fourth quarter of 2017.

The Plastics Division has also set a core target of exceeding an EBITDA margin of 10% over the medium term. In 2017, GAUDLITZ GmbH posted €3.7 million in earnings (EBITDA), continuing its positive earnings trend. Above all, we can now speak of a sustainable positive turnaround at the site in Wuxi, China. The Supervisory Board considers this a positive sign that the turnaround measures adopted will continue to bear fruit – including at the headquarters in Coburg – and that we are gradually getting closer to achieving the earnings target we have set.

Composition of the Supervisory Board

When the Supervisory Board was expanded from six to nine members in 2011, the company’s management bodies held detailed discussions about what would constitute an “ideal” Supervisory Board for what was then H&R AG. As a listed company subject to the One-Third Participation Act (Drittelbeteiligungsgesetz/DrittelbG), six of the members represent the equity investors; the other three members are elected by the employees. The benchmark for the ratio of independent to dependent members was set at two to one.

As a company with global operations, we believe that the following profile requirements should be given special consideration in determining the composition of the Supervisory Board:

- Refinery technology, plant construction and engineering
- Oil-based specialty products (expertise in product formulation and sales)
- Entrepreneurship, small/medium-sized business with international operations
- International background (experience, foreign languages, cultures and mentality)
- Traditional Supervisory Board profiles such as corporate management, finance, capital markets, controlling, tax and legal (primarily corporate and contract law). For legal, it is important to us to have on board someone with practical experience, i.e., a lawyer with extensive client and court experience.

The 2011 diversity goals for the composition of the Supervisory Board still apply. The resolution reads as follows: “H&R GmbH & Co. KGaA’s Supervisory Board would like to promote and strengthen a culture of diversity as a forward-looking foundation for our business. To us, diver-

T. 04 PROFILE REQUIREMENTS WITHIN THE MEANING OF SECTION 5.4.1 PARAGRAPH 2 OF THE GERMAN CORPORATE GOVERNANCE CODEX FOR THE SUPERVISORY BOARD

| Name | Dr Joachim Girg 53 years of age | Roland Chmiel 60 years of age | Reinhold Grothus 57 years of age | Sven Hansen 49 years of age |
|---|--|--|---|--|
| Function | Chairman of the Supervisory Board; Representative of the Majority Shareholder | Deputy Chairman of the Supervisory Board; Independent financial expert | Employee Representative | Majority Shareholder Entrepreneur |
| Occupation/Professional Background | MBA | MBA; CPA/Chartered Accountant | Chemical Technician | Industrial Manager, Degree in Business Administration |
| Training/Educational Background | Study of Business Administration; additional studies in Geography; doctorate | Study of Business Administration | Apprenticeship as chemical worker; further training as industrial master chemist | Degree in Business Administration (from College of Advanced Vocational Studies/BA) |
| Summary of Key Points from Résumé | <p>Almost 20 years of experience in international banking, including work as an assistant to the Board of Managing Directors, in corporate customer support and in corporate finance business for small and medium-sized clients.</p> <p>Extensive experience in capital markets and equity investments</p> <p>Certified, Freelance consultant Director of HVB Principal Equity GmbH, Munich</p> <p>Since 2010: Managing Director of H&R Beteiligung GmbH, Hamburg</p> | <p>More than 30 years of experience in business audits and in tax, commercial law and management consulting for medium-sized companies</p> <p>Particular experience in restructuring and reorganization consulting as well as enterprise valuations for corporate law and tax purposes</p> <p>Since 2009: Partner at Weiss Walter Fischer-Zernin, Munich</p> | <p>More than 40 years of professional experience in the petrochemical sector, including positions as a chemical technician, shift manager, project coordinator and safety specialist.</p> <p>Elected chairman of the works council in 2002</p> <p>Since 1976 at the H&R ChemPharm Group, Salzbergen, relevant predecessor companies</p> | <p>Approximately 30 years of professional experience in the Hansen und Rosenthal KG, including activities in national and international sales (USA) as well as development, development and implementation of the IT strategy.</p> <p>Product focus on chemical-pharmaceutical specialties</p> <p>Since 2001: Managing Partner of TUDAPETROL Mineralölerzeugnisse Nils Hansen K.G.</p> |
| Member of Supervisory Board Since/Elected Until | September 2011/2022 Annual Shareholders' Meeting | May 2011/2021 Annual Shareholders' Meeting | August 2016/2022 Annual Shareholders' Meeting | August 2016/2022 Annual Shareholders' Meeting |
| Supervisory Board Responsibilities | Banking and Capital Markets; International Business; Strategic Issues; Corporate Governance | Accounting, Controlling and Compliance; Taxes | General Works Council Chairman, H&R GmbH & Co. KGaA Works Council Chairman, H&R SRS, Salzbergen | Strategy; Sales/Distribution; Waxes and Paraffins; IT and Digital Native |
| Committees | Refinery Technology and Strategy; Audit Committee; Nomination Committee | Audit Committee (Chairman) | None | Refinery Technology and Strategy Nomination Committee (Chairman) |
| Committee Work (# of meetings/attendance) | Meetings 6/6 Committees 12/12 | 6/6 6/6 | 5/6 ¹⁾ | 6/6 6/5 ²⁾ |
| Other Memberships and Board Functions | Afrikaverein der Deutschen Wirtschaft, Hamburg, Berlin; Member | Togal Werk AG, Munich; Member of the Supervisory Board | | |

¹⁾ Sick Leave

²⁾ Customer visit

sity 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 and to a corresponding level of representation within the company's management bodies."

| Holger Hoff 60 years of age | Harald Januszewski 55 years of age | Dr. Hartmut Schütter 73 years of age | Dr. Rolf Schwedhelm 62 years of age | Dr. Peter Seifried 68 years of age |
|---|--|---|---|--|
| Employee Representative | Employee Representative | Independent member of the Supervisory Board | Independent member of the Supervisory Board | Independent member of the Supervisory Board |
| Trained Retail Salesman | Plastics and Rubber Process Mechanic | Certified Engineer (Freelance consultant) | Attorney; Specialist lawyer (tax law) | Chemical Engineer |
| Apprenticeship as a Retail Salesman in the Hardware Sector | Apprenticeship as Plastics Molder | Degree in Process Engineering; Doctorate in Chemistry (Dr. rer. Nat.) | Studied Law and Business Administration Doctorate (Dr. Jur.) | Studied Chemistry and Chemical Engineering Doctorate (Dr. Ing.) |
| <p>More than 40 years of professional experience in the ironmongery and petrochemical industries, including as a production employee and operator of tank farms.</p> <p>Election as chairman of the works council in 2010</p> <p>Since 1998 at the H&R OWS Hamburg Neuhof site, including predecessor companies</p> | <p>More than 40 years of professional experience in the plastics industry, including stations as a setter for injection moulding machines, shift supervisor in plastics production and tool-maker.</p> <p>Election as chairman of the works council in 2016</p> <p>Since 1977: GAUDLITZ GmbH, Coburg</p> | <p>35 years of professional experience in the petrochemical sector; extensive experience in refinery plant construction and operation; scientific work on vacuum gasoil (feedstock material at H&R)</p> <p>76 patents, 46 of which are used commercially; numerous publications</p> <p>1971 – 2006 PCK Raffinerie GmbH, Schwedt and predecessor companies</p> | <p>Decades of experience as a lawyer; specialising in consulting and representation in tax law, criminal tax law and corporate law.</p> <p>Author, co-author and co-editor of specialist legal literature such as the handbooks "Die Unternehmensumwandlung", "Recht und Steuern" and "GmbH-Beratung".</p> <p>Since 1989 Partner in Streck Mack Schwedhelm, Cologne</p> | <p>34 years of professional experience in the petrochemical sector; extensive experience as plant manager, director of refineries and R&D as well as portfolio manager; most recently Chairman of the Management Board of Shell Deutschland Oil GmbH</p> <p>Many years of experience in supervisory bodies: Shell Beteiligungsraffinerien, TÜV Nord, Erdölbevorratsverband, Fuchs DEA Mineralöl GmbH, Oest-Gruppe and others</p> |
| September 2011/2012 Annual Shareholders' Meeting May 2017/2022 Annual Shareholders' Meeting | May 2012/2022 Annual Shareholders' Meeting | May 2013/2018 Annual Shareholders' Meeting Nominated for re-election | 2011 Annual Shareholders' Meeting/2021 Annual Shareholders' Meeting | May 2015/2020 Annual Shareholders' Meeting |
| Works Council Chairman, H&R Oelwerke Schindler, Hamburg-Neuhof | Works Council Chairman, Gaudlitz GmbH, Coburg | Refinery Technology, plant construction, engineering, strategic issues | Corporate and tax law, corporate governance | Refinery Technology, plant construction, engineering, strategic issues |
| None | None | Refinery Technology and Strategy (Chairman) | Audit Committee; Nomination Committee | Refinery Technology and Strategy (Audit Committee) |
| 3/3 | 6/6 | 6/6 5/5 | 6/6 7/7 | 6/6 11/11 |
| | | | Deutsche Anwalt Akademie Gesellschaft für Aus- und Fortbildung und Serviceleistungen mbH, Berlin; Chairman of the Supervisory Board | VSI – Verband der Schmierstoffindustrie e.V., Hamburg; Chairman of the Executive Board UNITI – Bundesverband mittelständischer Mineralölunternehmen e. V., Berlin; Member of the Executive Board Foundation and Board of Directors Oest-Gruppe, Freudenstadt; member |

Moreover, in the meeting on 14 March 2017, the 2011 profile requirements were thoroughly discussed with the Supervisory Board and confirmed as profile requirements within the meaning of Section 5.4.1 paragraph 2 GCGC for the Supervisory Board plenum.

In 2015, the Supervisory Board set a target figure of 20% for the proportion of women on the Board. At that time, the Executive Board adopted the same target figure for the proportion of women at the top two levels of management below the Executive Board. Both quotas were reviewed and reconfirmed at the Supervisory Board meeting held on 14 March 2018. Although we have long since met the targets at operating management levels, there are currently no women serving on the Supervisory Board since the work-related departure of Ms Krusel. In this regard, the following comment is allowed: Representatives of the shareholders are not the only ones responsible for achieving the women's quota. In addition, the requirements of the German Corporate Governance Code apply to the KGaA legal form only to a limited extent. Nevertheless, we hope to be able to propose suitable candidates for election to our Supervisory Board again by 1 July 2020 so that we can also achieve the target figure for the Supervisory Board.

Naturally, any panel could be composed of even more experienced and more renowned representatives. Nevertheless, we are satisfied with the current composition of the board and our achievement of the profile requirements defined in 2011 as well as in the profile requirements confirmed in the Supervisory Board meeting on 14 March 2017. In recent years, we have spoken with numerous female candidates and in several cases have also submitted offers for nomination. However, we are competing here with bigger companies and, presumably, more lucrative offers. In the future, we will continue to be guided by the principle that *skills take precedence over gender* in the case of all candidates we propose for election as new members of the Supervisory Board. The decisive factor – aside from covering the profile requirements defined above – will be a deep understanding of the particularities of entrepreneur-driven small and medium-sized businesses.

Efficiency Audit

As in the previous year, in 2017 the Supervisory Board again carried out an audit of its efficiency. Building on the extensive questionnaire drawn up in the previous year, the Chairman of the Audit Committee and the Audit Manager of H&R GmbH & Co. KGaA made adjustments to cover the new legal situation. In turn, the Audit Manager evaluated the anonymous responses. After an intensive discussion of the results at a meeting of the Audit Committee held on 11 December 2017, a presentation was given to the entire Supervisory Board at the next regular meeting held on the following day.

There were some minor changes in the assessment compared to the previous year – all of them positive. Overall, the Supervisory Board members rated the cooperation and the work of our panel as good to very good. Suggestions for improvement were noted and have since been incorporated into the board's work. Particularly noteworthy in this regard are the position and contribution of the employee representatives. In a corporation set up under the One-Third Participation Act, the employee representatives by nature have a somewhat weaker position than in a corporation with equal representation. Nevertheless, it should be noted that all members of the Supervisory Board have equal rights and obligations, regardless of the size of the company. In addition, in the past all necessary resolutions have been adopted consistently by consensus. No conflicts of interest involving members of the Executive Board or members of the Supervisory Board arose during financial year 2017.

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 2017, the Supervisory Board and the Executive Board had a good, intensive working relationship. The Executive Board kept the Chairman of the Supervisory Board 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 of

meetings in order to ensure a constant flow of information and an exchange of opinions.

The practice of focusing on one pivotal product segment and/or one priority region per Supervisory Board meeting, which began in 2015, was continued in 2017. H&R's current position and the targets for the next few years were discussed in detail with the Executive Board and the respective specialists from the subsidiaries. Special topics in 2017 related to the Plastics Division – the status quo at GAUDLITZ GmbH and its outlook over the next few years were thoroughly discussed – as well as updates on our approach in the Near and Middle East and supplies of raw materials. The latter issue was discussed and analyzed in detail with experts from the Advisory Board of H&R GmbH & Co. KGaA and outside commodity analysts. Especially in light of our company's extensive investment plans, the supply of our feedstocks – atmospheric residue and vacuum-gas oil – in the required grades is critically important. For the current year, 2018, the focus is on Industry 4.0 and digitalization.

The workflow for a "normal" Supervisory Board meeting therefore includes the following:

- News on production and administration
- Audit Committee, risk management, compliance, Internal Audit
- RTS Committee, investment projects, safety
- The current situation of the company, broken down into Refineries, Sales and Plastics
- Special topic: Product segment or priority region
- Miscellaneous.

Topics Discussed by the Full Supervisory Board

During 2017, a total of six Supervisory Board meetings were held. There were five face-to-face Supervisory Board meetings and one teleconference. The May meeting was spread over two days. On the first day, Supervisory Board members also were given the opportunity to attend a training program. The Executive Board provided extensive information about the company's situation to the Supervisory Board on a regular basis, both verbally and in writing. Recurring themes were flood protection at the Hamburg site; maintenance and investment projects; and the business in China; as

a result, these are not covered separately below. The 2017 attendance rate at Supervisory Board meetings was 98.1%.

Below is a brief presentation of the main areas focused on at the meetings.

The annual session began on 31 January 2017 with the year's first Supervisory Board meeting, at which the attendees held detailed discussions of the status of work on the annual financial statements for 2016 and two other areas of focus.

The first topic was the status and further implementation in 2017 of pending investment and maintenance projects. Here, the focus was on budget and schedule monitoring and on safety.

The second area of focus was the status of contract production in Salzbergen. Based on the contractual fundamentals in place in the past, implementation of and adjustments to those contractual terms over time were discussed and debated with the managers of the refinery and the family business. In light of its extensive investment plans, the Executive Board decided to adhere to the model for the time being.

At the recommendation of the Nomination Committee, the Supervisory Board members decided to propose that the Annual Shareholders' Meeting on 18 May 2017 re-elect Mr. Sven Hansen and Dr. Joachim Girg.

The initial focus of the meeting on 14 March 2017 was a discussion of the 2016 annual financial statements. After the necessary supporting documents were first discussed by the Audit Committee in the presence of the auditor at the beginning of March, the updated documents were then made available to all Supervisory Board members from that date. Following extensive editing, the audit reports were discussed and debated with the auditors at the meeting. At the recommendation of the Audit Committee, the Supervisory Board approved and ratified the annual financial statements of the company and the consolidated financial statements. Also at the recommendation of the Audit Committee, the Supervisory Board decided to propose that the Annual Shareholders' Meeting appoint Warth & Klein Grant Thornton

AG, Wirtschaftsprüfungsgesellschaft, Hamburg, as auditors of the financial statements and the consolidated financial statements for financial year 2017.

The Plastics Division was discussed in detail at the March meeting. The current situation as well as medium-term domestic and international targets in the automotive, industry and medical technology segments were discussed in the presence of GAUDLITZ GmbH's Managing Director. The session also included a presentation on product innovations in the latter segment.

During the March meeting, the Executive Board notified the Supervisory Board of its intention, despite the company's inability to pay dividends, to enable shareholders to participate in the positive results of financial year 2016 by issuing bonus shares. The Supervisory Board expressly welcomed the proposal and asked for an audit of the project. Following the necessary preparatory work, the meeting held by telephone on 4 April 2017 dealt exclusively with the topic of convening the Annual Shareholders' Meeting in May and the agenda for the meeting.

On 17 May 2017 – the day before the 2017 Annual Shareholders' Meeting –, the Supervisory Board considered the current business situation and the status of preparations for the Annual Shareholders' Meeting. In addition, Supervisory Board members were given the opportunity to attend a training program. In addition to the general duties and obligations of a KGaA's Supervisory Board, the training focused on the German Market Abuse Regulation (Marktmissbrauchsverordnung), the current version of the German Corporate Governance Code and the target percentages for women in leadership positions. The training course was rounded off by a presentation on fundamental and current case law on the KGaA.

Following the Annual Shareholders' Meeting, the panel met again on 18 May 2017 to re-appoint as Supervisory Board Chairman Dr. Joachim Girg, who was re-elected as a member of the Supervisory Board at the 2017 Annual Shareholders' Meeting.

At the Supervisory Board meeting on 19 September 2017, particular emphasis was placed on supplies of raw materials and the trend in oil prices. Raw materials procurement managers provided a detailed account of sources of supply over time. Years ago, the Chairman of the Executive Board had ordered the creation of a database for use in analyzing in detail the grades available worldwide. The results of these analyses were also presented and discussed. Discussions of this issue ended with a presentation by a member of H&R GmbH & Co. KGaA's Advisory Board, Dr. Gertrud Rosa Traud, Chief Economist and Head of Research and Economics at Helaba, Frankfurt am Main, entitled "Peak Demand after Peak Oil – the Oil Price between Cyclical Factors and Structural Centrifugal Forces".

Discussions about supplies of raw materials continued at the last meeting held in financial year 2017. An outside international analyst gave a lecture entitled "Outlook for the Future Raw Material Supply" that was tailor-made to address H&R's concerns. Among other things, the analyst covered general aspects of raw material supplies over the next ten years, as well as forecasts relating to trends in various sources of supplies from different parts of the world and the probabilities associated with such forecasts.

Aside from raw materials issues, the meeting held on 12 December 2017 – like meetings held at the same place in previous years – focused on a review of the current financial year, 2018 planning and the five-year medium-term plan. The Executive Board intends to implement numerous measures to guarantee and expand our competitive position. The panel discussed the proposed investment plan in detail. In addition, the Chairman of the Audit Committee presented the results of the efficiency audit. The panel unanimously approved the revised 2017 Statement of Compliance. Employee representatives on the panel from both refineries in Hamburg and Salzbergen provided information about employee-related issues under the heading "One Refinery".

The Work of the Supervisory Board Committees

One result of the 2015 Efficiency Audit was that committee work was consolidated into just three

committees. This was based on the fact that in previous years, committee work was focused on the Audit Committee and the Committee on Refinery Technology and Strategy (RTS). The 2016 change in legal form also provided long-term support for these considerations. Therefore, the Steering Committee and the Corporate Actions Committee were eliminated.

In 2017, 12 committee meetings were held, including six meetings of the Audit Committee, five RTS meetings and one meeting of the Nomination Committee. In addition, a presentation of the results of the latest Solomon study was given on 18 September 2017; members of the RTS Committee and the Audit Committee were invited to attend. The attendance rate remained high, at 98%.

Audit Committee

Of the six Audit Committee meetings, one meeting was held jointly with the Committee on Refinery Technology and Strategy. As in previous years, all committee members attended all meetings in 2017.

Again in 2017, one of the committee's main responsibilities was to deal with the annual financial statements and the Combined Management and Group Management Report for H&R KGaA and the Group, the Subordinate Status Report and the appropriation of net income. After thoroughly discussing these documents in the presence of the auditors and the Executive Board, the Audit Committee gave the Supervisory Board its recommendations regarding approval of the financial statements for financial year 2016 and the proposal to the Annual Shareholders' Meeting concerning the election of the auditors for financial year 2017.

Other areas of focus for the committee included issuing the audit engagement to the auditors elected for financial year 2017; monitoring the auditors' independence and qualifications; determining the focal points of the audit and determining the auditing firm's fees. Further, the course and results of the audit of the financial statements were followed, discussed and evaluated in a timely manner. In addition, regarding the monitoring of the auditors' independence, the provisions of the new Audit Reform Act had to be followed.

Accordingly, the Audit Committee has 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 so-called 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.

Further, the body actively reviewed the efficiency of the work by the Supervisory Board. The questionnaire used for this purpose was revised, with particular input by the employee representatives on the Supervisory Board. The approach to the review and the very satisfactory results were discussed in detail. It was also decided that the panel would continue to refrain from including outside consultants in the evaluation.

In addition, the Audit Committee discussed the procedure for preparing the annual financial statements; the internal control system; and the Group's compliance management system – and here, in particular, implementation of a Tax Compliance Management System that adequately takes into account the Group's size and risk factors. It also kept itself informed about the work and results of the Internal Audit department. Other issues discussed included cybercrime, implementation of the EU's General Data Protection Regulation, topics relating to the Renewable Energy Sources Act and the drafting of the Subordinate Status Report and the new Non-Financial Group Statement.

On top of the committee meetings, the Chairman of the Audit Committee, the auditors, the Executive Board and the Head of Finance held regular discussions to exchange information and coordinate their work.

Refinery Technology and Strategy

The Committee on Refinery Technology and Strategy held five meetings during the year under review. The committee's work focused primarily on projects to increase value creation and minimize risk and on environmental legislation. Another

focal point was benchmarking, especially the detailed analysis of the results of the most recent study by Solomon in 2016. Projects that repeatedly came up during committee work were the plans to upgrade the flood defenses for the Hamburg refinery site and the extensive maintenance work in the fourth quarter.

The last two meetings in 2017 focused mainly on the company's medium-term investment planning and financing. Individual investment projects at our refineries and in the International Sales segment were discussed in detail with the respective project managers. Results from these discussions were incorporated into the 2018 plan and into medium-term planning through 2022.

The attendance rate for the Committee on Refinery Technology and Strategy was 95%.

Nomination Committee

Following preliminary discussions, the Nomination Committee met once during the past financial year, on 31 January 2017. The terms of office of Mr. Sven Hansen and Dr. Joachim Girg ended at the close of the 2017 Annual Shareholders' Meeting. Both represent the majority shareholder. In addition, Dr. Girg has held the position of Supervisory Board Chairman since 2012. After an in-depth discussion, the Nomination Committee recommended – even after giving special consideration to the targets and to diversity aspects – that the full Supervisory Board put a proposal to the Annual Shareholders' Meeting to re-elect both men due to their important committee work and that if re-elected, Dr. Girg should be reappointed as chairman of the committee. The full Supervisory Board unanimously followed this recommendation at its meeting held on the same day.

All committee members attended the meeting of the Nomination Committee.

Audit of the Annual and Consolidated Financial Statements

Warth & Klein Grant Thornton AG Wirtschaftsprüfungsgesellschaft, Hamburg, audited the annual and consolidated financial statements and the Combined Management and Group Management Report for H&R GmbH & Co. KGaA and the Group

for financial year 2017 and issued an unqualified audit certificate for each.

The annual financial statements for H&R GmbH & Co. KGaA and the Combined Management and Group 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 German requirements as set forth in Section 315(e), paragraph 1 of the HGB. The auditors carried out the audit in accordance with Regulation (EU) No 537/2014 on Specific requirements regarding statutory audit of public-interest entities and Section 317 of the 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 and Group Management Report – including the integrated Non-Financial Group Statement – were also examined in detail at the Audit Committee meeting on 1 March 2018.

The audit reports by Warth & Klein Grant Thornton were distributed to all Supervisory Board members and were reviewed thoroughly in the presence of the auditors at the Supervisory Board meeting held on 14 March 2018 to discuss the financial statements. The auditors reported on especially important audit issues and 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 plenum 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 after our own audit of the annual and consolidated financial statements and the

Combined Management and Group Management Report, we approved the results of the audit conducted by the auditors and ratified both the annual and the consolidated financial statements. The Supervisory Board considers the Executive Board's proposal for the appropriation of distributable profit to be balanced and endorses the proposal.

The report on relations with affiliated companies prepared by the Executive Board in accordance with Article 312 of the German Stock Corporation Act (AktG) was also examined by the auditors. 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,
2. the consideration paid by the company for the legal transactions listed in the report was not unreasonably high or disadvantages have been offset."

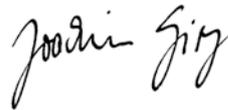
This report by the auditors was also reviewed by the Supervisory Board. The Supervisory Board endorses the closing statement made by the Executive Board in the report and has no objections to raise.

There was one personnel change that affected the Supervisory Board in financial year 2017. The election for employee representatives confirmed the current members, Mr. Reinhold Grothus and Mr. Harald Januszewski, and elected Mr. Holger Hoff to the Supervisory Board for the first time. With this election, all three major H&R sites in Germany – the two refineries in Hamburg and Salzbergen and GAUDLITZ GmbH, based in Coburg – will each send one representative to the Supervisory Board. The Supervisory Board would like to take this opportunity to thank the departing member, Mr. Matthias Erl, for his work on the panel.

The Supervisory Board thanks the members of the Executive Board, all employees worldwide and the employee representatives for their hard work, their personal contributions and their constructive collaboration for the good of the company.

March 2018

Signing for the Supervisory Board



Dr. Joachim Girg
Chairman

Corporate Governance Report

Statement on Corporate Governance

Corporate governance refers to a company's decision-making and control processes. Good corporate governance means making decisions based on long-term value creation, ensuring that a company's Executive Board and Supervisory Board work together effectively, and demonstrating a high level of transparency in corporate communications. These factors are the key guiding principles when it comes to the management and supervision of H&R KGaA. In Germany, the applicable regulations and the recognized German and international standards for responsible corporate governance are summarized in the German Corporate Governance Code (the "Code"). The Code, which is based on the statutory provisions applicable to a joint-stock company, is applied mutatis mutandis by H&R GmbH & Co. KGaA. Pursuant to Article 289a of the German Commercial Code (HGB), the Executive Board hereby issues the following Statement on Corporate Governance, which is an integral part of the summarized Management Report, thereby also fulfilling the recommendations of the current German Corporate Governance Code (Preparation of a Corporate Governance Report).

2017–2018 Statement of Compliance

Pursuant to Article 161 of the German Stock Corporation Act (AktG), and considering the specific features of the legal form of a partnership limited by shares described in Section I below, the Executive Board of H&R Komplementär GmbH acting in its capacity as general partner of H&R GmbH & Co. KGaA (the "Company") with full personal liability, and the Company's Supervisory Board have issued the following statement:

- With the exception of the deviations mentioned in Section II below, since issuing its last Statement of Compliance on 9 August 2016 (updated on 19 May 2017), the Company has followed the recommendations of the Government Commission on the German Corporate Governance Code (hereinafter referred to as the "GCGC" or "Code"), as updated on 5 May 2015 and published in the Bundesanzeiger (Federal Ga-

zette) on 12 June 2015. Since issuing the last Statement of Compliance, the Company has complied with the recommendation in Section 4.2.5, paragraph 3 of the Code only through 18 May 2017 (see updated Statement of Compliance of 19 May 2017 and Section II.2 below).

- With the exception of the deviations listed in Section II below, the Company currently complies and in future will likewise comply with the recommendations of the GCGC as updated on 7 February 2017 and published in the Bundesanzeiger on 24 April 2017.

I. Specific Features of the KGaA Legal Form

The GCGC contains descriptions and explanations of the legal requirements applicable to (listed) joint-stock companies; the Code's recommendations are also aimed at the (listed) joint-stock company legal form. Due to the structure of the KGaA, the following features in particular relating to specific legal requirements described in the Code and individual recommendations of the Code apply to the Company since the change in legal form to that of a KGaA took effect on 1 August 2016:

– Annual Shareholders' Meeting

Basically, the Annual Shareholders' Meeting of a partnership limited by shares (KGaA) has the same rights and obligations as the Annual Shareholders' Meeting of a joint-stock company.

However, in addition and pursuant to Article 286, paragraph 1, sentence 1 of the AktG, the KGaA's Annual Shareholders' Meeting must decide whether to approve the annual financial statements (compare Section 2.2.1, paragraph 1 of the GCGC). The resolution also requires the approval of the general partner with full personal liability. The Annual Shareholders' Meeting is likewise not allowed to decide on its own regarding amendments to the Articles of Association or major organizational changes (see Section 2.2.1, paragraph 2, sentence 1 GCGC). Such resolutions require the approval of the general partner with full personal liability to the extent they deal with matters for which the consent of the general partner with full personal liability and of the limited partners is required for a lim-

ited partnership. Determining the remuneration of the general partner with full personal liability falls within the remit of the Annual Shareholders' Meeting and is laid out in the Articles of Association. Due to lack of authority, the Annual Shareholders' Meeting cannot decide upon approval of remuneration for the managing directors of H&R Komplementär GmbH (see Section 2.2.1, paragraph 2, sentence 2 GCGC).

– Executive Board

Under the KGaA legal form, the general partner with full personal liability assumes responsibility for the Company's management. The KGaA does not have an Executive Board. The general partner with full personal liability is not appointed by the Supervisory Board, but rather in the KGaA's Articles of Association. The general partner with full personal liability is H&R Komplementär GmbH, which in turn is represented by its managing directors, Mr. Niels H. Hansen and Mr. Detlev Wösten.

The Company's Supervisory Board is not responsible for deciding on the composition of the Executive Board or for setting the remuneration for the managing directors (see Section 4.2 GCGC) of H&R Komplementär GmbH. The Shareholders' Meeting of H&R Komplementär GmbH is responsible for concluding employment agreements with the managing directors. The remuneration of the managing directors is set by the Advisory Board established at the level of H&R Komplementär GmbH through a shareholder resolution. With the exception of the deviations indicated under Section II.2, the Code's recommendations regarding the setting of remuneration for the managing directors of H&R Komplementär GmbH and the other contractual provisions of the employment agreements with the managing directors have been followed.

The general partner with full personal liability is subject not to the covenant not to compete stipulated in Article 88 AktG, but rather to the one stipulated in Article 284 AktG (see Section 4.3.1 GCGC). Taking on outside work requires the approval of the Shareholders' Meeting (see Section 4.3.4 GCGC).

– Supervisory Board

Compared to the Supervisory Board of an AG, a KGaA's Supervisory Board has limited rights and obligations.

Due to the configuration of the Supervisory Board under the KGaA legal form, the Company's strategic direction is determined by the general partner with full personal liability and, if applicable, the Annual Shareholders' Meeting (see Sections 3.2 and 4.1.2 GCGC). As a pure oversight body, the Supervisory Board is not authorized to draw up a list of transactions requiring its approval (see Section 3.3 GCGC). Since the general partner with full personal liability is specified in the Articles of Association, the Supervisory Board likewise is not responsible for appointing, dismissing, or governing the obligations and rights of the Executive Board (see Sections 4.2 and 5.1.2 GCGC).

II. Deviations from Code Recommendations

1. Section 4.1.3, sentence 3 of the Code:

To date, the Company has not established a separate whistleblowing system that would give employees a safe way to report on illegal activity within the company. However, the H&R Code of Conduct which is provided to all employees when they are hired and which is regularly covered in training courses expressly encourages employees "(...) to report violations of the law, other regulations or this Code of Conduct (...) without delay — including anonymously". Employees may, while maintaining strict confidentiality or anonymity, contact Compliance Management, the Executive Board of H&R GmbH & Co. KGaA and, if they work for a subsidiary of H&R GmbH & Co. KGaA, the Executive Board of the subsidiary in question. At the present time, the general partner with full personal liability and the Supervisory Board believe that this is adequate and reasonable. However, they will consider whether it might make sense to implement a standardized whistleblowing system.

2. Section 4.2.3, paragraph 4 of the Code:

The managing director employment agreements concluded by H&R Komplementär GmbH do not contain any agreement on a severance-pay cap within the meaning of Section 4.2.3, paragraph 4 GCGC. The managing directors' employment agreements are concluded for a fixed term and do not contain any option for regular termination. In the event of extraordinary termination with good cause, the managing director shall not be entitled to any severance pay from H&R Komplementär GmbH. As a result, the Company shall not be required to reimburse H&R Komplementär GmbH. In the absence of good cause, the existing employment agreements may only be terminated prematurely by termination agreements, which shall also stipulate the conditions for terminating the employment agreement including the amount of any severance pay. The Code recommendation shall be followed if a termination agreement includes an agreement on severance pay.

3. Section 4.2.5, paragraph 3 of the Code:

In the Remuneration Reports for financial years 2017-2021, remuneration for managing directors is not broken down for the individual members of the Executive Board. On 18 May 2017, the Company's regular Annual Shareholders' Meeting, acting at the suggestion of the gen-

eral partner with full personal liability and the Supervisory Board and pursuant to Article 286, paragraph 5, Article 314, paragraph 3, and Article 315a, paragraph 1 HGB, adopted a resolution regarding Agenda Item 9 (Exemption from the requirement to provide an individual breakdown of remuneration for managing directors), declining to disclose on an individual basis the remuneration paid to the managing directors of H&R Komplementär GmbH for financial years 2017 to 2021. The general partner with full personal liability and the Supervisory Board believe that disclosure of an individual breakdown of managing director's remuneration would constitute a disproportionate violation of privacy of the persons in question. In consequence, the Company has declined to disclose individual remuneration for members of the Executive Board in order to protect confidentiality both inside and outside of the Company as of 19 May 2017.

4. Section 5.1.2, paragraph 2 of the Code:

The employment agreements for H&R Komplementär GmbH's managing directors do not specify any age limit. In view of the current age structure of H&R Komplementär GmbH's Executive Board, there has been no reason for such a provision to date. Moreover, a formal age limit would unnecessarily complicate the search for suitable managing directors.

Salzbergen, 12 December 2017



Niels H. Hansen
Executive Board of H&R
Komplementär GmbH



Detlev Wösten
Executive Board of H&R
Komplementär GmbH



Dr. Joachim Girg
Supervisory Board of H&R
GmbH & Co. KGaA

Legal Structure of H&R GmbH & Co. KGaA

Since registering the change in legal form to that of a partnership limited by shares on 1 August 2016 pursuant to the resolution adopted on 18 May 2016 by the regular Annual Shareholders' Meeting, H&R Komplementär GmbH, as general partner with full personal liability, is responsible for managing and representing the Company. Mr. Nils Hansen, also the majority shareholder of H&R KGaA, holds the majority of voting shares in H&R Komplementär GmbH.

In the following section, the Executive Board and the Supervisory Board report on Corporate Governance at H&R KGaA pursuant to Section 3.10 of the GCGC, applied *mutatis mutandis*.

Corporate Governance Practices and Compliance

Management and control at H&R KGaA are based on the Articles of Association, the rules of procedure for the Supervisory Board and the Executive Board, the German Corporate Governance Code, and relevant national legislation.

We see ourselves as role models, setting an example in the way we treat our customers, colleagues, partners, shareholders, and the public. Integrity, fairness and respect are the main criteria by which we want to be judged. In order for us to accomplish this, it is essential for all of our employees to fully comply with all laws and regulations applicable to them in their jurisdictions. The same applies to the voluntary internal guidelines agreed on.

H&R's Compliance Organization. The Compliance function is part of the Process Optimization and Compliance (POC) department and therefore is a direct component of our Integrated Management System (IMS). This enables us to integrate compliance into our processes and structures and to utilize existing systems and resources. The Compliance function provides reports directly to the Executive Board at regular intervals or as needed.

The Executive Board ensures that the appropriate human and material resources are available for the Compliance Management System (CMS) and for the IMS. This guarantees that the required resources can be provided as needed and the system works smoothly.

Compliance duties are delegated to professionally qualified people as needed to maintain the CMS. The centralized Compliance function at Group level is performed by the person appointed as Compliance Manager. Along with the Executive Board, he/she is responsible for translating the Compliance goals and strategy derived from the corporate strategy, the corporate policy guidelines and from the Code of Conduct, as well as legal requirements into a CMS that can be implemented and verified. Compliance Coordinators at the individual companies provide local support to the Compliance Manager. This ensures that specific local characteristics, such as legal requirements, are taken into account and that a contact person is available to employees at the site.

The Compliance Manager provides regular compliance reports to the Supervisory Board via the Audit Committee, for example on the development of the CMS. In addition, he/she prepares an annual report which he/she submits to the Supervisory Board.

H&R's Code of Conduct. In case corporate management practices go beyond the statutory requirements, they are summarized in a Group-wide Code of Conduct. This Code of Conduct defines binding rules of conduct derived from our corporate policy. It is the main operational framework and outlines the principles on which our actions are based.

We work continuously to make our employees aware of the need to behave in accordance with the Code of Conduct when carrying out their jobs. Any violation of Code of Conduct rules is tantamount to an infringement of labor law obligations and may lead to consequences under labor law such as a warning or even termination. Furthermore, specific violations may trigger claims for

damages or may constitute pertinent elements of an offense and may be prosecuted under the applicable criminal law.

The Supervisory Board meets regularly to review compliance with the requirements of the Group-wide Code of Conduct.

Our values and the resulting corporate policy can be consulted online at www.hur.com under the heading H&R Group/Our Values.



www.hur.com

Compliance Training. As part of their initial training, all our employees are briefed on our Code of Conduct, which contains all relevant information as well as specific case studies. Each year, they undergo additional training on the Code of Conduct; the training courses must be documented and monitored through spot checks.

We also hold extensive training sessions on special issues, depending on the area of responsibility. These courses at H&R focus on topics relating to occupational health and safety, environmental protection and anti-trust legislation.

Combating Corruption and Bribery. H&R places high priority on dealing with business partners, customers and public authorities in a proper manner. This also includes ensuring that in their business dealings, all employees avoid any appearance of dishonesty or corruption. Combating corruption and bribery is therefore one of the central pillars of our Compliance Management System. Our Code of Conduct clearly states that award decisions are based exclusively on a performance evaluation. Accordingly, our success is based on the quality of our performance and we will not tolerate any kind of corruption or other unfair business practices that could help to obtain advantages. As a result, the Code of Conduct also contains unambiguous rules covering, among other things, the granting or acceptance of benefits or gifts and the participation in primarily non-commercial events, or sponsorships. The Code of Conduct training sessions for our employees also address the issue of corruption. In addition, our employees know that in case of doubt, they can contact the Compliance Manager, their superior, or the Executive Board at

any time. No cases of corruption came to light in 2017.

Respect for Human Rights. Naturally, good compliance also involves observing recognized human rights at our locations and in our business relationships. Above all, this means protecting the personal dignity and privacy of each individual. In addition, we recognize employees' and/or business partners' rights to freedom of assembly and association.

Compliance with human rights is enshrined both in our Code of Conduct and in our corporate policy, which guides our actions as a company. In order to ensure that human rights are respected in our supply chain, both our corporate policy and a separate Supplier Code are integral parts of the contracts we conclude with our suppliers. If a supplier hires a subcontractor, they must ensure that the subcontractor is aware of and complies with all the obligations that our supplier has entered into with us. These issues are not explicitly reviewed, but general supplier audits are conducted by the departments and/or companies in charge.

Limited Liability Shareholders and Annual Shareholders' Meeting. Our shareholders decide on Company matters by exercising their voting rights at an Annual Shareholders' Meeting, which is held at least once a year. The shareholders entitled to attend and vote are those, who on the 21st day before the Annual Shareholders' Meeting (record date), hold H&R shares and correctly register to attend the Annual Shareholders' Meeting. Each share entitles its holder to cast one vote (one-share-one-vote rule). Every shareholder entitled to vote has the option of exercising his voting right in person, appointing a proxy, or abstaining from the vote. In addition, we offer shareholders the option to pool their votes through our Company's instruction-bound voting-rights representative.

Shareholders have the right to speak at the Annual Shareholders' Meeting, submit motions, and request information about matters concerning the Company and its affiliated companies insofar as is necessary to reach a constructive assessment of an item on the agenda. Our Annual Shareholders'

Meeting elects six of the nine members of the Supervisory Board by rotation. Among other things, it also considers resolutions on approval of the Company's annual financial statements, the appropriation of distributable profit, formal approval of the activities of the general partner with full personal liability and of the Supervisory Board, the appointment of the (Group) auditors, and corporate actions and amendments to the Articles of Association. Resolutions on approval of the annual financial statements, amendments to the Articles of Association, and major organizational changes also require the approval of the general partner with full personal liability. The invitation and all documents to be made accessible for the Annual Shareholders' Meeting are published in a timely manner on our website www.hur.com under Investor Relations/Shareholders' Meeting. After the Annual Shareholders' Meeting, the results of voting and attendance figures can also be found in this section of the website.



www.hur.com

Executive Board and Supervisory Board Cooperation

H&R KGaA is managed by H&R Komplementär GmbH in its capacity as general partner with full personal liability, which in turn is represented by its managing directors. The managing directors are appointed by the Shareholders' Meeting of H&R Komplementär GmbH. Details about the work of the Executive Board are governed by the internal rules of procedure for H&R KGaA's management.

In accordance with statutory requirements, we have implemented a dual management system with a strict separation between corporate management and control functions. The Executive Board manages the company. The Executive Board regularly consults with the Supervisory Board on the strategic direction of the company and the business plan and notifies it about the progress towards meeting targets and implementing the strategy.

The Supervisory Board oversees and monitors the Executive Board within the framework of its statutory duties. It is notified and involved in consultations regarding decisions of fundamental importance to our company. For the work of

the Executive Board, the general partner with full personal liability has drawn up a list of transactions that require the approval of H&R Komplementär GmbH's Advisory Board.

Supervisory Board

Composition of the Supervisory Board. In accordance with Article 7, paragraph 1 of the Articles of Association, in conjunction with Article 96, paragraph 1, alt. 4, Article 101, paragraph 1, sentence 1 AktG, in conjunction with Article 1, paragraph 1, sentence 1, no. 2; paragraph 2, sentence 1, no. 1, Article 4, paragraph 1 of the German Act concerning One-Third Employee Representation on the Supervisory Board (One-Third Participation Act, or in German, DrittelbG) our Supervisory Board is composed of nine members in total, of whom six are appointed by the Annual Shareholders' Meeting, with no obligation to follow proposals, and three by the employees in accordance with the regulations on co-determination. The body is therefore subject to co-determination in accordance with the DrittelbG. Under Article 287, paragraph 3 AktG, general partners with full personal liability cannot be members of the Supervisory Board.

Dr. Joachim Girg has been elected to the Supervisory Board as shareholder representative for the period up to the close of the 2022 Annual Shareholders' Meeting, which will formally approve the activities of the members of the Supervisory Board for financial year 2021. Mr. Sven Hansen's term of office will also expire at the close of the 2022 Annual Shareholders' Meeting.

Dr. Ing. Peter J. Seifried was elected to the Supervisory Board by the 2015 Annual Shareholders' Meeting. His term of office will end at the close of the 2020 Annual Shareholders' Meeting.

Dr. Hartmut Schütter was elected to the Supervisory Board by the 2013 Annual Shareholders' Meeting. His term of office will end at the close of the 2018 Annual Shareholders' Meeting.

At the 2016 Annual Shareholders' Meeting, Mr. Roland Chmiel and Dr. Rolf Schwedhelm were successfully nominated for re-election as members of the Supervisory Board. Their term of

office will end at the close of the 2021 Annual Shareholders' Meeting.

The Supervisory Board has been chaired by Dr. Joachim Girg since his election to the Supervisory Board at the 2017 Annual Shareholders' Meeting.

The term of office of the three employee representatives on the Supervisory Board, Mr. Reinhold Grothus, Mr. Matthias Erl and Mr. Harald Januszewski, ended at the close of the 2017 Annual Shareholders' Meeting. Of the departing members, Mr. Grothus and Mr. Januszewski were re-elected in April 2017. Mr. Holger Hoff sits on the Supervisory Board as a third member of the employee representatives. Their term of office will end at the close of the 2022 Annual Shareholders' Meeting.

Duties. The Supervisory Board oversees and advises the Executive Board on the management of the company.

Amendments to the Articles of Association are made on the basis of Articles 133, 179 and 285, paragraph 2 AktG, and Article 18, paragraph 2 of the Articles of Association. The Supervisory Board is entitled to adopt amendments to the Articles of Association that only affect their wording without the approval of the Annual Shareholders' Meeting. The Supervisory Board has also adopted rules of procedure as recommended in Section 5.1.3 of the German Corporate Governance Code.

Mode of Operation. Three committees were formed from among its members in financial year 2017:

– An Audit Committee chaired by Mr. Roland Chmiel; the other committee members are Dr. Joachim Girg and Dr. Ing. Peter J. Seifried. As an auditor, Mr. Chmiel has specialist knowledge and experience applying accounting principles and internal control procedures. This is a requirement for chairing this committee under Section 5.3.2 of the German Corporate Governance Code. Moreover, in the opinion of the Supervisory Board, he is qualified as an independent financial expert within the meaning of Article 100, paragraph 5 AktG. The Audit Com-

mittee's responsibilities include supervising the accounting process, monitoring the effectiveness of the risk management system, and overseeing the audit of the financial statements in addition to other responsibilities.

– A Nomination Committee chaired by Mr. Sven Hansen; the other members are Dr. Joachim Girg and Dr. Rolf Schwedhelm. This committee's remit is to identify suitable Supervisory Board candidates, who are then nominated by the Supervisory Board plenum at the Annual Shareholders' Meeting. Among other things, apart from qualifications relating specifically to professional background, the committee is guided by the objectives regarding composition listed below (see Section 5.4.1, paragraph 2 GCGC) and by the principle of diversity; it has set a target for women to occupy one-fifth of all positions on the Supervisory Board which are up for election.

– A Refinery Technology and Strategy Committee chaired by Dr. Hartmut Schütter; the other committee members are Dr. Joachim Girg, Mr. Sven Hansen and Dr. Ing. Peter J. Seifried (since May 2015). The committee's purpose is to advise the Executive Board on the strategic future development of H&R Group's refinery sites.

Following the change in legal form, budgeting and major investments require the approval of H&R Komplementär GmbH's Advisory Board. The Advisory Board is chaired by Dr. Ing. Peter J. Seifried; the other members are Dr. Hartmut Schütter and Mr. Roland Chmiel.

None of the existing Supervisory Board members is a former Executive Board member or managing director. To enable the members of the Supervisory Board to diligently prepare for meetings, the Executive Board notifies them in writing and in advance of the topics to be addressed.

Objectives. Pursuant to Section 5.4.1 of the Code, the Supervisory Board has set concrete objectives regarding its composition. These are as follows:

– To ensure that women make up at least 20% of Supervisory Board members by the middle

of financial year 2020; the goal is for an equal percentage to be represented on both the shareholder and employee side. Currently, the Supervisory Board is not meeting this objective.

- To elect Supervisory Board members with an international background.
- To consider special knowledge and experience applying accounting principles and internal control procedures.
- To consider technical expertise, particularly in the field of refining technology.
- To consider knowledge of the company.
- Independence of members.
- To avoid conflicts of interest.
- To consider the age limit of 70 years at the time of the election.

With regard to the criterion of independence of the Supervisory Board members, the Supervisory Board plenum believes that, based on a Supervisory Board consisting of a total of nine members, the number of independent board members should be at least six, including the representatives chosen by employees. Pursuant to Annex II, Section 1 b) of the Commission Recommendation of 15 February 2005 on the role of non-executive directors/Supervisory Board members of listed companies and on the committees of the Management/Supervisory Board (OJ EU No. L 52, 25 February 2005, page 51), the Supervisory Board considers the employee representatives to be independent. By separate resolution of the shareholder representatives on the Supervisory Board, these have set the number of independent shareholder representatives to at least three.

The current composition of the Supervisory Board of H&R KGaA satisfies the specific objectives outlined above. From the perspective of the Supervisory Board, the Board includes four independent shareholder representatives: Mr. Roland Chmiel, Dr. Rolf Schwedhelm, Dr. Hartmut Schütter, and Dr. Ing. Peter Seifried. Thus, including the em-

ployee representatives, the total number of independent Supervisory Board members is seven.

Further details concerning the work of the Supervisory Board during the reporting period can be found in the [Supervisory Board report](#) in the 2017 Annual Report.

Executive Board

Composition of the Executive Board. H&R GmbH & Co. KGaA is managed by H&R Komplementär GmbH, which in turn is represented by its managing directors. The Executive Board represents the Company externally. It conducts business and runs the company. In doing so, the Executive Board considers the concerns of the limited liability shareholders, its employees, and other groups affiliated with the company (stakeholders) while pursuing the goal of sustainable added value. It is guided by the law, the Articles of Association, its rules of procedure, and the resolutions adopted by the Annual Shareholders' Meeting.

The members of the Executive Board have joint responsibility for overall management of the Company.

In financial year 2017, the Executive Board of H&R Komplementär GmbH consisted of two individuals who, among other things, held the following management responsibilities at H&R KGaA:

Mr. Niels H. Hansen,
Chairman of the Executive Board:
International Business, Sales and Distribution
Companies, Capital Market Communications

Mr. Detlev Wösten,
Member of the Executive Board:
Technology and Strategy, Association Work,
Political Issues

Duties. The Executive Board develops the corporate objectives, the basic strategic direction, the corporate policy, and the Group structure. It is responsible for preparing the quarterly and annual financial statements, including the management reports. Moreover, the Executive Board oversees an appropriate risk-management and risk-control system, ensures compliance with legal provisions



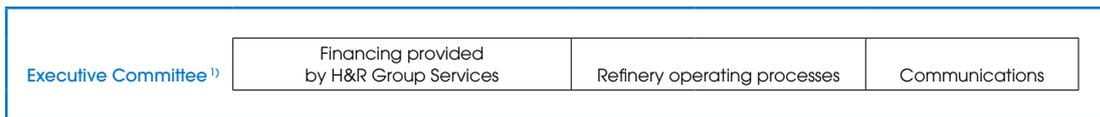
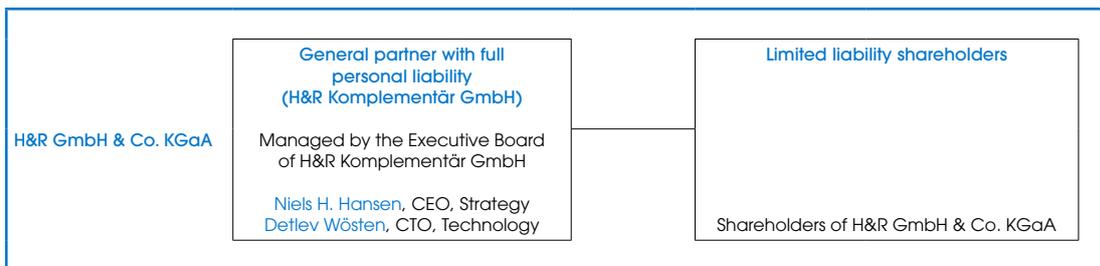
For further
information
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and internal company guidelines, and enforces compliance with these by Group companies.

Mode of Operation. The Executive Board deliberates at regular meetings of a so-called Executive Committee. These meetings are called by the Chairman of the Executive Board, who coordinates the panel’s work. The results of the meetings are recorded in minutes, which are made available to all members of the Executive Board. As the Executive Board is relatively small, it has not formed any committees.

Cooperation by members of the Executive Board is governed by the internal rules of procedure for H&R KGaA’s management. Each member of the Executive Board is required, without being asked, to inform the other Executive Board members of all significant events in the areas under his responsibility. The rules of procedure also stipulate circumstances which require a unanimous decision by the Executive Board plenum.

G. 01 OVERVIEW OF MANAGEMENT STRUCTURE



¹⁾ The Executive Committee is not a management body of the KGaA. It provides support to the Executive Board for all relevant processes and decisions and links the Executive Board with the operating subsidiaries through the flow of information, and by laying the groundwork for decision-making.

Objectives. Pursuant to the recommendations of the German Corporate Governance Code, the Executive Board of H&R Komplementär GmbH in its capacity as managing director of H&R KGaA and in agreement with the Advisory Board and the shareholders of H&R Komplementär GmbH has adopted the following resolution:

- When filling management positions at the company, greater priority must be placed on the criterion of diversity. In addition to balanced professional qualifications, the objective is to achieve greater international representation and appropriate representation by women on the Executive Board and, in particular, at the top two levels of management below the Executive Board by taking diversity into account.
- As for achieving a certain percentage of women at the first level of management below the Executive Board, the two managing directors of H&R Komplementär GmbH, in agreement with the Supervisory Board, have defined a minimum target quota for women of 20%.
- As for achieving a certain percentage of women at the second level of management below the Executive Board, the two managing directors have also defined a minimum target quota for women of 20%.

Both quotas were reviewed in the meeting of the Supervisory Board on 14 March 2018 and their fulfilment confirmed.

Other disclosures on corporate governance

Audit of the Financial Statements by WKGT

The consolidated financial statements of H&R, the semi-annual report and the quarterly reports were prepared in accordance with International Financial Reporting Standards (IFRS). The separate financial statements for H&R KGaA were drawn up in accordance with the requirements of the German Commercial Code (HGB). The

separate and consolidated financial statements of H&R KGaA for financial year 2017 have been audited by Warth & Klein Grant Thornton AG (WKGT), Wirtschaftsprüfungsgesellschaft, Hamburg, which has declared itself to be independent as required by Section 7.2.1 of the German Corporate Governance Code. It was agreed with WKGT that the Supervisory Board Chairman would be notified immediately of any grounds for disqualification or conflicts of interest which may arise during the audit, unless these are resolved immediately. It was also agreed that the Supervisory Board would be notified immediately of any findings and events arising during the audit that are significant to the duties of the Supervisory Board. Finally, WKGT is obliged to inform the Supervisory Board should any facts be identified during the audit which would render incorrect the Statement of Compliance issued by the Executive Board and the Supervisory Board in accordance with Article 161 of the German Stock Corporation Act (AktG).

Risk Management

We have an early-warning system for risks that is reviewed by the auditor.

For a detailed description of the system, please refer to the section of the Management Report entitled “[Risk Report](#)”.

Avoidance of Conflicts of Interest

There were no consultancy or other service agreements and contracts between Supervisory Board members and the Company during the year under review.

There were no conflicts of interest of Executive Board or Supervisory Board members that had to be disclosed to the Supervisory Board without delay. Seats held by Executive Board and Supervisory Board members on supervisory boards and/or comparable domestic or foreign control bodies of business enterprises that had to be set up by law can be found under the section entitled “[Governance Bodies of H&R GmbH & Co. KGaA](#)” in the notes to the consolidated financial statements. [Relationships with related parties](#) are likewise discussed in the notes to the consolidated financial statements.



For further information see page 79



For further information see page 155



For further information see page 155

Deductible for D&O Insurance

The Company has taken out property damage liability insurance (D&O) for the members of the Executive Board and the Supervisory Board with an appropriate deductible in accordance with Article 93, paragraph 2, sentence 3 AktG (Executive Board members) or in accordance with the German Corporate Governance Code (Supervisory Board members).

Shares Held by Members of the Supervisory Board and the Executive Board

As of 31 December 2017, members of our Supervisory Board held a total of 6,785 H&R shares (additions due to the issuance of bonus shares; disposals due to departures from the Supervisory Board), accounting for less than 1% of H&R KGaA's share capital.

As of 31 December 2017, members of H&R Komplementär GmbH's Executive Board held a total of 5,432 shares (additions due to the issuance of bonus shares and purchases), also accounting for less than 1% of the share capital of H&R KGaA.

Directors' Dealings

In accordance with Article 19 of the German Market Abuse Regulation (Marktmissbrauchsverordnung/MAR), executives and close associates are obliged to disclose transactions involving H&R KGaA shares with a trading volume exceeding €5 thousand in the course of a calendar year.

The following transactions have been reported to H&R KGaA for financial year 2017:

T. 05 DIRECTORS' DEALINGS 2017

| Date and Exchange | Issuer | Person subject to reporting requirement | Transaction subject to reporting requirement |
|--------------------|---------------------|--|---|
| 14/8/2017 Xetra | H&R GmbH & Co. KGaA | Niels H. Hansen Managing Director, H&R GmbH & Co. KGaA | Type of transaction: Purchase Financial instrument: Share Aggregate average price/ price: €12.37 Total volume: €3,092.50 |
| 11/7/2017 Xetra | H&R GmbH & Co. KGaA | Detlev Wösten Managing Director, H&R GmbH & Co. KGaA | Type of transaction: Purchase Financial instrument: Share Aggregate average price/ price: €12.034 Total volume: €12,034.00 |
| 15/5/2017 Xetra | H&R GmbH & Co. KGaA | Detlev Wösten Managing Director, H&R GmbH & Co. KGaA | Type of transaction: Purchase Financial instrument: Share Aggregate average price/ price: €13.2773 Total volume: €13,277.28 |

Transparency

The prime objective of our communications is to provide comprehensive, prompt, and equal information to shareholders, financial analysts, journalists, staff, and interested members of the public.

For this purpose, important documents, such as quarterly reports and/or semi-annual and annual reports, published insider information and press releases, the Statement of Compliance with the German Corporate Governance Code, the Articles of Association, the invitation to the Annual Shareholders' Meeting, and the financial calendar are all published in the Investor Relations section of the H&R KGaA website. Interested parties can also register to receive the latest company news automatically via an E-mail newsletter. We also send out free copies of the reports upon request. The Executive Board and the Investor Relations department are in regular contact with both institutional and private investors at capital market conferences and shareholder events. For a detailed description of our capital market activities, please consult the section entitled "[H&R on the Capital Market](#)" elsewhere in this Report.



For further
information
see page 32

H&R on the Capital Market

Company Share and Share Price Performance

Big Gains on the Financial Markets

At the beginning of 2017, fears were still high that the financial markets could run into trouble in face of the numerous political risks (the possibility of eurosceptics winning the French and Dutch elections, fear of protectionism in the USA and the Brexit negotiations). However, these concerns disappeared over the course of the year. Equity markets posted clearly positive overall returns across virtually all regions. The Dow Jones rose 25.1% during the year and the DAX increased by 12.5%. The performance of the MSCI World Index, which includes the most important stock exchanges, increased by 20.0% during the year and the MSCI Emerging Markets Index even climbed 34.9%.

The macroeconomic data for this year are currently positive. The economy is booming in Germany and across Europe – even in the countries of southern and southeastern Europe that used to be referred to as “problem children”. The

same applies to other relevant regions outside of Europe. According to Germany’s Handelsblatt business newspaper, conditions are ideal for equities in 2018 as well. The newspaper’s editors point to feedback from more than 30 economists and analysts from German and foreign banks indicating that they expect the German share index (Dax) to continue to soar through the end of 2018. On average, the banks surveyed expect the Dax to once again increase to more than 14,000 this year.

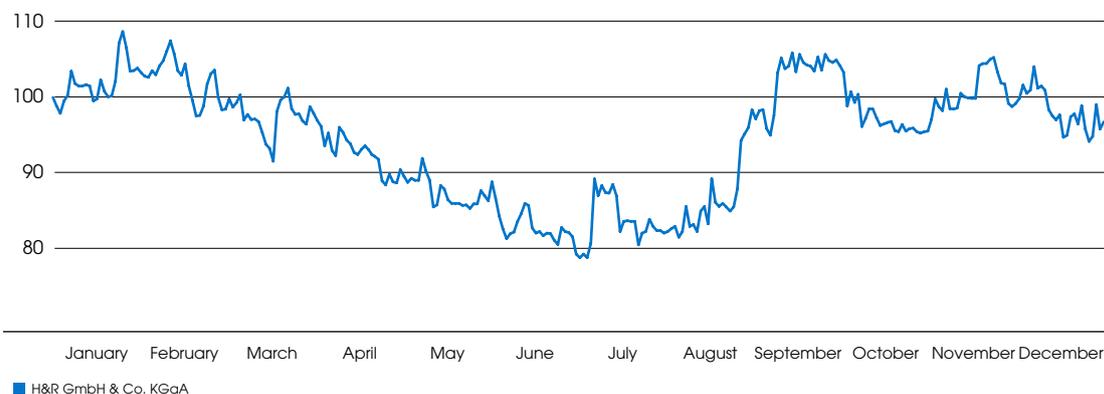
H&R Share Price Ends Year Around 6% Higher than 2017 Average

H&R’s share price started trading on 2 January 2017 at €14.63 and climbed up to the €16.00 mark when the good results for 2016 were announced. In a countermovement, the share price came under pressure due to profit-taking. This was only partially offset by the positive figures for the first quarter of 2017 and the announcement of a bonus share program. The introduction of the new shares also led to a technical correction, with the share price falling below the €12.00 mark at mid-year.

However, the share recovered considerably in the second half: the good results for the first half

G. 02 PERFORMANCE OF THE H&R SHARE

(INDEX 2.1.2017=100)



and the first nine months were followed by clarifications on guidance. In particular, the increase in the minimum expectation raised speculative hopes, causing the H&R share to rise by year-end. H&R's share ended trading at €14.60.

T. 06 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 Chemicals Specialty, DAXPlus Family Index |
| Designated Sponsor | Oddo Seydler Bank AG |

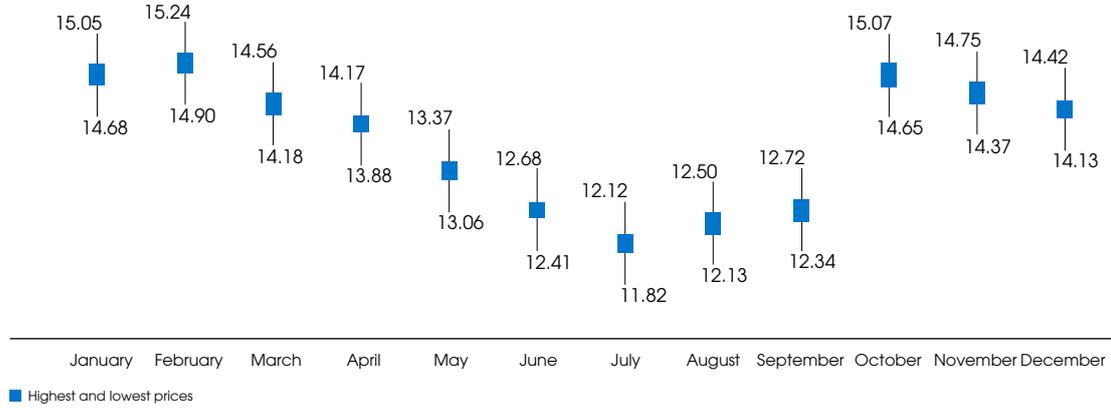
Number of Shares, Market Capitalization and Trading Volume

The number of company shares issued totaled 36,536,553 as of 31 December 2017, i.e., higher than in the previous year due to the issuance of bonus shares in the summer of 2017. 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 share was again stable, with around 8.5 million shares being traded on the Frankfurt Stock Exchange and on Xetra. Another 0.7 million shares changed hands via Tradegate, Deutsche Börse's platform for private investors. In terms of daily volumes and closing prices, the total trading volume stood at around €125.0 million.

G. 03 HIGHEST AND LOWEST PRICES OF THE H&R SHARE, FULL YEAR 2017

IN €



T. 07 KEY SHARE DATA

| | 2017 | 2016 | 2015 | 2014 | 2013 |
|--------------------------------------|----------------|----------------|----------------|----------------|----------------|
| Number of shares on 31 December | 36,536,553 | 35,820,154 | 35,820,154 | 35,820,154 | 29,973,112 |
| Earnings per share | €0.88 | €1.06 | €0.77 | €-0.49 | €-0.47 |
| Highest price for the year | €15.91 | €19.97 | €9.70 | €9.40 | €13.03 |
| Lowest price for the year | €11.49 | €7.31 | €5.86 | €6.45 | €8.05 |
| Price on 31 December | €14.60 | €14.95 | €9.24 | €7.54 | €8.70 |
| Market capitalization on 31 December | €553.4 million | €535.5 million | €330.9 million | €270.1 million | €260.7 million |
| Average daily trading volume | €436 thousand | €608 thousand | €269 thousand | €130 thousand | €324 thousand |

Board Members Further Increase Stakes

During the reporting period, we received notice of three directors' dealings in H&R shares. Mr. Nils Hansen, a member of the Supervisory Board until 31 July 2016, is no longer subject to the reporting requirements stipulated in Section 17 of the Market Abuse Regulation (MAR).

Mr. Detlev Wösten, Managing Director of H&R Komplementär GmbH, is indirectly subject to a reporting requirement under Article 17 MAR as Managing Director of H&R GmbH & Co. KGaA. Mr. Wösten acquired a total of 2,000 additional shares in two transactions. Mr. Niels H. Hansen, also Managing Director of H&R Komplementär GmbH and therefore subject to the same reporting requirements, acquired 250 shares in one transaction. The individual transactions are listed in the "Directors' Dealings" section on page 30 of this report.



For further information see page 30

Shareholder Structure

When the company changed its legal form from that of a joint-stock company to a partnership limited by shares (KGaA), H&R Komplementär GmbH became partner.

In a voting rights notification dated 5 July 2016, Mr. Nils Hansen reported that his share of voting rights totaled 60.63% of the company's voting rights due to his 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 voting rights notification, (i) the share of voting rights of H&R Beteiligung GmbH totaled 59.33% 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 26.02% 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 59.33% of the company's voting rights due to the attribution of voting rights. In addition, he personally and directly held another 1.3% of the share capital until he left the Supervisory Board and the reporting requirement expired as a result on 31 July 2016.

According to an informal notification, Mr. Wilhelm Scholten's total stake in the share capital on 31 December 2017 was unchanged at 6.07%, 5.45% of which was held via Wilhelm Scholten Beteiligungen GmbH and the remaining 0.62% of which was held via Ölfabrik Wilhelm Scholten GmbH and subsidiary.

The remaining 33.3% of H&R shares were in free float as of 31 December 2017. Of these, around 7.4% are in turn held by institutional investors.

Investor Relations

Capital Market Communication Activities Intensified. During the 2017 reporting year, numerous investors, analysts and private investors again took advantage of the opportunity to exchange information with the company by telephone and e-mail. Investors also visited us at our production sites in Hamburg and Salzbergen, where they toured our refineries and received information about current business developments directly from the company's Management. In addition, members of the Executive Board and employees of the IR department represented the company at roadshows and information events. Management and the IT department 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.

Research Coverage. Despite heavier trading in H&R shares and the increased attractiveness of the share's liquidity, many banks continued to focus exclusively on covering blue chips in 2017. Commerzbank also restructured its internal responsibilities and in the process unfortunately

stopped covering H&R shares. On the other hand, DZ Bank started covering H&R in 2018 and is expected to issue an initial comment when our 2017 Annual Report is published. Two other banks – Kepler Cheuvreux and Baader Bank – will also continue to monitor our shares.

T. 08 RESEARCH COVERAGE OF THE H&R SHARE

Kepler Cheuvreux

Baader Bank

DZ Bank

We Would Like to Hear from You

Interested parties can download our company reports at any time from the Investor Relations section of our website, www.hur.com. We will also be happy to send you a printed copy on request.



www.hur.com

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

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

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COMBINED
MANAGEMENT
AND GROUP
MANAGEMENT
REPORT OF
**H&R GMBH & CO.
KGAA**

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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 Plastics. At the same time, we have three business segments: ChemPharm Refining, ChemPharm Sales and Plastics.

Our biggest segment, ChemPharm Refining, includes the two specialty refinery sites in Germany. These two production sites differ from conventional lubricant refineries in that a significantly higher percentage of output consists of so-called crude oil based specialty products such as plasticizers, paraffins and white oils and a considerably lower percentage consists of lubricants. During the course of our production processes, we create over 800 different products that are used in more than 100 client industries.

Our ChemPharm Sales segment is comprised of numerous plants for additional processing as well as our distribution sites worldwide. This segment's core products include label-free plasticizers for the tire industry and paraffins for many different applications.

Our Plastics segment primarily produces precision plastic parts. In addition to the headquarters in Coburg, Germany, we also operate production sites in Eastern Europe and Asia. The Plastics segment's customers 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 & Co. KGaA (hereinafter referred to as H&R KGaA) is in charge of the strategic management of our business operations. It is responsible for Group financing activities and controls communication with the public and the capital markets. In addition, it provides various management functions and services for our subsidiaries.

At the end of the reporting period, there were 38 consolidated subsidiaries (31 December 2016: 34). Two new companies at the Hamburg production site and a company in South Africa as well as a company in Japan were added to the consolidated group.

Our subsidiaries can be found in the list of shareholdings in the Notes to the Consolidated Financial Statements under "Scope of Consolidation and Holdings".

The ChemPharm Refining segment, which primarily consists of the specialty refineries 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 possess any specialty refineries of its own, the responsibility for all functions is held by regional managing directors who report directly 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 domestic production plant in Coburg, Germany.

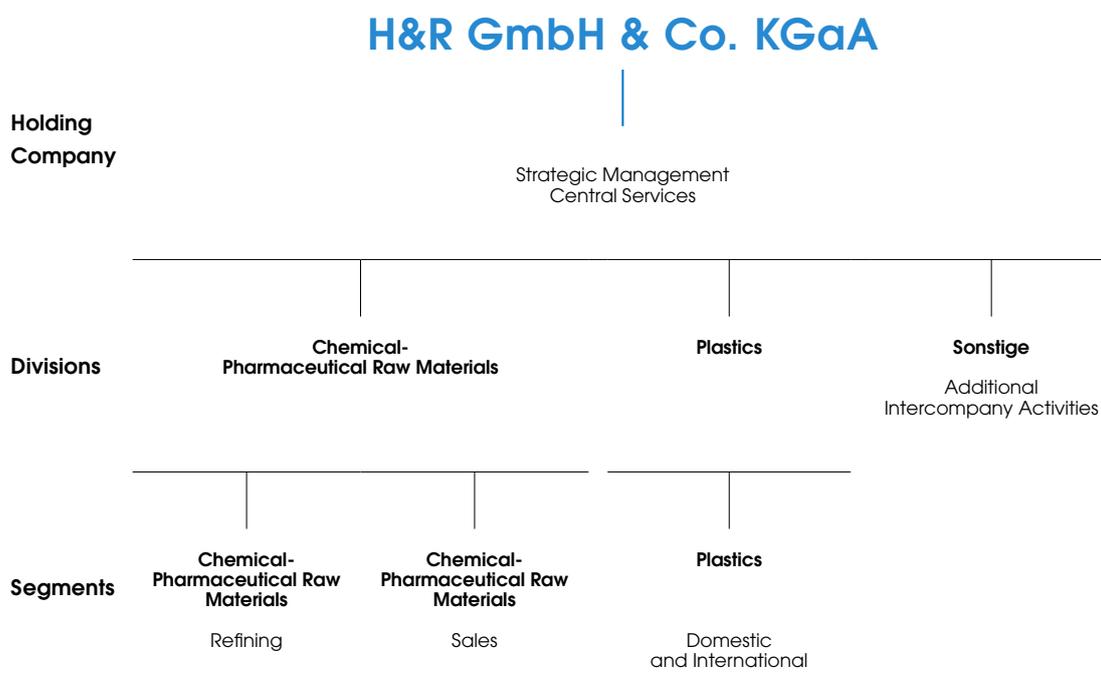


For further information see the glossary on page 170



For further information see page 119

G. 04 OVERVIEW OF GROUP STRUCTURE



Locations

At year-end 2017, our Group employed 1,692 people worldwide (previous year: 1,628 employees). The following overview shows our most important sites with more than 20 employees:

T. 09 MAIN SITES IN THE H&R GROUP

| Continent | Country | City | Division | Employees |
|-----------|----------------|------------------|-----------|-----------|
| Africa | South Africa | Durban | ChemPharm | 58 |
| Asia | China | Wuxi | Plastics | 143 |
| | | Ningbo/Daixi | ChemPharm | 111 |
| | | Fushun | ChemPharm | 78 |
| Europe | Thailand | Bangkok/Si Racha | ChemPharm | 56 |
| | Germany | Hamburg | ChemPharm | 291 |
| | | Salzbergen | ChemPharm | 394 |
| | | Coburg | Plastics | 326 |
| | Great Britain | Tipton | ChemPharm | 40 |
| | Czech Republic | Dačice | Plastics | 106 |

Main Products, Services and Business Processes



For further information see the glossary on page 170

So-called atmospheric residue (ATRES) and vacuum gas oil (VGO) are the primary raw materials used at our ChemPharm Refining segment's specialty refineries in Germany.

We generate more than 800 other crude oil based specialty products from these crude oil derivatives, which are obtained by distilling crude oil in the upstream fuel refineries. In addition to base oil as a raw material for lubricant production, we primarily produce process oils, technical and medical white oils, paraffins and specialty wax products. In our propane deasphalting facilities, we use efficient processes to further refine by-products and co-products. This creates more high-grade crude oil based specialty products and bitumen, which is used in road construction and as feedstock for other types of refineries.



For further information see the glossary on page 170

While in Hamburg we exclusively manufacture our own specialty products, we act as a service provider at the Salzbergen production site, where we manufacture products to specification on a contract basis for our main customer. Furthermore, at a special filling facility, we also mix lubricants based on well-known end customers' formulations.

We also refine crude oil based feedstock at the ChemPharm Sales segment's production plants. Production here focuses on environmentally friendly, label-free plasticizers and wax emulsions. Partnerships with local producers around the world allow us to lower our investment costs, limit risks and accelerate our growth.



In the Plastics segment, we produce high-precision, injection-molded plastic components as well as the molds required to manufacture them. This division is particularly skillful at producing complex plastic parts while using different types of materials simultaneously.

Objectives and Strategy

Key Sales Markets and Competitive Position

By consistently focusing on customer needs for many decades, we have established a solid market presence in the crude oil based specialty products business. A comparative biennial study published by the renowned U.S. research organization HSB Solomon Associates LLC® (most recently in 2017) in which around 50% of the worldwide refinery capacity in the lubricants segment participated rates H&R KGaA as being "well positioned competitively": As core elements of our ChemPharm Refining segment, our refineries rank within the first or second quartile of the peer group, especially in terms of their efficiency and productivity. Based on the product mix generated of just under 60% specialty products versus 40% lubricants, they are classified as specialty refineries, and not as lubricant refineries, whose output ratio is only 10% specialty products to 90% lubricants.

This assessment is supported by the fact that H&R's specialty refineries are well established in a market environment which for years has experienced a continuous shortage of generating capacity in Group 1 refineries. Thanks to their high percentage of specialty products, our production sites can also hold their own against bigger units owned by major oil companies.

Our environmentally friendly, label-free plasticizers are used in rubber blends for almost all well-known car tire manufacturers as well as in additional rubber and caoutchouc products. Our main competitors in this product area are the major oil companies.

Our paraffins are used for an especially wide variety of applications: in the food industry, for example, cheese rinds are coated with paraffin to prevent the cheese from drying out. The packaging industry has various uses for paraffins, including coating the inside of Tetra Pak containers. In the construction industry, wax emulsions provide construction materials with water repellent characteristics. In this product segment, we and other



For further information see the glossary on page 170

competing companies jostle for second place behind the market leader.

Thanks to our ability to reliably meet high quality standards, we have also established a good reputation in the market for white oils. For instance, our technical white oils are used to clean printing presses or as plasticizers for plastic components. Our medical white oils are found, among other applications, as components in cosmetic products such as creams and ointments. The large oil companies are also significant producers in this field.

We sell the vast majority of our base oils to lubricant manufacturers as a raw material. Using additives, we further process a small quantity of these base oils into ready-made lubricants that are primarily used in agriculture.

Hansen & Rosenthal KG currently handles domestic sales and distribution for a large portion of the primary products from our Chemical-Pharmaceutical Division. Our sales/distribution partner has been trading in crude oil based specialty products for nearly 100 years. Thanks to its long-established market presence, Hansen & Rosenthal has excellent market knowledge and close customer contacts.

The marketing of by-products is becoming increasingly important. As a matter of principle, H&R KGaA is focusing on maximizing its output of primary products and avoiding by-products. Nevertheless, the production process at our production sites in Salzbergen and Hamburg generates residues which, by using our propane deasphalting plants, we can convert into environmentally friendly, crude oil based specialty products and asphalt for use in the road-building industry. In turn, some of this bitumen can be used as a raw material by other refinery operators.

The customers of our Plastics Division can be divided into three groups of which the automotive industry is by far our biggest customer group. Other customer groups include the medical technology industry and other industrial customers. In the latter group, we primarily include products for customers in the electrical industry, the meas-

urement and control technology industry, and the mechanical engineering industry.

Legal and Economic Factors

REACH (The European regulation on the Registration, Evaluation, Authorization and Restriction of Chemicals) entered into force in the EU in 2007. The main aim of REACH is to protect human health and the environment when dealing with chemical substances. In order to accomplish this goal, REACH places a special level of responsibility on the manufacturer or importer of a substance by requiring it to assess the risks of substances it has brought to market and their uses over the entire lifecycle and to register as a manufacturer or importer with the European Chemicals Agency (ECHA). H&R KGaA submits the relevant documents for all substances manufactured or undergoing further processing at its specialty refineries. Certain substances of very high concern require separate authorization. The relevant applications were submitted to and approved by the ECHA in the first half of 2016. We are awaiting final approval from the REACH Committee. H&R KGaA expects a permit for the maximum validity period to be issued.

Prices of the crude oil derivatives used as the primary feedstock at our specialty refineries in Germany are closely correlated with the current price of crude oil. Price changes regularly result in so-called “windfall effects” on our earnings situation. Such effects on earnings have nothing to do with the company’s own operating performance, but instead are caused by short-term variations in market prices. At our company, we define windfall losses or profits as negative or positive changes in inventory prices (raw materials, work-in-progress and finished goods) compared to the previous month. In contrast to just-in-time production, due to the length of our production processes, feedstocks are processed with a time lag.

This is closely related to currency translation effects: the price of crude oil worldwide is denominated in US dollar, meaning that H&R KGaA is directly affected by fluctuations in this reserve currency and the corresponding currency translation effects, due to its high requirements for raw



For further information see the glossary on page 170



For further information see the glossary on page 170

materials and the fact that raw material supplies are sourced internationally.

Objectives

H&R KGaA's main economic objectives are spelled out in our "Vision 2020", which Management first presented at the 2015 Annual Shareholders' Meeting and has pursued systematically since that time.

These objectives primarily refer to our Chemical-Pharmaceutical Raw Materials Division, where our main operating goal is to establish production partnerships on every continent. We also want to have a global presence through our own additional processing facilities and sales/distribution units.

Further, we intend to increase the ChemPharm Sales segment's share of total revenues to around 50%.

We apply the term "Green Refinery" to our own production sites in Germany: This reflects our efforts to permanently reduce the percentage of combustion products and to generate an output of more than 90% in high-grade primary and value-added products.

In the Plastics segment, we aim to continue pursuing over the long term the corporate development efforts implemented over the past two years.

Taken together, these measures should, over the next three to five years, result in a level of earnings that will enable us to achieve a minimum operating income (EBITDA) of around €100.0 million that will give us planning certainty while being relatively unaffected by market volatility.

Strategy

We call our strategic approach **G.A.T.E.**, as in "Gateway to the Future":

In line with our goal of expanding further internationally, we see ourselves as a **Globally** oriented company. 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. At the same time, we continue to be **TechnoVative** by ensuring that our locations are always on the cutting edge technologically and searching for 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 bringing us another step closer to the Green Refinery.

Company Control

Internal Management System

A value-based management system is used to guide and manage the Group. This system is centered on comprehensive reporting of key performance indicators and ratios designed to support management's monitoring 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, reject rates and quality fluctuations. In sales and distribution, we examine sales volume statistics, general market data and leading macroeconomic indicators.

The 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

Over the past two 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 earnings contributions. Manufacturing planning is based on optimizing contribution margins; the business segments are controlled using EBITDA and EBT figures.

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

H&R KGaA calculates EBITDA as follows:

Consolidated income
 +/- Income taxes
 +/- Net interest result
 +/- Other financial income
 + Depreciation, impairments and amortization
 = EBITDA

Although 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. For the H&R KGaA Group, EBITDA is the relevant income figure that illustrates the income needed to cover the Group's ongoing (maintenance) capital expenditures. This is of critical importance for the company's capital-intensive business model.

T. 10 RECONCILIATION OF OPERATING INCOME (EBITDA) TO CONSOLIDATED INCOME (IFRS)

| | 2017 | 2016 |
|---|-------------|--------------|
| Operating income (EBITDA) of H&R GmbH & Co. KGaA | 97.9 | 101.4 |
| Depreciation, impairments and amortization of intangible assets and property, plant and equipment | -43.1 | -43.2 |
| Reversals of fixed-asset impairments | - | 6.0 |
| Interest income and income from other financing activities | 1.8 | 3.1 |
| Financing costs | -10.4 | -13.1 |
| Income taxes | -16.7 | -14.9 |
| Consolidated income | 29.5 | 39.3 |

The long-term WACC (Weighted-Average Cost of Capital) performance indicator, which consists of the weighted capital costs of our equity and borrowed capital, is used in medium and long-term planning. For more detail, please consult the notes to the consolidated financial statements.

The ROCE profitability ratio (Return On Capital Employed), which compares earnings before interest and taxes to the average committed capital necessary for operations, is also used in medium and long-term planning.

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 For further information see the glossary on page 170

i
 For further information see the glossary on page 170

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For further information see the glossary on page 170

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 also ensures that we will be able to maintain the H&R Group's financial stability in the future.

T. 11 CHANGE IN FREE CASH FLOW

| IN € MILLION | 2017 | 2016 | 2015 | 2014 | 2013 |
|-------------------------------------|--------------|-------------|-------------|--------------|-------------|
| Cash flow from operating activities | 46.2 | 75.5 | 56.4 | -0.4 | 88.9 |
| Cash flow from investing activities | -58.1 | -38.8 | -28.1 | -10.1 | -16.2 |
| Free cash flow | -11.9 | 36.7 | 28.4 | -10.5 | 72.8 |

The starting point for calculating and reporting cash flow from operating activities in 2017 was the decrease in consolidated income to €29.5 million (31 December 2016: €39.3 million) resulting from the higher cost of materials and higher depreciation/amortization. Therefore, because our capital expenditures rose 50.0% to €58.1 million, we generated free cash flow of €-11.9 million (31 December 2016: €36.7 million).

Capital Structure. We aim to have a balanced capital structure that provides leeway for strategic development of the Group while optimizing the cost of capital for our equity and debt. Under the terms of our loan agreements and our borrower's note loans, we are obliged to uphold two financial covenants relating to our equity funding and the ratio of our net debt to operating earnings (EBITDA).

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For further information see the glossary on page 170

Another control parameter relating to our capital structure is net gearing, which is the ratio of our net financial debt to equity. The increase in debt in 2017 and a significant improvement in equity caused this ratio to change from 15.1% to 16.0%.

T. 12 CAPITAL STRUCTURE

| | 2017 | 2016 | 2015 | 2014 | 2013 |
|-------------------|------|------|------|------|------|
| Net debt/EBITDA | 0.55 | 0.41 | 1.00 | 3.41 | 2.24 |
| Equity ratio in % | 51.7 | 49.0 | 45.4 | 35.2 | 31.8 |
| Net gearing in % | 16.0 | 15.1 | 31.4 | 45.6 | 42.2 |

Operating Performance. We essentially measure our operating business based on sales and 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 always has a direct impact on the cost of materials, which affects H&R KGaA's sales revenues for reasons related to the business model.

On its own, our revenue is 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 net debt, they constitute the main relevant control parameters used by our company.

T. 13 EARNINGS AND VOLUME TREND

| IN € MILLION | 2017 | 2016 | 2015 | 2014 | 2013 |
|--|------|-------|------|------|-------|
| Sales volume of primary products in kt ¹⁾ | 832 | 849 | 762 | 697 | 734 |
| EBITDA | 97.9 | 101.4 | 85.4 | 31.5 | 32.6 |
| EBIT | 54.8 | 64.2 | 48.7 | 5.8 | -4.1 |
| EBT | 46.2 | 54.2 | 34.2 | -7.8 | -16.8 |

¹⁾ Chemical-Pharmaceutical Raw Materials Division.

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For further information see the glossary on page 170

Research and Development

Focus of Our R&D Activities

Our crude oil based specialty products and plastic parts are incorporated directly into our customers' products. We collaborate closely with them in order to optimize the effect on the end product of the components we supply. An important focus of our R&D work is on boosting the efficiency of our production processes, thereby increasing the value we create. Research activities are managed at the divisional level.

Our Chemical-Pharmaceutical Division operates R&D laboratories, primarily at domestic production sites. Valuable synergies are created both from communication within R&D and from exchanging ideas with other production areas. We apply a similar concept in the Plastics Division by combining our R&D work at the headquarters in Coburg.

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For further information see the glossary on page 170

As in prior years, in 2017 we once again collaborated closely with universities and research institutes. To the extent possible and expedient, we try to protect our research results from external use through patents. We did not receive any subsidies or other funding for research activities.

Chemical-Pharmaceutical Raw Materials. Our products, which overall total around 800, are used as inputs in more than 100 different industries. As a result, there is great potential for developing new products. Our sales/distribution staff and partners are an important source of ideas for product innovations; thanks to the customer relationships they have developed over a long period of time, they have an excellent feel for clients' changing needs. In our research work, we place particular emphasis on the paraffin, plasticizer and white-oil product groups.

We are also researching processes that could increase the yield of crude oil based specialty products from our raw materials and thereby further improve the level of value added at our specialty refineries. The promising results of this research work have influenced our investment planning. While in the past we focused mainly on expanding our production capacity, in recent years we have increased our investments in plants that can further refine our products.

The division's collaboration with the universities of Hamburg, Hanover, Magdeburg, Munich, Rostock (all in Germany), Bangkok (Thailand) and Enschede (the Netherlands) forms an important part of its research activities. These cooperative projects give us access to the universities' research infrastructure and enable us to establish contact with key players in the R&D field at an early stage.

Plastics. The use of increasingly sophisticated technologies in vehicles to reduce fuel consumption and CO₂ 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 clients, who are direct suppliers to automobile manufacturers. We also further expanded our research and development work in the field of medical technology – an increasingly important market segment for the Plastics Division.

R&D Expenses, Employees and Key Figures

The particular importance of our research activities has for years been reflected in our consistently high spending and the increase in the number of people we employ in this area. All employees in the Research and Development department have outstanding professional qualifications, either in the form of technical training in a chemistry-related occupation or in some cases even the

title of master craftsman. Other staff, such as engineering graduates, are as highly qualified as our employees, who hold doctorates in chemistry. At around €2.4 million, R&D spending was

noticeably higher than the prior-year figure. Our R&D ratio, defined as R&D expense divided by sales revenues, increased slightly from 0.22% to 0.24% in spite of the increase in sales.

T. 14 RESEARCH AND DEVELOPMENT COSTS

| IN T€ | 2017 | 2016 | 2015 | 2014 | 2013 |
|--------------------------------|-------|-------|-------|-------|-------|
| Research and Development Costs | 2,423 | 2,054 | 1,955 | 1,909 | 1,906 |
| of which ChemPharm | 2,160 | 1,904 | 1,749 | 1,563 | 1,585 |
| of which Plastics | 263 | 150 | 206 | 346 | 321 |
| as % of annual revenues | 0.24 | 0.22 | 0.20 | 0.17 | 0.16 |

Report on Economic Position

Trends in the Business Environment

Macroeconomic Conditions

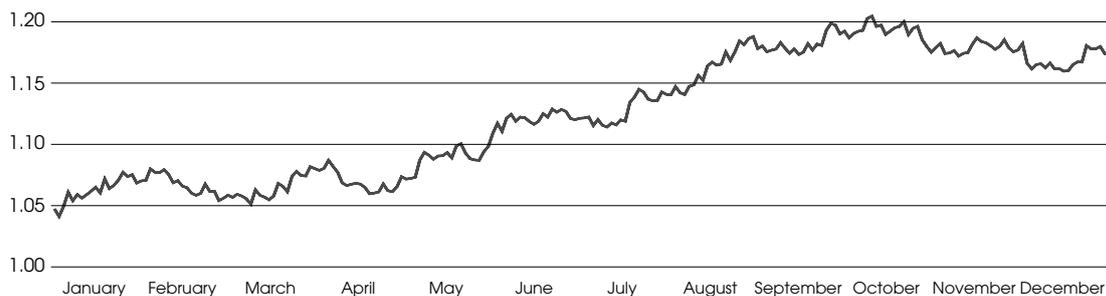
The Economic Barometer of the German Institute for Economic Research (DIW Berlin) once again indicated extraordinarily strong growth in the final quarter of 2017 and predicted that GDP growth would remain above average at just over 0.6% in the fourth quarter. The institute recently warned that while many companies may have counted on

a tangible boost from economic policy, any such stimulus was slowed down considerably after failure of the exploratory talks concerning a possible coalition government by the CDU and CSU, FDP and Green parties (so-called “Jamaica coalition” because of the party colors).

According to experts at the OECD (Organization for Economic Cooperation and Development), the global economy grew in 2017 at rates last seen in 2010. The increase was expected to be 3.5%, with a further increase to 3.75% in 2018.

G. 05 EXCHANGE RATES US\$ PER € IN 2017

(CLOSING RATE US\$ PER €)



The OECD expects growth in the euro area to increase somewhat, to 2.4%.

In its latest forecast, the International Monetary Fund (IMF) predicts that emerging economies will grow by 4.6% this year.

The euro, which is the functional currency used to calculate the earnings trend at H&R KGaA, firmly held its ground against the US dollar, increasing from around USD 1.05 to up to USD 1.20 during the first half of the year. Toward year-end, it followed a stable sideways movement around the USD 1.18 mark.

Crude oil prices (all data refer to the average price of a barrel of North Sea Brent) rose sharply at mid-year. After starting out the year around USD 56.00, the price of crude declined by mid-year to around USD 45.00. Since the end of June 2017, though, Brent had moved steadily upward above USD 60.00 before ending trading at year-end at just under USD 67.00.

Industry-Specific Climate

2017 was an especially good year for the chemical-pharmaceutical industry, with strong increase in sales of more than 5%. Thanks to strong economic activity in the industrial sector across Europe which increased even further during the course of the year, production rose considerably and plant capacity utilization remained high.

Overview of Business Development and Performance

In 2017, H&R KGaA sold a total of 831,700 tons of primary products from its Chemical-Pharmaceutical Raw Materials Division (2016: 849,300 tons) to outside buyers. Overall, it generated €1.03 billion in sales revenues – more than in the previous year (2016: €942.7 million). Above all, higher prices for raw materials compared to the previous year raised the cost of materials, the main factor influencing pricing and, therefore, the level of sales revenues.

During 2017, fluctuations in the price of crude oil led to “windfall effects” that largely canceled each other out over the year as a whole. At the same time, positive effects such as decent margins thanks to a good price situation for primary and by-products and stable base-oil prices resulted in a positive earnings trend. To summarize, the total operating income (EBITDA) generated by the Group amounted to €97.9 million (2016: €101.4 million).

Events with a Major Impact on Business Development and Performance

Overall, the Group’s €1.03 billion of sales exceeded the prior-year level (2016: €0.94 billion). At the same time, the fact that it once again posted positive results demonstrates that H&R KGaA again pursued a profitable strategy in 2017: despite extensive maintenance work at the Hamburg location which the company successfully completed in minimal time while complying with the prescribed budget, the volumes delivered to customers remained constant. During the year, our specialty refineries, which are well positioned thanks to cost efficiencies and high availability, also served customers who had not ordered any, or had ordered significantly lower, volumes from us at the beginning of the year.

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 2017 were primarily the result of the good impression the company had made following its repositioning in 2015 and good performance in 2016.

Based on our planning assumptions, we initially expected sales to increase due to higher oil prices. We expected operating income (EBITDA) to be within a range of between €86.0 million and €100.0 million. Due to the positive business trend, we raised our minimum forecast to €92.0 million in the first half of 2017 and revised the upper limit to €101.0 million. Based on figures for the first nine months and the continuing positive business trend in the third quarter of 2017, we raised the lower limit to around €96.0 million. Total sales revenues ultimately reached €1.03

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For further information see the glossary on page 170

billion. At €97.9 million, the EBITDA recognized in the consolidated income statement for the financial year was solidly within our projected range.

T. 15 FORECAST FOR FINANCIAL YEAR 2017

| Forecast Date | Publication of the 2016 Annual Report | Publication of interim statement for Q1 2017 | Publication of the 2017 Semi-Annual Report | Publication of interim statement for Q3 2017 | Actual Value |
|-----------------------------|---------------------------------------|--|--|--|-----------------|
| Total sales | "≥ €950.0 million" | Not defined | Not defined | Not defined | €1.0251 billion |
| Sales in ChemPharm Refining | "≥ €590.0 million" | Not defined | Not defined | Not defined | €616.8 million |
| Sales in ChemPharm Sales | "≥ €304.0 million" | Not defined | Not defined | Not defined | €357.2 million |
| Sales in Plastics | "≥ €57.0 million" | Not defined | Not defined | Not defined | €59.6 million |
| EBITDA at Group level | "€86.0 million to €100.0 million" | "€86.0 million to €100.0 million" | "€92.0 million to €101.0 million" | "€96.0 million to €101.0 million" | €97.9 million |

In the Chemical-Pharmaceutical Raw Materials Division, sales increased year-on-year to €965.5 million, primarily because of prices of raw materials (2016: €886.1 million). We referred to this upward trend in sales in our interim reports but did not update the forecast.

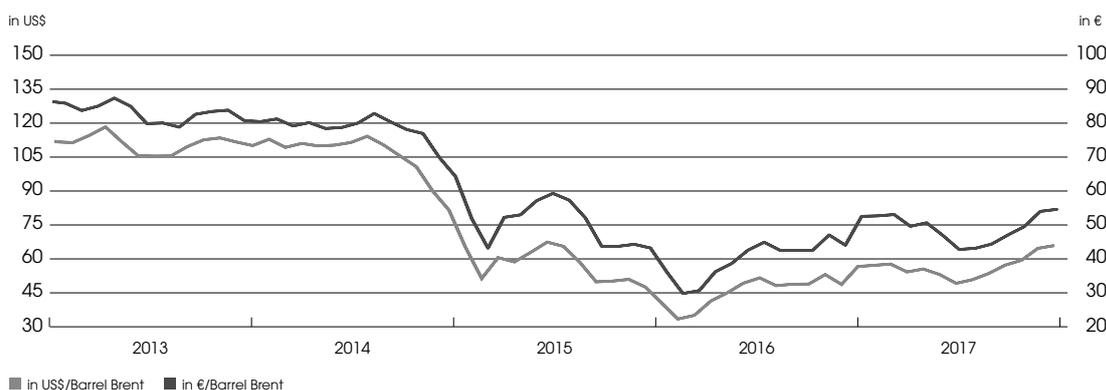
The trend was similar in the Plastics Division. While this segment reported slightly higher sales revenues (€59.6 million) than in the previous year (2016: €56.5 million), it was considerably more profitable than in 2016, turning in EBITDA of €3.7 million (2016 EBITDA: €2.6 million).

After a rather sluggish start, especially for the Refining segment, it was not necessarily to be expected that H&R KGaA would achieve the targeted operating income for the year as a whole.

Our specialty refineries only began to deliver good earnings contributions in the second quarter, but even after the first half they were still lagging behind the previous year. Significant positive momentum was generated by the Sales and Plastics segments. Over the rest of the year, Plastics provided the strongest percentage growth. Increasingly, the Refining segment also recovered. Our confidence in our own strengths was also borne out by our revised forecasts in the second half of the year, which reflected our increasing optimism despite the extensive maintenance work scheduled and the economic and geopolitical challenges we faced. Although the fourth quarter was the weakest in terms of contributions, the company's €97.9 million of EBITDA was again one of the best results in the company's history.

G. 06 OIL PRICES 2013-2017

(AVERAGE MONTHLY PRICES)



Economic Position of the H&R Group

Assessment of Economic Performance and Overall Statement by the Executive Board

Overall, H&R KGaA's business performed during the reporting period much as the Executive Board had expected at the beginning of 2017. Driven by the trend in crude oil prices, our sales increased noticeably for the first time again. At the same time, sales volumes were at a similarly high level as in 2016 thanks to robust customer demand.

At €97.9 million, earnings (EBITDA) were only slightly lower than in the previous year (2016: €101.4 million).

The good overall figures are a direct result of strategic decisions made in recent years. For example, the company's more diversified position in its international businesses will help to ensure that its result of operations is sustainable, while continuing with contract orders at the Salzbergen site has restabilized our earnings trend. Further optimizing our smart raw materials management system and achieving internal synergies within the H&R Group were important strategic contributions toward enhancing the company's future viability. We now have the ability to analyze samples of raw materials virtually overnight, to determine their "intrinsic value" and to adjust our specialty refineries to produce those products for which there is market demand.

Systematic positioning of the refineries as specialty refineries and clearly differentiating them from lubricant refineries has strengthened our competitive position. While a further decline in Western European production capacity for Group 1 lubricants failed to materialize in 2017, production shutdowns by various competitors nevertheless demonstrated how important H&R's production sites now are to the market: both existing and new customers increasingly demanded high-grade, petroleum-based specialty products, waxes and white oils from our sites.

Overall, therefore, we believe that, as of the date on which the Management Report was prepared, the company's position was significantly more stable than it was a few years ago. We can now look back on the third successful financial year in a row since 2015. The targets originally set at the beginning of the year have largely been met. In particular, considering the aforementioned financing structure, the cash flows generated in 2017 and the company's liquidity position, which has to be described as very good overall, H&R KGaA believes that it is very well positioned, and not just in terms of servicing its debt.

Worldwide, we continue to see stable demand for our products; as a result, the business trend during the first few weeks of 2018 has also been within our expected range.

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

The accounting is based on discretionary powers and estimates which we have exercised appropriately, 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 in this annual report.



For further
Information
see page
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Result of Operations

In financial year 2017, our sales revenues increased year-on-year to €1.0251 billion (previous year: €942.7 million), thereby reversing the trend of recent years. Sales revenues from the Chemical-Pharmaceutical businesses (2017 sales contribution: 94.2%; previous year: 94.0%) were higher mainly because prices of raw materials rose again for the first time in 2017. Operating income was only slightly lower than the prior-year figure, indicating stable earning power. In contrast, although sales in the Plastics Division were comparable (2017 sales contribution: 5.8%; previous year: 6.0%), the business was significantly more profitable than in 2016.

The regional focus of our business activities remains on Germany, where 55.6% of sales were generated in financial year 2017 (2016: 55.9%). This percentage includes transactions with our sales partner – the Hansen & Rosenthal Group – which in turn generates a large proportion of its sales revenues outside of Germany.

Europe-wide, H&R KGaA's direct sales revenues from foreign customers stood at 11.4%. Sales revenues from outside of Europe accounted for 33.0% of the total.

For H&R KGaA, financial year 2017 was again characterized by high demand, rewarding product prices and a good margin situation. The first half of the year set the pace for solid performance, which then continued in the second half, leading to successful figures for the year as a whole. However, in addition to the maintenance work mentioned above, the company faced other challenges during the financial year, including external factors: the Brexit negotiations, the change of administration in the USA and various elections in Europe and Germany provided plenty of political and

economic uncertainty, which the company dealt with rather well on the whole.

Another contributing factor was our international network in the Chemical-Pharmaceutical Raw Materials Division, which enabled us to gain new suppliers of raw materials, production partners, and customers. At the same time, the stabilization of the Plastics Division under GAUDLITZ GmbH, which this year again made a positive contribution to EBITDA, also contributed to the good performance.

Strong customer demand for specialty products led to high capacity utilization at our production units and, consequently, to very good sales volumes.

Overall, the company posted a very good result for 2017, with consolidated operating earnings (EBITDA) of €97.9 million at a level similar to that of the previous year (2016: €101.4 million). Driven by the increase in sales revenues, there was a 1.2% change in the EBITDA margin to 9.6%, compared to 10.8% in 2016.

Overall, the other earnings indicators also remained stable. For example, consolidated earnings before interest and taxes (EBIT) totaled €54.8 million in 2017 (previous year: €64.2 million). This trend mainly reflects higher depreciation and amortization. Earnings before taxes (EBT) decreased from €54.2 million in 2016 to €46.2 million in 2017. Because of the higher tax expense, consolidated income attributable to shareholders amounted to €32.1 million (previous year: €38.4 million).

The company reported earnings per share of €0.88 for 2017, compared to earnings per share of €1.05 in the prior-year period.

T. 16 CHANGE IN SALES REVENUES AND EARNINGS

| IN € MILLION | 2017 | 2016 | 2015 | 2014 | 2013 |
|---------------------------------|---------|-------|-------|---------|---------|
| Sales revenues | 1,025.1 | 942.7 | 982.9 | 1,058.6 | 1,214.4 |
| EBITDA | 97.9 | 101.4 | 85.4 | 31.5 | 32.6 |
| EBIT | 54.8 | 64.2 | 48.7 | 5.8 | -4.1 |
| Earnings before taxes | 46.2 | 54.2 | 34.2 | -7.8 | -16.8 |
| Net profit/loss to shareholders | 32.1 | 38.4 | 26.9 | -15.4 | -14.0 |
| Earnings per share | 0.88 | 1.05 | 0.75 | -0.49 | -0.47 |

Trend in Orders

New orders for products in our Chemical-Pharmaceutical business were at a high level throughout all of 2017. Even at year-end, there was hardly any decrease in demand.

Following extensive sales efforts and a restructuring of the customer portfolio, the Plastics Division was in robust shape, with the order book increasing slightly to around €34.6 million at the end of the year (31 December 2016: €34.5 million). However, the percentage of the total order book accounted for by tools increased, so it can be assumed that these tools will be used to produce even more plastic components in the future.

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For further information see the glossary on page 170

Trends in the Main Items on the Income Statement

During the reporting period, there was a €9.8 million change in inventories of finished products and work-in-progress (previous year: €9.2 million).

In financial year 2017, our cost of materials increased by 13.7% to €764.3 million (previous year: €671.8 million) as a direct result of increases in prices of raw materials. The change in the material expense ratio to 73.6% (2016: 70.6%) was also primarily attributable to increases in prices of raw materials.

T. 17 TRENDS IN THE MAIN ITEMS ON THE INCOME STATEMENT

| IN € MILLION | 2017 | 2016 | 2015 | 2014 | 2013 |
|--|-------------|-------------|-------------|--------------|--------------|
| Sales revenues | 1,025.1 | 942.7 | 982.9 | 1,058.6 | 1,214.4 |
| Changes in inventories | 9.8 | 9.2 | -27.9 | 0.4 | -56.5 |
| Other operating income | 26.5 | 21.6 | 32.4 | 18.7 | 22.3 |
| Cost of materials | -764.3 | -671.8 | -709.4 | -881.4 | -981.3 |
| Personnel expenses | -86.0 | -86.7 | -79.9 | -72.7 | -71.4 |
| Depreciation and amortization | -43.1 | -37.2 | -36.8 | -25.6 | -36.7 |
| Other operating expenses | -113.7 | -114.1 | -113.1 | -92.4 | -95.2 |
| Operating profit/loss | 54.3 | 63.7 | 48.3 | 5.7 | -4.5 |
| Financial result | -8.1 | -9.5 | -14.1 | -13.5 | -12.4 |
| Consolidated income before taxes | 46.2 | 54.2 | 34.2 | -7.8 | -16.8 |
| Consolidated income before minority interests | 29.5 | 39.3 | 26.8 | -15.6 | -14.0 |
| Net profit/loss to shareholders | 32.1 | 38.4 | 26.9 | -15.4 | -14.0 |

There was a slight 0.9% decrease in personnel expenses to €86.0 million (previous year: €86.7 million), although the total number of employees increased.

Depreciation and amortization increased markedly from €37.2 million in 2016 to €43.1 million in 2017. As in the previous year, the ChemPharm Sales segment recognized impairments to intangible assets at the end of 2017: For the Chinese business activities of H&R KGaA in China, this impairment to goodwill totaled €2.5 million. Intangible assets decreased by €5.2 million. Originally, the company had a more optimistic view of business prospects; these impairments reflect its current expectation that the projected growth will occur more slowly.

In 2017, the financing costs dropped from €13.1 million to €10.4 million, also affecting the financial income, which improved from €-9.5 million in 2016 to €-8.1 million in 2017.

Earnings Trends by Segment

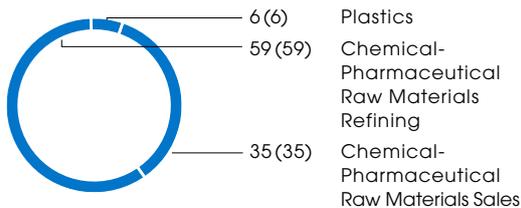
ChemPharm Refining. Sales volumes of primary products at our Group’s largest segment decreased somewhat from around 484,940 tons in 2016 to around 463,798 tons in 2017. At the same time, demand remained high and thanks to proactive management of volumes and availability, we managed to supply the required volumes to our customers despite the maintenance work carried out in the fall of 2017. At no time was quality compromised in any way. Meanwhile, segment sales revenues were higher in financial year 2017, primarily because of higher raw material prices. Because of our substantial material requirements, the higher commodity prices translated into higher material costs, thereby increasing our sales revenues. Overall, sales revenues increased by 8.7% to €616.8 million (previous year: €567.2 million). However, operating income (EBITDA) for the segment was almost unchanged, decreasing from €64.5 million in 2016 to €63.7 million in 2017.

ChemPharm Sales. Sales revenues in the international segment increased by 8.9% to €357.2 million (previous year: €328.0 million). The sales volume increased from around 364,368 tons in 2016 to 378,993 tons in 2017. As in previous years, performance by our subsidiaries was mixed and overall remained somewhat below expectations. As a result, operating income (EBITDA) declined from €39.4 million in 2016 to €34.3 million in 2017.

Plastics. With €59.6 million in sales revenues, our Plastics Division made a bigger contribution to total sales than in the previous year (2016: €56.5 million). After contributing €2.6 million to operating income (EBITDA) in the previous year, the segment reported a significantly higher EBITDA of €3.7 million in the reporting period, further confirming its positive trend.

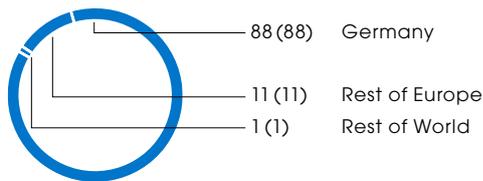
G. 07 SALES BY SEGMENT IN 2017

IN % (PREVIOUS YEAR'S FIGURES)



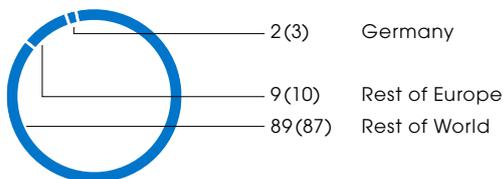
G. 08 SALES BY REGION IN THE CHEMPHARM REFINING SEGMENT IN 2017

IN % (PREVIOUS YEAR'S FIGURES)



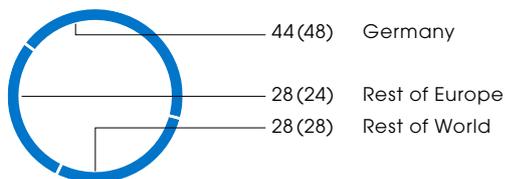
G. 09 SALES BY REGION IN THE CHEMPHARM SALES SEGMENT IN 2017

IN % (PREVIOUS YEAR'S FIGURES)



G. 10 SALES BY REGION IN THE PLASTICS SEGMENT IN 2017

IN % (PREVIOUS YEAR'S FIGURES)



T. 18 THE SEGMENTS IN FIGURES BY (IFRS)

| IN € MILLION | 2017 | 2016 | 2015 | 2014 | 2013 |
|----------------------------------|-------|-------|-------|-------|-------|
| Sales revenues | | | | | |
| Refining | 616.8 | 567.2 | 614.3 | 768.7 | 941.0 |
| Sales | 357.2 | 328.0 | 320.2 | 244.7 | 231.7 |
| Plastics | 59.6 | 56.5 | 60.1 | 56.5 | 62.7 |
| Reconciliation | -8.5 | -9.1 | -11.6 | -11.3 | -21.0 |
| Operating income (EBITDA) | | | | | |
| Refining | 63.7 | 64.5 | 52.7 | 18.2 | 20.6 |
| Sales | 34.4 | 39.4 | 35.1 | 18.8 | 16.5 |
| Plastics | 3.7 | 2.6 | -0.8 | -1.5 | 0.7 |
| Reconciliation | -3.8 | -5.1 | -1.5 | -3.9 | -5.1 |

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 working capital and capital expenditure
- to hedge against financial risks
- to ensure compliance with financing terms
- to optimize our capital structure

To ensure we are in a position to service our debt and to make efficient use of our liquidity, we transfer surplus cash within Germany to a cash pool which supplies the subsidiaries with the necessary liquidity.

In August 2017, we reduced a widely syndicated loan granted in August 2015 with a maximum volume of €240.0 million to €200.0 million and renewed it for an additional year; it will now mature in August 2020. This loan's main purpose is to finance net working capital, the amount of which affects the maximum utilization under the loan agreement (borrowing-base mechanism). The mechanism ensures that financing needs are covered even when net working capital increases.

We took out redeemable loans from KfW (Kreditanstalt für Wiederaufbau, Reconstruction Credit Corporation) in January 2011 (€50.0 million) and September 2015 (€28.8 million), each for ten-year

terms. These loans are part of a funding scheme, which offers financing under favorable conditions for environmentally friendly investments. In 2017, we took out three additional loans from KfW totaling €43.5 million to finance capital expenditures; we have already utilized €34.0 of that amount (see table 19). The €19 million of financing raised in September 2017 (with 50% drawn in 2017) will be used to increase energy efficiency through improved waste heat recovery and prevention and is supported by KfW repayment subsidies. An €18.0 million tranche of the borrower's note loan taken out in November 2011 will mature in November 2018. In January 2017, €11.0 million was repaid early using excess cash. As of 31 December 2017, the statement of financial position shows that the remaining borrower's note loans totaling €7.0 million will mature in November 2018.

In addition to other conditions, the utilization of these loans is subject to two covenants: the ratio of net debt to operating income (EBITDA) and the equity ratio.

In order to increase planning certainty regarding our interest expense, in 2011 we hedged a variable interest-risk position from borrower's note loans maturing in November 2018 totaling €40.0 million with a fixed-interest position under an interest rate swap. We repaid these borrower's note loans in November 2015, but given the current market situation, we have not liquidated the interest rate swap.



For further information see the glossary on page 170



For further information see the glossary on page 170

As of 31 December 2017, €1.2 million remained on the statement of financial position from a 2011 interest rate hedge on the aforementioned borrower's note options maturing in November 2018. Although we repaid the bulk of the borrower's note loans early, we have not reversed this position due to the current market situation.

During the reporting period, we have to the greatest extent possible refrained from using derivatives to hedge against the risks inherent in prices of raw materials, exchange rates and other risks.

T. 19 MAIN FINANCING INSTRUMENTS OF THE H&R GROUP

| | Original Loan Amount in € million | Year Issued | Current | Fälligkeit |
|-----------------------|-----------------------------------|-------------|---------|------------|
| Syndicated loan | up to 200.0 | 2015 | 12.7 | 24/8/2020 |
| Borrower's note loans | 18.0 | 2011 | 7.0 | 30/11/2018 |
| Redeemable loan | 50.0 | 2011 | 18.7 | 30/9/2020 |
| Redeemable loan | 28.8 | 2015 | 24.7 | 30/9/2023 |
| Redeemable loan | 10.0 | 2017 | 10.0 | 30/6/2027 |
| Redeemable loan | 19.0 | 2017 | 9.5 | 30/9/2027 |
| Redeemable loan | 14.5 | 2017 | 14.5 | 30/9/2027 |

Analysis of the Cash Flow Statement

Based on the lower consolidated income figure of €29.5 million, cash flow from operating activities totaled €46.2 million in the year under review (previous year: €75.5 million). This amount included €43.1 million of depreciation and amortization (previous year: €37.2 million). Changes in net working capital totaled €-6.7 million (previous year: €-18.5 million). There was a significant increase in income taxes paid, from €-7.8 million in 2016 to €-17.8 million in 2017.

Cash used in investing activities increased to €-58.1 million (previous year: €-38.8 million). Higher cash outflows related to the implementation of projects at our specialty refineries and locations totaling €-56.8 million (2016: €-39.0 million) were slightly offset by lower payments for the purchase of intangible assets (2017: €-0.6 million; 2016: €-0.9 million) and payments for financial investments (2017: €-0.9 million; 2016: €-1.6 million).

Accordingly, free cash flow (total cash flow from investing and operating activities) decreased from €36.7 million in 2016 to €-11.9 million in 2017. Overall, financing activities resulted in a net cash inflow of €15.3 million (previous year: €-58.9 million). Financial liabilities, which had already been steadily reduced in the past, were further

reduced in 2017 (by €-42.8 million; 2016: €-99.1 million); at the same time, €57.8 million of new financial liabilities were incurred (2016: €39.8 million). At the end of the reporting period, cash and cash equivalents amounted to €59.0 million, compared to €58.0 million a year earlier.

In the fourth quarter of 2017 alone, the company reported operating cash flow of €1.5 million (Q4 2016: €8.5 million). This was primarily attributable, first of all, to the lower consolidated income, as well as higher depreciation/amortization and a higher tax expense. Because capital expenditures almost doubled to €-20.3 million (2016: €-10.5 million), free cash flow for the fourth quarter of 2017 stood at €-16.8 million (Q4 2016: €-1.9 million).

For the current year, there are no pre-existing payment obligations under finance leases (previous year €17,000); commitments under operating leases total €41.1 million (previous year: €37.1 million). The total amount of liabilities to banks maturing in 2018 was €44.4 million as of the reporting date.

T. 20 FINANCIAL POSITION

| IN € MILLION | 2017 | 2016 | 2015 | 2014 | 2013 |
|---------------------------------------|-------|-------|-------|-------|-------|
| Cash flow from operating activities | 46.2 | 75.5 | 56.4 | -0.4 | 88.9 |
| Cash flow from investing activities | -58.1 | -38.8 | -28.1 | -10.1 | -16.2 |
| Free cash flow | -11.9 | 36.7 | 28.4 | -10.5 | 72.8 |
| Cash flow from financing activities | 15.3 | -58.9 | -52.4 | -0.3 | -49.2 |
| Cash and cash equivalents as of 31/12 | 59.0 | 58.0 | 79.3 | 101.6 | 109.6 |

Capital expenditures

During the reporting period, our €59.1 million of were considerably higher than in the prior-year period (2016: €39.3 million).

T. 21 CAPITAL EXPENDITURES BY SEGMENT

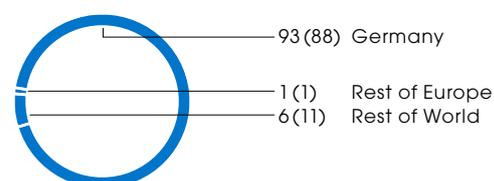
| IN € MILLION | 2017 | 2016 | 2015 | 2014 | 2013 |
|--------------------------------------|-------------|-------------|-------------|-------------|-------------|
| Refining | 54.2 | 34.0 | 23.6 | 18.1 | 12.0 |
| Sales | 3.9 | 4.5 | 6.7 | 4.7 | 0.5 |
| Plastics | 0.8 | 0.8 | 0.7 | 0.8 | 0.6 |
| Reconciliation (other activities) | - | - | - | 0.1 | - |
| Group | 59.1 | 39.3 | 31.1 | 23.7 | 13.1 |

We invested a total of €58.1 million in the Chemical-Pharmaceutical Raw Materials Division during the 2017 financial year (previous year: €38.5 million). A substantial portion of this amount (€54.2 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. For example, the world's largest dynamic hydrogen electrolysis plant based on PEM (Proton-Exchange Membrane) technology has been built at the Hamburg site. Each year, it will produce several hundred tons of hydrogen that will not be used to generate energy, as usual, but instead will be used as a resource to add value in production processes.

The division's remaining €3.9 million of capital expenditures were divided among our ChemPharm Sales segment's international locations.

G. 11 CAPITAL EXPENDITURES BY REGION IN 2017

IN % (PREVIOUS YEAR'S FIGURES)



Analysis of the Statement of Financial Position

As of year-end 2017, balance sheet total stood at €662.6 million (31 December 2016: €648.2 million).

On the assets side, there was a moderate 1.7% increase in cash and cash equivalents to €59.0 million, compared to €58.0 million at the end of the prior year. There was also a slight 1.6% decrease in trade receivables to €107.5 million (31 December 2016: €109.2 million).

Largely because of the trend in the price of crude oil over the course of the year, inventories – one of the main components of current assets – increased by 6.4% to €129.2 million (2016: €121.4 million). Overall, current assets increased by a moderate 3.6% to €308.1 million as of 31 December 2017, compared with €297.3 million at the end of 2016. As a proportion of balance sheet total, they increased to 46.5% (31 December 2016: 45.9%).

During financial year 2017, non-current assets likewise increased slightly (by 1.1%) from €350.8 million on 31 December 2016 to €354.5 million on 31 December 2017. Property, plant and equipment rose 8.3%, from €270.3 million to €292.6 million. Because of the impairment losses in China, goodwill decreased from €25.0 million to €22.4 million. Other intangible assets decreased by 32.1% (also due to adjustments in China) to €19.5 million (2016: €28.7 million). Deferred taxes decreased by 46.5%, from €14.2 million to €7.6 million. Overall, non-current assets comprised 53.5% of balance sheet total.

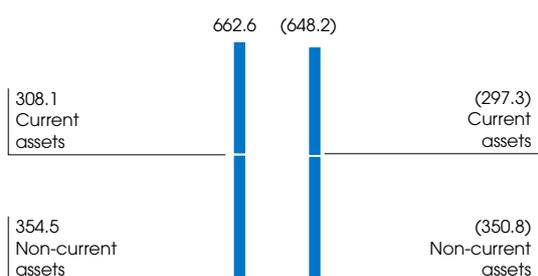
On the liabilities and shareholders' equity side of the statement of financial position, current liabilities decreased by 3.3% from €169.6 million to €164.0 million and the ratio of current liabilities to total liabilities and shareholders' equity dropped accordingly to 24.8% (31 December 2016: 26.2%). Liabilities to banks, which rose from €38.2 million to €44.4 million as a result of the valuation on the reporting date and new borrowings, and trade payables, which increased from €77.2 million at 31 December 2016 to €83.3 million due to higher purchase prices for ship deliveries of our raw materials, were offset by lower income tax liabilities, which decreased from €12.0 million on 31 December 2016 to €7.4 million, and by a decrease in other provisions from €19.6 million on 31 December 2016 to €11.6 million. Other financial liabilities decreased from €11.7 million in 2016 to €5.6 million, while other liabilities increased from €11.0 million to €11.6 million.

During the same period, non-current liabilities decreased by 3.2% to €155.9 million (31 December 2016: €161.1 million) and as a share of balance sheet total decreased from 24.9% to 23.5%. Non-current liabilities to banks increased from €62.0 million to €68.4 million, in part due to the new borrowings. Pension provisions and other liabilities decreased. Other provisions also decreased. Deferred tax liabilities decreased by 32.9% from €7.3 million to €4.9 million.

At the end of the reporting period, H&R KGaA's equity capital amounted to €342.7 million

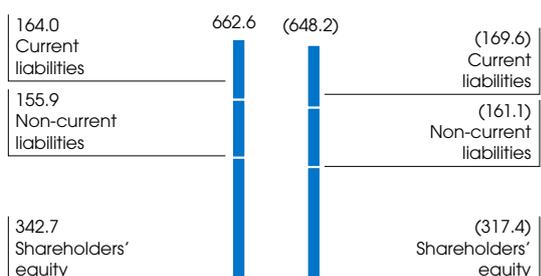
G. 12 ASSETS 2017

IN € MILLION (PREVIOUS YEAR'S FIGURES)



LIABILITIES AND SHAREHOLDERS' EQUITY 2017

IN € MILLION (PREVIOUS YEAR'S FIGURES)



(31 December 2016: €317.4 million). Thanks to the substantial increase in retained earnings, which after including consolidated income totaled €172.0 million (31 December 2016: €136.3 million), shareholders' equity was around 8.0% higher than in the previous year.

The equity ratio also improved in line with the shareholders' equity figure. It increased significantly to 51.7% on the reporting date (31 December 2016: 49.0%), despite the increase in

balance sheet total. Net gearing (the ratio of net financial liabilities to equity) increased slightly (by 0.9 percentage points) from 15.1% to 16.0%.

Apart from the aforementioned transactions, no companies were acquired or sold during the reporting period. Our off-balance-sheet assets are limited mainly to the leased portion of our specialty refinery site in Hamburg and our fleet of leased vehicles.

i

For further information see the glossary on page 170

Non-Financial Statement/ Non-Financial Performance Indicators

The entry into force of the CSR Directive Implementation Act (CSR-RUG) imposes new reporting obligations on H&R KGaA. For financial year 2017, we are obliged for the first time to supplement our existing financial reporting with disclosures on material, non-financial aspects of our business activities in areas involving environmental, employee and social concerns, respect for human rights and the fight against corruption.

The following section contains the Non-Financial Statement of the H&R Group in accordance with Section 289b–e of the German Commercial Code (HGB), in conjunction with Section 315b–c HGB. It will be published as part of the Management Report, together with the Annual Report. In order to avoid redundancies, reference is made to other passages in the Management Report containing non-financial information.

The diversity policy on the composition of management and supervisory bodies is laid out in the “Statement on Corporate Governance” (page 20).

Reporting Profile and Environment of H&R KGaA

Identification of Major Non-Financial Issues

Before preparing the Non-Financial Statement, a list of relevant non-financial issues was compiled internally and with the assistance of an outside consultant. This included an examination of the value chain of the H&R Group and the topics previously discussed in the “Non-Financial Performance Indicators” section of the company’s Annual Report. A materiality analysis involving internal and external stakeholders was not performed for this Non-Financial Statement. The company plans to carry out such an analysis in financial year 2018.

The key topics identified for the H&R Group for the purposes of the CSR-RUG were energy consumption and CO₂ emissions, waste, water and wastewater, employment, training and continuing education, occupational and process safety, product safety, social commitment, anti-corruption and compliance and human rights.

Legal Requirements and Framework

No international framework has been applied in preparing the Non-Financial Statement; however, we were guided by aspects of and comments in the Global Reporting Initiative (GRI) Standards.

H&R KGaA’s Business Model and Strategy

With the help of modern refineries and smart processes, we use crude oil derivatives to produce more than 800 high-grade chemical-pharmaceutical specialty products such as label-free process oils, white oils and paraffins. High-precision plastic parts complete our product portfolio. Our products are an important component in the processes and products of numerous industries. Our customer base ranges from the automotive industry to medical technology. Today, we manufacture and sell our products worldwide through our organically developed network.

For more information on our business model and on H&R KGaA’s strategy and corporate objectives, please consult pages 40–42 of the Management Report.



For further
Information
see page 40

Understanding of Sustainability and Major Issues at H&R

Corporate Responsibility

At H&R, as part of an owner-managed group of companies, we have always based our company policy on sustainability. We are convinced that the successes that come from quality management, safety, protection of the environment, and human health and compliance not only enhance our reputation, but also ensure our profitability and, as a result, our ability to sustainably increase our company's value and guarantee our future viability.

This conviction is expressed in our motto – “Oil is far too valuable to burn!” – which obliges us to strive for maximum resource conservation while systematically protecting the environment. At the same time, we take seriously our responsibility as an employer and place the highest priority on employee safety and development.

Only by taking into account both of these aspects, combined with our goal of flawlessly controlling and continuously improving production processes and associated services, can we also ensure that the quality of our products will continue to be impeccable in the future and thus meet our quality objective: to provide consumers with safe products that are in no way harmful to human health.

To accomplish this, we rely on a systematic, integrated management system (IMS) that encompasses all corporate processes and the associated workflows. The IMS also considers aspects such as occupational health and safety, environmental protection and quality requirements based on requirements for internationally recognized certifications (such as ISO 9001, ISO 14001 and OHSAS 18001). The IMS is regularly audited for compliance with the requirements by an independent outside testing body.

Challenges

As a specialty chemicals company, we face a wide variety of challenges with our business model. One of the major challenges stems from our vertical integration: at our refinery sites, the degree of processing involved in our production of high-grade specialty products far exceeds that of other refineries (whose processes end with the generation of fuels and base oils) and involves higher energy costs and greater consumption of resources.

Demographic change requires us to retain our skilled employees over the long term. We can only succeed in doing so if we offer our employees good jobs and enhanced job security while positioning ourselves as a responsible employer.

Today, customers demand not just the same product quality that has been proven over many years, but expect the H&R Group to be in a position to deliver environmentally friendly products which, wherever possible, are backed by the appropriate certifications. Guidelines intended to guarantee ethical conduct are becoming more and more important and extend to all partners, in addition to our own company. This also encompasses both upstream and downstream aspects of our own value chain.

Identification of Major Issues

The H&R Group is constantly dealing with relevant trends in its relevant industries and environments. The issues of most significance to our company are those connected with the aforementioned challenges and how we respond to them. Developing suitable policies and action plans on major issues helps us to deal with these challenges in the best possible way and to mitigate them or turn them into opportunities.

For purposes of the CSR-RUG, the major issues we have identified from the challenges above are:

T. 22 MAJOR ISSUES FOR THE H&R GROUP

| | |
|--|--------------------------|
| Energy consumption and CO ₂ emissions | Environmental concerns |
| Waste | |
| Water and wastewater | |
| Employment | Employee concerns |
| Training and continuing education | |
| Occupational and process safety | |
| Product safety | Social concerns |
| Social commitment | |
| Human rights | Respect for human rights |
| Anti-corruption | Fight against corruption |

For more on the fight against corruption and the respect for human rights please consult the section Corporate Governance (see pages 20–31). For all other issues, our policies, due diligence processes, objectives and results are described below.

Environmental Concerns: Climate Protection and Resource Conservation

The responsible use of natural resources and protection of the climate and environment are key goals of our company policy. On the one hand, we are always striving to reduce energy consumption and the amount of environmental pollutants caused by the production process. On the other hand, during our coupling process, further processing yields products that either offer an alternative to products containing substances harmful to the environment or products whose use will contribute to protection of the environment (see “Environmental Compatibility and Safety of Products”, page 67).

Our “Environmental Aspects and Impacts” database enables us to identify all activities that have an impact on the environment and to detect and assess risks during normal operations, during disruptions to operations, and in emergencies. If we see opportunities for improvement, we develop appropriate measures.

Years ago, we started collecting data on our emissions, waste and water consumption and to disclose these as absolute figures. However, because this did not adequately reflect the degree of value added or the size of our refinery sites, we decided back in 2012 to present the corresponding figures for our CO₂ emissions, wastewater, and waste as the amount of emissions per ton of feedstock. We use the figure for the year 2011 as the reference value of 100%. As the degree of vertical integration increases and production efficiency improves, we aim to avoid exceeding the reference value and where possible to come in below that benchmark.

Energy Efficiency and CO₂ Emissions

Our goal is to optimize our production processes so as to maximize the proportion of crude oil based specialty products and to minimize the proportion of barely usable or unusable materials. By 2020, we aim to convert more than 90% of raw materials used into high-grade products and to hold the percentage of combustion products correspondingly low. The feedstock plays an important role here, because the better the quality, the higher the yield of high-grade specialty products. But energy consumption is also important: the greater the degree of processing, the more energy has to be used to produce the products. A performance analysis by HSB Solomon Associates LLC® in 2017 confirmed our pioneering role in energy efficiency in the refining sector: Our two specialty refineries in Hamburg and Salzbergen ranked in the first quartile in benchmarking with other refineries.

With two energy-intensive production plants, our company has a stated goal of always keeping our energy consumption as low as possible and ensuring that it is as efficient as possible so that we can reduce our CO₂ emissions as much as possible. By doing so, we not only want to improve our own carbon footprint, but also to help achieve the climate protection goals called for by the Federal Government and the Paris Climate Agreement.

With this in mind, we have established an energy management system pursuant to the ISO 50001 standard at our refinery sites in Hamburg and Salzbergen. It defines company responsibilities, includes commitments to improve energy-related performance and compliance with all applicable statutory requirements regarding energy use, provides the framework for individual strategic and operating targets, along with measures for achieving them, and incorporates all of this into the company's energy policy. For example, under Salzbergen's energy policy, significant modernization work has been performed on the industrial power plant to supply the specialty refinery site with its own energy. The industrial power plant was designed in accordance with the highly efficient principle of cogeneration and includes a steam generation unit and an electric power generation unit. As a result, the industrial power plant supplies the site with both heat and electricity in an energy-efficient and cost-efficient manner. The modernization was carried out between 2014 and 2016 in two subprojects: In Subproject 1, the latest requirements of the Federal Emissions Control Act (Bundesemissionsschutz-Gesetz) were implemented and a new boiler plant was installed to use more climate-friendly natural gas as fuel. Subproject 2 increased the efficiency of electric power generation by replacing old power units. At the Hamburg specialty refinery site, the world's largest dynamic hydrogen electrolysis plant based on so-called PEM (Proton-Exchange Membrane) technology was placed into operation in 2017. For the H&R Group, the hydrogen produced using electricity and water represents a big step toward our goal of a "Green Refinery", because many experts view hydrogen as the key to protecting the climate. The plant's construction was subsidized by the Hamburg Environmental Protection Agency as part of the European Union's European Regional Development Fund (ERDF)

for the Promotion of Innovation and Sustainable Growth. The H&R Group plans to make further investments in the years to come to increase process efficiency; as planning progresses, these will be specified in greater detail.

We see to it that compliance with the requirements of the ISO 50001 standard is audited on a regular basis by an independent outside expert. If the requirements are not being met, we will revise and adjust our energy policy accordingly. The most recent certification, which confirmed that we are in compliance with all requirements of the ISO 50001 standard, took place in 2016 and is valid until mid-2019. We also conduct annual internal audits to verify and demonstrate that the requirements of the ISO standard are actually applied in practice within the organization. We avail ourselves of the option under the ISO 50001 standard not to make our energy policy available to the public.

One of the major effects of higher energy efficiency and minimum energy consumption is to lower emissions of CO₂. The measures taken to reduce CO₂ emissions in our company are largely in line with those taken to reduce primary energy consumption, as outlined in our energy policy.

In order to provide the best possible overview of our emissions, our CO₂ footprint covers both direct emissions and indirect effects such as those associated with energy purchases. We account for the depth of our value chain by calculating the sum of all individual plant throughputs in the course of production. From a legal standpoint, the main pillars for determining our CO₂ emissions are, first and foremost, the provisions of the Greenhouse Gas Emissions Trading Act (Treibhausemissionshandelsgesetz/TEHG). In addition, the ISO 50001 standard also calls for the monitoring of relevant data by providing for energy reviews, binding energy efficiency indicators and the introduction of an Energy Lifecycle Statement for certain plants. Finally, industry standards and very specific information such as information on individual plant set-ups, processes and production methods used or the composition of energy sources and other operating resources used, are also included when calculating our CO₂ emissions. For financial year 2017, our emissions

per ton of feedstock totaled 335.8 kg. The figure for the past financial year was therefore below the level of the previous year (350.3 kg) and also lower than the 2011 benchmark (398.1 kg).

T. 23 EMISSIONS OF H&R REFINERIES

| PER TON OF FEEDSTOCK | 2017 | 2016 | 2015 |
|--|-------|-------|-------|
| CO ₂ for all energy sources ¹⁾ (kg/t feedstock) | 335.8 | 350.3 | 397.5 |

¹⁾ 2016 Modified calculation basis as a result of improved plant engineering

Waste

Because of the wide variety of types of waste, the quantity, the potential risk posed by hazardous waste, the complexity of disposal procedures and disposal costs, H&R KGaA places high priority on operational waste management and on optimizing costs.

For example, the plant site at the Hamburg-Neuhof refinery produces around 63 different hazardous and non-hazardous types of waste in differing quantities and frequencies. These range from the non-hazardous waste specified in the Commercial Waste Regulation (Gewerbeabfallverordnung); through laboratory waste and construction waste, some of which is contaminated with hazardous substances and some of which is not (excavated soil, construction waste, road demolition rubble), scrap metal and building components containing asbestos, sludge material containing oil from wastewater treatment; to cleaning waste from the process plants.

The approach we follow is to always reduce the amount of waste caused by our production process as much as possible. On the one hand, we accomplish this by achieving the best possible ratio of primary products to by-products and through a high degree of vertical integration.

Most unavoidable waste is recycled. Residual material is disposed of professionally and in compliance with all legal requirements.

Goals and measures to reduce the amount of waste we generate are identified and implemented as part of our environmental management system, which is certified in accordance with the ISO 14001 standard and also includes specifications on waste management. This standard specifies environmental management requirements that organizations can implement to improve their environmental performance and to achieve environmental targets. It is based on the central elements of planning, implementation, control, and improvement. Compliance with the requirements is verified and certified by an independent outside body. The most recent certification was carried out in 2015 and is valid until mid-2018. In addition, we ensure compliance with laws, provisions, audit obligations, and regulations and verify the performance of our environmental management system with the help of officer meetings, internal audits, and compliance audits.

The total amount of waste generated by H&R's refinery sites is at a gratifyingly low level. By way of comparison, in 2017 we managed to reduce the amount of waste we produce by approximately 4.0% compared to the benchmark year of 2011 (3.09 kg/ton of feedstock). In financial year 2017, we generated 2.97 kg of waste per ton of feedstock (2016: 2.93 kg).

T. 24 WASTE GENERATED BY H&R REFINERIES

| PER TON OF FEEDSTOCK | 2017 | 2016 | 2015 |
|------------------------|------|------|------|
| Waste (kg/t feedstock) | 2.97 | 2.93 | 1.57 |

Water and Wastewater

Even if Germany is not subject to water restrictions, the prudent and conscious use of water resources is an issue that the H&R Group also classifies as essential.

Most of the water required for our refineries is used for cooling. This water does not come into contact with our products and can be returned directly to the environment. Only a small proportion of the water is used directly in our refinery processes. Once used, this water contains a large number of hazardous components and poses a high level of potential risk; consequently, wastewater management is also very important.

Basically, our goal is to consume as little water as possible and to generate as little wastewater as possible. The targets and measures for reducing our water consumption are identified, implemented and audited as part of our environmental management system, which is described in the section on waste. Our water sources are the local utility companies. The Salzbergen site also draws water from the Ems River and uses it, in processed form, as process and boiler feed water to provide steam. Water from the river is also used to compensate for evaporation losses in the cooling water circuit. In order to conserve water, we use our cooling water several times in the process. We are also working to create new ways to use service water in order to further increase the recycling rate. Wherever possible we use sophisticated, complex procedures to purify contaminated process wastewater right at the point of contamination, before it can be returned safely to the environment as wastewater.

In total, in 2017 we drained off 621.5 liters of domestic or process wastewater per ton of feedstock – after deducting the amount of precipitation falling on sealed surfaces – which was significantly (around 27.8%) below our 2011 benchmark (861.2 liters). In the previous year, by comparison, the quantity was, however, still around 600.9 liters.

T. 25 WASTEWATER GENERATED BY H&R REFINERIES

| PER TON OF FEEDSTOCK | 2017 | 2016 | 2015 |
|----------------------------|-------|-------|-------|
| Wastewater (l/t feedstock) | 621.5 | 600.9 | 686.3 |

Employee Concerns: Employees

Our company’s success is heavily dependent on the skills, performance capabilities and commitment of our employees. Our human resources management is therefore especially important, because the actions it takes contribute decisively to the future viability of our company.

H&R’s Human Resources Strategy

The particular conditions in local and regional labor markets pose a special challenge to the human resources management of the H&R Group, inasmuch as they may differ greatly, for example in terms of demographics and educational level. In order to meet its corporate objectives, the H&R Group needs qualified employees for both its production sites and refining locations; as a result, human resources work focuses on employee recruitment and retention. The H&R Group therefore trains its own junior staff and offers attractive pay and personal training opportunities in order to retain skilled employees over the long term.

In addition, the H&R Group places the highest priority on safety and ensuring that employees remain able to work.

In our human resources work, we are guided by our globally binding guidelines, such as the Code of Conduct, the corporate policy and our Compliance Manual. Naturally, we follow carefully the local laws.

Human Resources Management Organization

The human resources management of the H&R Group is organized in such a way as to take into account site-specific and country-specific differences. Local human resources departments at the sites tailor their human resources management approaches to fit country-specific requirements. They are supported by the Human Resources department in Hamburg, which defines the general guidelines for our global human resources management.

Employee Structure

At year-end 2017, the number of people employed by the H&R Group had increased by 63 to 1,692 (31 December 2016: 1,628). The following table shows a breakdown by division:

T. 26 EMPLOYEES BY DIVISION

| | 2017 | 2016 | 2015 |
|---------------------------------|-------|-------|-------|
| Employees | 1,692 | 1,628 | 1,568 |
| of which ChemPharm. | 1,088 | 1,035 | 975 |
| of which Plastics | 575 | 565 | 562 |
| Other | 29 | 28 | 31 |
| Personnel expenses in € million | 86.0 | 86.7 | 79.9 |

Most of our employees work at the domestic refineries in Hamburg and Salzbergen (685 people (31 December 2016: 659)) and at the GAUDLITZ GmbH site in Coburg (326 people (31 December 2016: 339)). At the end of the reporting period, therefore, these locations had 1,011 (31 December 2016: 998) of our total number of employees. Female employees accounted for 19.7% (199 employees) of this figure, which, according to our own estimates, was quite high for a production company with full-time shift operations. The age structure of our domestic workforce has remained roughly the same in recent years. During the reporting period, the 41-to-50 age group was the largest. The age distribution of our employees is thus typical of industrial companies in Germany.

Employee Recruitment and Retention

To recruit new employees, we rely primarily on traditional channels such as recruitment consultants, job portals, advertisements, and our own website. One of the main areas we focus on is recruiting young employees under apprenticeships to become chemical technicians or laboratory technicians.

Our performance-related remuneration models and flat hierarchies also make us an attractive employer for experienced professionals. At the German sites, most employment contracts are subject to the terms of collective bargaining agreements. In addition, we offer our employees flexible working hours (part-time arrangements, honor-system working hours) which – to the extent possible, given the processes and operating needs, such as shift work – they also take advantage of. Further, we offer numerous individual, in-house opportunities for continuing education in order to retain our employees over the long term (see Training and Continuing Education, page 64).

Our employees are very committed to the H&R Group. This is demonstrated, in particular, by the high average seniority and the persistently low staff turnover ratio at the sites in Germany. We calculate the turnover rate exclusively on the basis of voluntary resignations by employees. Employees retiring for age reasons are not counted, as new employees are generally hired to replace them. In 2017, our turnover rate was 1.0%, which was far below the two-digit turnover rate customary for employees covered by the German social security system.

Training and Continuing Education

As we can only compete internationally if we have superbly trained employees on board, we consider our spending on advanced training and professional development to be an investment in the future of our company.

When choosing advanced training courses, we follow an individual approach that promotes employees' strengths and helps them to achieve their career goals. To that end, we want to create dependable future prospects for our employees

and to support them in their professional and personal development. Here, we focus primarily on in-house continuing education programs, such as master craftsmen's training courses, but also on regular discussions and feedback sessions.

The increasing complexity of our plants and equipment also requires well-trained employees. For example, for the supervision of the processes in the refineries' measurement and control rooms, we deploy only experienced employees who are ready and willing to regularly expand their knowledge base.

We use our training management information system (SMIS database) to plan, coordinate and document all training activities within the company. If all of our employees worldwide complete the various training programs and briefings planned for them, around 18,000 training courses will be provided over the course of a financial year. In 2017, around 1,500 of our employees took part in continuing education courses, most of which are available online, reaching 98.6% of this target. In addition to covering the traditional jobs at our sites, the training also covers more general topics such as environmental protection, healthcare and social and cross-cultural skills. New content can be added to the training system, depending on the specific needs of the individual subsidiaries or departments.

Occupational and Process Safety

As an operator of refineries and production plants, the H&R Group places a high priority on occupational safety. In their daily work, many of our employees control, operate, and maintain machinery and plants; in addition, our refinery processes utilize various substances that must be handled with the utmost caution. We comply with the German statutory requirements stipulated in Section 2 of German Social Accident Insurance Regulation 2 (Deutsche Gesetzliche Unfallversicherung Vorschrift 2/DGUV V2) and Section 5 of the Occupational Safety Act (Arbeitssicherheitsgesetz/ASiG) by deploying specialists in occupational safety. At our international subsidiaries, the powers and responsibilities of occupational safety managers are based on the requirements promulgated by the Occupational Safety and Health

Administration (OSHA) within the framework of each jurisdiction's particular legal provisions.

Group-wide, we strive to have uniform safety standards that exceed statutory requirements. In doing so, we take the entire value chain into consideration: from the delivery of raw materials to the use of our components in our customers' products.

Occupational healthcare and safety specialists provide support by introducing suitable measures to prevent accidents and illnesses. Our occupational health and safety regulations also further this objective. Many of the occupational health and safety measures that we take are aimed at raising employees' awareness of potential dangers – to protect them as well as their coworkers. Therefore, a key safety issue at all of our sites is providing continuing education to our employees: we hold regular training sessions on topics relating to safety and require all our employees to visit our Internet-based safety instruction system on a regular basis. Contractors working in our factories are also included in our safety strategy. Every H&R Group employee is required to diligently follow all safety rules in their own work area.

Both before starting to work and at regular intervals, employees are required to attend briefings and training courses at which they are informed about, and sensitized to, possible safety risks, potential dangers, and how to properly handle hazardous materials. In addition, regular safety inspections, detailed analyses of any loss events or claims, a special report on safety-related indicators, and the active involvement of the Executive Board ensure that our safety performance is constantly improving.

In case of a relevant event, the executives and safety managers must immediately notify the company departments that are responsible for health, safety, and environmental protection.

Our accident statistics are based on the international CONCAWE standard (CONservation of Clean Air and Water in Europe) which uses the indicators LWIF (lost workday injury frequency) and LWIS (lost workday injury severity). The LWIF



For further information see the glossary on page 170

figure shows the frequency of accidents (number of work accidents with at least one day lost for every one million working hours). The LWIS figure shows the severity of accidents (number of days lost per work accident). Here, both our own employees and our contractors are taken into account.

The standards we apply are therefore much stricter than those called for by the employers' liability insurance associations in Germany, for instance. During the past year, our safety efforts were not as successful as they usually are: In

2017, the LWIF figure for our refineries was 5.3 (previous year: 0.7) – obviously a level with which we are not satisfied. We documented an increase in the frequency and severity of accidents (particularly among outside contractors), which we intend to address through more extensive training measures in 2018. Here, we will also be relying on our own well-trained employees to pass on to contractors their own practical knowledge of how to remain attentive and safe as they carry out their work at the respective sites.

T. 27 OCCUPATIONAL SAFETY AT H&R'S REFINERIES

| | 2017 | CONCAWE Standard | 2016 | 2015 | 2014 |
|---|------|------------------|------|------|------|
| Number of occupational accidents with at least one day lost per million working hours (Lost Workday Injury Frequency; LWIF) | 5.3 | 0.9 | 0.7 | 0.6 | 1.2 |
| Number of occupational accidents with at least one day lost | 16 | - | 4.0 | 1.0 | 2.0 |
| Number of days lost due to accidents | 263 | - | 73.0 | 12.0 | 56.0 |
| Number of working days lost per occupational accident (Lost Workday Injury Severity; LWIS) | 21.1 | 37.5 | 13.4 | 12.0 | 28.0 |
| Number of fatal occupational accidents per million working hours | 0.0 | 0.7 | 0.0 | 0.0 | 0.0 |

In addition to evaluating occupational safety, we also rate the production processes and workflows implemented at H&R, meaning that we systematically analyze all relevant production processes, up to and including an analysis of damages once any events have occurred. In other words, we investigate how error-prone our processes are and the extent to which they can reliably be performed error-free. Since the start of 2011, we have used the PSE to measure our performance in the area of process safety. To calculate this figure, we track incidents relating to the safety of our processes (PSE – Process Safety Events) per 1 million working hours.

We ensure that our results are meaningful by comparing them with the reference figure from the industry association CONCAWE, which set its benchmark standard for 2017 at 1.07. We achieved an average annual PSE of 0.19 at both refinery sites. Since we began recording the PSE, we have therefore always performed better than the CONCAWE benchmark standard.

Social Concerns: Product Responsibility and Social Commitment

Environmental Compatibility and Safety of Products

Respect for the environment, our neighbors, and our business partners and employees obliges us to manufacture products that are safe to use, to conserve natural resources, and to use environmentally compatible production processes that are safe and use less energy.

It is the joint responsibility of all employees to constantly search for opportunities to reduce the environmental impact of our processes, products and services. Therefore, wherever it is feasible and appropriate to do so, we design our production processes and processing facilities in accordance with the latest technology and in such a way as to conserve resources.

Our products are used in more than 100 industries, for example in the food and packaging industries, but also in the cosmetics and pharmaceutical sectors. In the food industry, for example, cheese rinds are coated with paraffin to prevent the cheese from drying out. The packaging industry has various uses for paraffins, including coating the inside of Tetra Pak containers. Our medical white oils are found, among other applications, in cosmetic products such as creams and ointments. Because our products also come into contact with people in the end products in which they are used, it is particularly important that they are harmless and non-hazardous to the health over their entire lifecycle. On the one hand, we guarantee this by modeling all product development and testing processes in our laboratory data information management system (LIMS). On the other hand, we apply international standards such as Advanced Product Quality Planning (APQP) and standardized internal approval processes.

In recent years, we have also concentrated on developing environmentally friendly products that meet the highest quality standards. Our environmentally friendly products either offer an

alternative to products containing environmental pollutants or, by virtue of their use, help to protect the environment. For example, the white oils produced in our refineries are used as components in pesticides to improve the yield of renewable raw materials. Our paraffins can be used to weather-proof domestic timber varieties. Their use renders intensive deforestation of slow-growing tropical timber stocks unnecessary. The innovative products from our Plastics Division are increasingly being substituted for metal parts used in the automotive industry. The resulting weight reduction helps to reduce vehicle fuel consumption even further. At the same time, the amount of energy used in their production is much lower than for comparable metal components.

We are making a further contribution to environmental compatibility by optimizing our yield of primary products while reducing to a minimum our output of by-products. Nevertheless, the production process at our production sites in Salzbirgen and Hamburg generates residues which, by using our propane deasphalting plants, we can convert into environmentally friendly, crude oil based specialty products and asphalt for use in the road-building industry. Some of this bitumen can also be reused as a raw material by other refinery operators. In this regard, one focus of our R&D work is on further reducing the percentage of by-products and/or products that are ultimately incinerated.

In addition, we are also working to promote the switch from fossil fuels to renewable raw materials (without competing with agricultural land and food), up to and including synthesized raw materials.

We apply the standards set forth in the European Union's Regulation on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) (For more about REACH, please consult the section in the Management Report entitled "Legal and Economic Factors", page 41). At a local level, we also joined the REACH Hamburg expert network in 2014.

For 2017, we are not aware of violations of legal provisions, requirements or labeling obligations.

However, we cannot fully rule out the risks inherent in operating industrial plants (including risks arising from our refineries and our products). For example, in order to ensure that both the sites and their neighbors are protected, we operate our own plant fire brigades and/or are in close contact with the local emergency teams. Regular drills ensure smooth cooperation.

Social Commitment

At its production sites, the H&R Group is not only a company and employer, but also a neighbor. The H&R Group has processes to handle complaints management. Suggestions and complaints from the public are investigated accordingly; the remedy is usually direct and unbureaucratic. In addition, the company holds regular events at its sites such as “Open House” or, specifically in Hamburg, an event as part of the “Long Night of Industry”.

To date, the company does not have an overriding, Group-wide policy regarding its social commitment. However, The H&R Group takes its social responsibility seriously. Our sites are responsible for their social activities, which are adapted to country-specific requirements. In Germany, for example, we support the Landmann Foundation, which provides funding for one or two students each year in our specialty areas (Chemistry, Engineering Sciences). The H&R Group also sponsors sporting events and youth programs and provides financial support for various institutions. The annual total is in the moderate five-digit range. We are especially proud of our many dedicated employees who voluntarily and on a good-will basis get involved in various religious, sociopolitical or neighborhood issues at our locations. Above all, they are making a difference in areas where what is needed is helping hands, not financial resources.

Major Risks

As a success-oriented, responsible-minded company, we operate an integrated, Group-wide risk and opportunity management system. Our goal is to identify, assess, communicate and manage relevant risks at an early stage in order to prevent or limit damage to our company. We also want to identify relevant opportunities early on so that we can take maximum advantage of them.

Our risk management system is based on a structured process for recording and managing risks (see Risk Report, page 79) that differentiates between environmental and industry risks, operating and corporate strategic risks and financial risks. This process also covers technical production risks – which may include risks from operating the plants or accidents and may harm people and the environment – as well as risks arising from product liability and personnel risks.

None of these risks has been identified as having a high probability of occurrence or potentially serious consequences for our business or our business relationships. The aforementioned risks are already being managed by our Group-wide risk management system and are discussed in the Risk Report.

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

T. 28 RESULTS OF OPERATIONS OF H&R GMBH & CO. KGAA UNDER HGB

| IN € THOUSAND | 2017 | 2016 | Change |
|--|---------------|---------------|---------------|
| Sales revenues | 1,361 | 961 | 400 |
| Other operating income | 14,674 | 12,691 | 1,983 |
| Personnel expenses | -546 | -1,457 | 911 |
| Depreciation and amortization of Intangible assets and property, plant and equipment | -26 | -18 | -8 |
| Other operating expenses | -7,449 | -6,355 | -1,094 |
| Income from equity investments | 0 | 400 | -400 |
| Income from profit-transfer agreements | 52,094 | 48,685 | 3,409 |
| Expenses from loss-transfer agreements | -922 | -857 | -65 |
| Income from lending financial assets | 2,086 | 2,403 | -317 |
| Depreciation and amortization on investments | 0 | 1,000 | -1,000 |
| Other interest and similar income | 2,124 | 2,636 | -512 |
| Interest and similar expenses | -6,944 | -9,234 | 2,290 |
| Earnings before taxes | 56,452 | 48,855 | 7,597 |
| Income taxes | -2,021 | -4,550 | 2,529 |
| Earnings after taxes | 54,431 | 44,305 | 10,126 |
| Other taxes | -7 | -15 | 8 |
| Net income/loss for the year | 54,425 | 44,291 | 10,134 |
| Loss carryforward | -33,318 | -77,609 | 44,291 |
| Distributable profit/accumulated deficit | 21,106 | -33,318 | 54,424 |

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 downloading from the Investor Relations>Publications Overview section of our website (<https://hur.com>). For financial year 2017, 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. Sales revenues totaled around €1.4 million, higher than in the prior year (2016: €1.0 million). In contrast, personnel expenses for the reporting period stood at €0.5 million, significantly lower than the prior-year level (2016: €1.5 million). This was due to the change from the joint-stock company (AG) legal form to that of a partnership limited by shares (KGaA): throughout 2017, management was handled by H&R Komplementär GmbH; as a result, the expenses are no longer reported directly in the KGaA's personnel expenses, but instead are included under other operating

expenses. Depreciation of property, plant and equipment increased from €18 thousand to €26 thousand.

Other operating income includes the reversal of impairment to receivables due from GAUDLITZ GmbH in the amount of €11.0 million due to the expected improvement in the company's results of operations and liquidity situation.

Other operating expenses increased from €6.4 million to €7.4 million (see above). As a result of the continued positive economic performance of our subsidiaries, income from profit-transfer agreements increased from €48.7 million in 2016 to €52.1 million.

The generally good earnings situation at most of the subsidiaries with which individual profit-and-loss-transfer agreements exist was also the main reason expenses from loss-transfer agreements continued to be very low, amounting to €0.9 million in 2017 (2016: €0.9 million).



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The subsidiaries of H&R KGaA obtain funding for their financing needs from H&R KGaA's resources, which in turn are financed on the capital markets via credit lines and borrower's note loans. Due to a further drop in demand, other interest and similar income declined for another consecutive year from €5.0 million to €4.2 million. Financing costs also decreased accordingly in 2017, with interest and similar expenses dropping from €9.2 million to €6.9 million.

Overall, earnings before taxes amounted to €56.5 million (previous year: €48.9 million).

The tax liability decreased from €4.6 million in the prior-year period to €2.0 million. Overall, H&R KGaA generated €54.4 million of net income for the year (2016: €44.3 million).

After netting the 2017 result against the loss carryforward of €-33.3 million from the previous year, the company's distributable profit/accumulated deficit improved by €54.4 million to €21.1 million.

T. 29 NET ASSETS AND FINANCIAL POSITION OF H&R GMBH & CO. KGAA

| IN € THOUSAND | 2017 | 2016 | Change |
|---|----------------|----------------|---------------|
| Prepayments | 0 | 27 | -27 |
| Intangible assets | 18 | 27 | -9 |
| Land, land rights and buildings, including structures on third-party land | 0 | 8 | -8 |
| Other equipment, operating and office equipment | 55 | 72 | -17 |
| Property, plant and equipment | 55 | 80 | -25 |
| Shares in affiliated companies | 124,311 | 123,869 | 442 |
| Loans to affiliated companies | 80,450 | 57,627 | 22,823 |
| Holdings | 1,050 | 1,050 | 0 |
| Loans to holdings | 0 | 0 | 0 |
| Financial assets | 205,812 | 182,546 | 23,266 |
| Receivables due from affiliated companies | 115,256 | 91,280 | 23,976 |
| Other assets | 4,195 | 1,837 | 2,358 |
| Receivables and other assets | 119,451 | 93,117 | 26,334 |
| Securities | 76 | 116 | -40 |
| Bank balances | 4,242 | 6,314 | -2,072 |
| Current assets | 123,233 | 99,547 | 23,686 |
| Prepaid expenses | 113 | 104 | 9 |
| Assets | 329,767 | 282,304 | 47,463 |
| Subscribed capital | 93,404 | 91,573 | 1,831 |
| Capital reserve | 54,648 | 56,037 | -1,389 |
| Other retained earnings | 29,866 | 29,866 | 0 |
| Distributable profit/(accumulated deficit) | 21,106 | -33,318 | 54,424 |
| Equity | 199,024 | 144,157 | 54,867 |
| Provisions for pensions and similar commitments | 2,191 | 2,385 | -194 |
| Tax provisions | 2,487 | 6,734 | -4,247 |
| Other provisions | 2,853 | 4,049 | -1,196 |
| Provisions | 7,530 | 13,168 | -5,638 |
| Liabilities to banks | 84,609 | 70,581 | 14,028 |
| Trade payables | 182 | 46 | 136 |
| Liabilities to affiliated companies | 35,183 | 50,675 | -15,492 |
| Other liabilities | 3,239 | 3,677 | -438 |
| Liabilities | 123,213 | 124,979 | -1,766 |
| Liabilities and Shareholders' Equity | 329,767 | 282,304 | 47,463 |

As of 31 December 2017, H&R KGaA's balance sheet total had increased by 16.8% to €329.8 million (31 December 2016: €282.3 million). Loans to affiliated companies increased to €80.5 million (previous year: €57.6 million) and were mainly related to the construction of the new hydrogen production facility at the specialty refinery in Hamburg. This was the main factor behind the increase in financial assets from €182.7 million to €205.8 million at the end of 2017.

Receivables due from affiliated companies increased due to better results and, therefore, higher claims by H&R KGaA against its subsidiaries under profit-transfer agreements. These were offset somewhat by scheduled loan repayments, so on balance the receivables increased from €91.3 million to €115.3 million. Bank balances decreased from €6.3 million to €4.2 million.

All in all, current assets increased by 23.8%, from €99.5 million to €123.2 million.

On the liabilities and shareholders' equity side of the statement of financial position, the increase in capital from company funds carried out in mid-2017 caused an increase in subscribed capital (2017: €93.4 million; 2016: €91.6 million) and a decrease in the capital reserve (2017: €54.6 million; 2016: €56.0 million). The other retained earnings figure of €29.7 million was comparable to the prior-year figure. The net income generated during the reporting period, €54.4 million, was posted to distributable profit/accumulated

deficit, which therefore improved to €21.1 million. Equity therefore increased from €144.2 million as of 31 December 2016 to €199.0 million at the end of the reporting period. The equity ratio improved to 60.3% (31 December 2016: 51.1%).

Provisions for pension commitments decreased slightly. In contrast, there was a sharper decline in other provisions. Lower tax provisions additionally reduced the burden, causing the total provisions item to drop from €13.2 million on 31 December 2016 to €7.5 million.

By contrast, there was a moderate 1.4% decrease in liabilities, from €123.2 million on 31 December 2016 to €91.7 million; although liabilities to banks increased to €84.6 million (previous year: €70.6 million), at the same time this was offset by a significant decrease in liabilities to affiliated companies (€35.2 million; previous year: €50.7 million).

The Executive Board and the Supervisory Board will propose to the Annual Shareholders' Meeting on 24 May 2018 that a dividend of €0.40 per dividend-bearing share be paid from the €21,106 thousand of distributable profit for financial year 2017; this would be equal to a total dividend distribution of €14,615 thousand. The balance will be carried forward.

This proposal is subject to approval by the shareholders at the Annual Shareholders' Meeting.

Other Legally Required Disclosures

Disclosures in accordance with Section 289a, paragraph 1 and Section 315a, paragraph 1 of the German Commercial Code (HGB)

Item 1: Composition of Subscribed Capital

The share capital available upon conversion of the company into a partnership limited by shares was fully paid in by changing the legal form of the previous legal entity, H&R Aktiengesellschaft. Due to an increase in capital from company funds connected with the issuance of 716,403 new shares (bonus shares), subscribed capital increased by €1,831,444.96 effective 28 June 2017. This increase in share capital also entailed reducing capital by retiring four shares, thereby reducing subscribed capital by €10.23. On the reporting date, subscribed capital therefore totaled €93,404,214.59, divided into 36,536,553 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 (16.32% of voting rights in the company) are subject to the mutual voting rights restriction. A total of 26.02% 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 a voting rights notification dated 5 July 2016, Mr. Nils Hansen reported that his share of voting rights totaled 60.63% of the company's voting rights due to his 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 voting rights notification, (i) the share of voting rights of H&R Beteiligung GmbH totaled 59.33% 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 26.02% 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 59.33% of the company's voting rights due to the attribution of voting rights.

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 1 August 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 company 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 of the AktG). According to Section 285, paragraph 2 of the 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. Pursuant to Article 24, the Supervisory Board may adopt amendments to the Articles of Association that only affect their wording without the approval of the Annual Shareholders' Meeting. In addition, under Section 4, paragraph 5, the Supervisory Board is authorized to revise the Articles of Association once an increase in share capital has been fully or partly completed in accordance with the respective utilization of the approved capital and once the authorization period has expired. Pursuant to Section 4, paragraph 6 of the Articles of Association, this also applies to respective utilizations of contingent capital in accordance with Section 4, paragraphs 1 and 6 of the Articles of Association. Finally, the Supervisory Board shall be 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 has various options for implementing corporate actions. Pursuant to Section 4, paragraph 5 of the Articles of Association, the general partner with full personal liability is authorized – with the Supervisory Board's approval – to increase the company's share capital by 12 May 2019 by a maximum of €22,364,796.53 by issuing up to 8,748,348 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 (2014 Approved Capital). In principle, the shareholders have a subscription right. The new shares may also be acquired by one or more banks with the obligation to offer them for subscription to shareholders.

Subject to the approval of the Supervisory Board, the general partner with full personal liability is authorized to suspend shareholders' subscription rights on one or more occasions:

- a) to the extent necessary to exclude fractional share amounts from shareholders' subscription rights;
- b) to the extent necessary to grant holders of option or conversion rights and/or obligations under warrants or convertible bonds the same rights to subscribe new shares that they would have as shareholders if they had already exercised their option or conversion rights or fulfilled their conversion obligations;
- c) to the extent that the new shares are issued for subscription in cash and the proportion of share capital attributable to the new shares does not exceed the lesser of €7,662,503.90 or 10% of share capital at the time this authorization to exclude subscription rights takes effect and is exercised for the first time ("maximum amount") and the issue price of the new shares is not significantly lower than the quoted price

for company shares of the same type already listed on the stock exchange at the time the issue price is set definitively;

- d) to the extent that the new shares are issued in exchange for contributions-in-kind, especially in the form of companies, parts of companies, equity investments in companies or receivables.

The maximum amount defined in Section 4, paragraph 5(c) of the Articles of Association is to be reduced by the proportion of share capital attributable to new or previously acquired treasury shares that have been issued or sold since 13 May 2014 on the basis of a simplified exclusion of subscription rights in accordance or by analogy with Section 186, paragraph 3, sentence 4 AktG, and by the proportion of share capital attributable to shares that can be acquired through option or conversion rights and/or obligations that have been issued since 13 May 2014 pursuant to Article 186, paragraph 3, sentence 4 AktG, mutatis mutandis. Any reduction is reversed to the extent that authorizations to issue convertible bonds and/or bonds with warrants in accordance with Article 221, paragraph 4, sentence 2 and Article 186, paragraph 3, sentence 4 AktG or to sell treasury shares in accordance with Section 71, paragraph 1, no. 8 and Article 186, paragraph 3, sentence 4 AktG or to issue new shares in accordance or by analogy with Article 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.

The general partner with full personal liability is authorized, with the approval of the Supervisory Board, to specify further details about the capital increase, in particular details regarding the rights accruing to the shares and the terms of issue. The Supervisory Board is authorized, once the increase in share capital has been fully or partly completed, to revise Article 4 of the Articles of Association based on the utilization of the approved capital from time to time and once the authorization period has expired.

Finally, the Annual Shareholders' Meeting passed a resolution on a contingent increase in the company's share capital of up to €7,650,000.00 in the period until 12 May 2019 through the issuance of up to 2,992,419.90 no-par bearer shares with dividend rights from the beginning of the financial year in which they are issued. The contingent capital is intended to grant shares to satisfy subscription and/or conversion rights and/or obligations of holders of warrant-linked and/or convertible bonds that are issued by the company or a Group company in accordance with the authorization by the company's Annual Shareholders' Meeting on 13 May 2014.

The general partner is authorized, with the approval of the Supervisory Board, to determine the further details of the process relating to the contingent capital increase (2014 Contingent Capital).

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 borrower's note loans have the right to call in the loans in the event of a change of 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

Until 31 July 2016, the company exercising direct control was H&R Beteiligung GmbH, a member of the Hansen & Rosenthal Group, with a 43.01% stake.

Following the Annual Shareholders' Meeting of H&R AG on 18 May 2016 and the entry in the Commercial Register on 1 August 2016, the company's legal form was changed to that of a partnership limited by shares, H&R GmbH & Co. KGaA. When the change in legal form went into effect, H&R Komplementär GmbH, Salzbergen, joined the company as the general partner with full personal liability and assumed the management and representation of H&R GmbH & Co. KGaA. 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 2017, 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 1 January 2017 to 31 December 2017, 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."

Corporate Governance Statement

The Statement on Corporate Governance contained in the Corporate Governance Report is part of the Management Report. The Statement is also made available by the company on the company website at hur.com/en/investor-relations/corporate-governance/.



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Remuneration Report

The following remuneration report is an integral part of the Management Report. It describes the remuneration system covering the Executive Board and the Supervisory Board of H&R KGaA.

Executive Board Remuneration

The Executive Board of H&R KGaA consists of up to three members. H&R Komplementär GmbH reviews and makes decisions about the remuneration system for the Executive Board and the total remuneration for the individual members of the Executive Board through its Advisory Board, within the meaning of both Section 87 of the AktG and the recommendations of the German Corporate Governance Code, applied mutatis mutandis. To evaluate appropriateness, the remuneration is compared to that of other listed companies in similar industries of a similar size and complexity as well as with the remuneration structure within the company itself. Moreover, it is also set at a level that ensures the company is in a position to compete for highly qualified top managers.

At listed companies such as H&R KGaA, the remuneration structure must also be geared toward sustainable company performance.

Following these requirements, the total remuneration of the members of H&R KGaA's Executive Board consists of both non-performance-related and performance-related components. The non-performance-related portions consist of a fixed salary and benefits, while the performance-related components consist of a two-step variable remuneration with a sustainability component and an annual special or recognition bonus determined at the discretion of the Advisory Board of H&R Komplementär GmbH, as general partner with full personal liability, that is limited to a maximum of €100,000.00.

The criteria for measurement of the remuneration for members of the Executive Board include the economic situation, the company's performance and its future prospects. In addition, individual

remuneration is dependent on the different duties of the members of the Executive Board and on their individual performance.

Fixed Remuneration

The fixed remuneration consists of a non-performance-related basic remuneration – which is paid pro rata each month as a salary – plus various fringe benefits and non-monetary remuneration. At present, this primarily comprises insurance premiums for private life and disability insurance policies, contributions to pension, health and long-term-care insurance policies corresponding to the amount payable by an employer if social-insurance contributions were payable in full, and the private use of a company car. Members of the Executive Board pay tax on non-monetary remuneration based on the amounts reportable under tax guidelines.

The fixed salary is reviewed regularly (every two years).

Variable Remuneration

The maximum annual bonus is limited to the amount of the fixed salary. One-half consists of a component with a short-term incentive effect (referred to as the “earnings component”) based on the annual Group operating income (EBITDA), adjusted by any extraordinary result within the meaning of Section 275, paragraph 2, no. 17 HGB (old version), with the other half being a component with a long-term incentive effect (referred to as the “sustainability component”).

The earnings component can be up to 50% of the annual target bonus and depends on whether the EBITDA defined in the business plan is achieved. If EBITDA is 110% or more of the plan, the Executive Board member is entitled to 100% of the earnings component (50% of the annual target bonus), i.e., a maximum of 50% of the maximum possible bonus. The maximum entitlement to the earnings component is reduced on a straight-line basis by the percentage by which EBITDA is below plan.

The sustainability component provides for a variable bonus based on the average return on capital employed (ROCE) over a rolling three-year period.

The return is calculated as the ratio of EBIT to average capital employed (equity plus net financial debt, pension provisions and other non-current provisions) at the H&R KGaA.

A maximum of 50% of the annual target bonus is paid if the average annual ROCE reaches 15% or more. The maximum entitlement to the sustainability component is reduced pro rata to 0% for a ROCE of up to 5%. By including this component, we satisfy the requirements of Article 87, paragraph 1, sentence 3 AktG, which stipulates that variable remuneration components must be calculated based on a timeframe spanning several years.

In Mr. Detlev Wösten’s case, up to 20% of the variable remuneration may be awarded on a project basis. The earnings and sustainability components will then be reduced to 40% each.

Should the term of office of a member of the Executive Board end prematurely, any payments agreed for the departing member – including fringe benefits – should not exceed the value of twice the annual remuneration (severance pay cap) or the value of the remuneration that would be payable for the remaining term of the executive employment contract. This is stipulated in Recommendation Number 4.2.3, paragraph 4 of the German Corporate Governance Code as amended on 24 June 2014. The company has followed this recommendation to the extent legally possible by including what are known as “coupling clauses” in the employment contracts of members of the Executive Board. These stipulate that, if the appointment is revoked, the member resigns for good cause or the board position is otherwise terminated by the company, the employment contracts of members of the Executive Board will terminate two years after the term of office ends, but no later than the end of the scheduled appointment period.

The executive employment contracts of all members of the Executive Board ensure that the variable remuneration is limited in case of extraordinary developments in the company that could not have been foreseen at the time the executive employment contract was signed or at the time

that targets were defined and which are deemed to render unreasonable for the company adherence to the payment of the agreed variable remuneration or to the defined targets. This could also be dealt with by appropriate adjustment of the

targets already defined for the payment of variable remuneration. The company does not use securities-based incentive systems such as stock option programs. No loans or advances have been extended to members of the Executive Board.

T. 30 EXECUTIVE BOARD REMUNERATION (GRANTED)

| Members of the Executive Board | IN € | Benefits Granted | |
|--|-------------------------------------|------------------|------------------|
| | | 2016 | 2017 |
| Niels H. Hansen Chairman of the Executive Board/ Chairman of the Executive Board (until 31 July 2016) Chairman of the Executive Board since 1 January 2012 | Fixed remuneration | 661,015 | 725,000 |
| | Fringe benefits ¹⁾ | 17,713 | 14,952 |
| | Total | 678,728 | 739,952 |
| | One-year variable remuneration | 472,328 | 319,725 |
| Detlev Wösten Member of the Executive Board/ Member of the Executive Board (until 31 July 2016) Member of the Executive Board since 1 August 2011 | Multiple-year variable remuneration | | 262,233 |
| | Total | 1,151,056 | 1,321,910 |
| | Pension expenses | | |
| | Total remuneration | 1,151,056 | 1,321,910 |

¹⁾ Inter alia, this item includes the use of a car and casualty insurance premiums

T. 31 EXECUTIVE BOARD REMUNERATION (RECEIVED)

| Members of the Executive Board | IN € | Benefits Received | |
|---|-------------------------------------|-------------------|------------------|
| | | 2016 | 2017 |
| Niels H. Hansen Chairman of the Executive Board / Chairman of the Executive Board (until 31 July 2016) Chairman of the Executive Board since 1 January 2012 | Fixed remuneration | 661,015 | 725,000 |
| | Fringe benefits ¹⁾ | 17,713 | 14,952 |
| | Total | 678,728 | 739,952 |
| | One-year variable remuneration | 450,000 | 472,328 |
| Detlev Wösten Member of the Executive Board / Member of the Executive Board (until 31 July 2016) Member of the Executive Board since 1 August 2011 | Multiple-year variable remuneration | - | - |
| | Total | 1,128,728 | 1,212,280 |
| | Pension expenses | - | - |
| | Total remuneration | 1,128,728 | 1,212,280 |

¹⁾ Inter alia, this item includes the use of a car and accident-insurance premiums

Supervisory Board Remuneration

Since the change in legal form went into effect, Supervisory Board remuneration has been governed by Article 13 of our Articles of Association and primarily comprises the following elements:

Every member of the Supervisory Board receives a fixed annual payment of €30,000.00 in addition to the reimbursement of out-of-pocket expenses. The Chairman of the Supervisory Board receives three times and his deputy one and a half times this amount.

Supervisory Board members who are also members of Supervisory Board committees receive an additional fixed remuneration of €10,000.00 per committee; if there is a Nomination Committee, its members receive fixed annual remuneration of €5,000.00. Supervisory Board members who chair one of the committees receive twice the remuneration payable for membership of the committee in question.

T. 32 SUPERVISORY BOARD REMUNERATION

| IN € | Fixed Remuneration | | Remuneration for Committee Work | | Total | |
|----------------------------------|--------------------|----------------|---------------------------------|----------------|----------------|----------------|
| | 2016 | 2017 | 2016 | 2017 | 2016 | 2017 |
| Dr. Joachim Girg (Chairman) | 90,000 | 90,000 | 25,000 | 25,000 | 115,000 | 115,000 |
| Roland Chmiel | 45,000 | 45,000 | 20,000 | 20,000 | 65,000 | 65,000 |
| Nils Hansen (Until 31/7/2016) | 17,459.02 | - | 11,639.34 | - | 29,098.36 | - |
| Sven Hansen (Since 31/7/2016) | 12,540.98 | 30,000 | 8,360.66 | 20,000 | 20,901.64 | 50,000 |
| Dr. Rolf Schwedhelm | 30,000 | 30,000 | 15,000 | 15,000 | 45,000 | 45,000 |
| Dr. Hartmut Schütter | 30,000 | 30,000 | 20,000 | 20,000 | 50,000 | 50,000 |
| Dr. Peter Seifried | 30,000 | 30,000 | 20,000 | 20,000 | 50,000 | 50,000 |
| Reinhold Grothus | 30,000 | 30,000 | - | - | 30,000 | 30,000 |
| Holger Hoff (Since 26/4/2017) | - | 20,547.95 | - | - | - | 20,547.95 |
| Harald Januszewski | 30,000 | 30,000 | - | - | 30,000 | 30,000 |
| Mathias Erl (Until 26/4/2017) | 27,459.02 | 9,452.05 | - | - | 27,459.02 | 9,452.05 |
| Rainer Metzner (until 31/1/2016) | 2,540.98 | - | - | - | 2,540.98 | - |
| Total | 345,000 | 345,000 | 120,000 | 120,000 | 465,000 | 465,000 |

Events after the Reporting date

Between 31 December 2017 and the editorial deadline for this Report, there were no events with a material impact on the net assets, financial position, or results of operations.

Report on Risks and Opportunities

Risk Report¹⁾

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 generally 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, we have a particular responsibility to operate our specialty refineries 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.

Risk Management System

The risks to which H&R KGaA and its subsidiaries are exposed are identified, assessed, quantified (to the extent possible), communicated, and limited, as appropriate, 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 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.

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, independently of normal communication channels.

In addition, a monthly performance report is prepared for all the main individual companies and

¹⁾ In the interests of clarity and better readability, unlike last year, the section entitled "Forecast Report" will now be presented separately following the Report on Risks and Opportunities.

the Group. This report compares revenue 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.

The regular divisional meetings attended by local managing directors and the Executive Board of H&R KGaA are another tool used for early risk detection. 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 a regular 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.

Description of the Main Features of the Internal Control and Risk Management System with Regard to the Group Accounting Process (Section 289, Paragraph 5 and Section 315, Paragraph 2, No. 5 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 contact persons 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 have the appropriate manpower, 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, processes and measures which ensure that the accounting is effective, efficient and correct, and complies with the relevant legal requirements.

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 include both manual controls, such as the dual-review principle, and automated IT controls.

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 of the German Stock Corporation Act (AktG), 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 systems.

Extensive access regulations for the relevant IT systems and a strict dual-review policy in the Accounting Departments – both at the individual

companies and at the Group level – 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 rules. 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 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).

Derivative financial instruments are not used for speculative purposes. The contracts currently in place serve mainly to hedge interest rate and currency risks. The open interest rate positions with a maturity date of 30 November 2018 totaled €40.0 million on the reporting date. In the currency area, the total was HKD 27.0 million. Valuation units were not shown.

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 “Probability of Occurrence” and “Potential Financial Impact”. The resulting risk classification matrix is shown in the following table:

T. 33 POTENTIAL FINANCIAL IMPACT¹⁾

| | Likelihood of occurrence ²⁾ | | |
|--------------------|--|----------|--------|
| | Unlikely | Possible | Likely |
| Existential threat | ■ | ■ | ■ |
| Significant | ■ | ■ | ■ |
| Moderate | ■ | ■ | ■ |

¹⁾ Moderate: some negative effects on business activity, financial position, results of operations and cash flows if EBITDA falls below €30.0 million in 2017;
 Significant: substantial negative effects on business activity, financial position, results of operations and cash flows if EBITDA falls below €30.0 million 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 an EBITDA permanently below €30.0 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. 34 CORPORATE RISKS

| | Likelihood of occurrence | Possible financial impact | Risk situation compared to previous year |
|--|--------------------------|---------------------------|--|
| Macroeconomic and Industry Risks | | | |
| Fluctuations in demand and margins | Possible | Significant | Unchanged |
| Raw material supply risks | Unlikely | Significant | Unchanged |
| Risks from the development of substitute products/general competitive pressure | Likely | Moderate | Unchanged |
| Changes in the tax and legal environment | Possible | Moderate | Unchanged |
| Operating and Corporate Strategy Risks | | | |
| Technical production risks | Unlikely | Significant | Unchanged |
| Investment risks | Unlikely | Significant | |
| Risks associated with contractual relationship with Hansen & Rosenthal Group | Unlikely | Significant | Unchanged |
| Product liability risks | Unlikely | Moderate | Unchanged |
| Information technology risks | Unlikely | Significant | Unchanged |
| Personnel risks | Unlikely | Moderate | Unchanged |
| Financial Risks | | | |
| Liquidity risks | Unlikely | Significant | Unchanged |
| Risks from the breach of covenants | Possible | Significant | Unchanged |
| Risks from future refinancing requirements | Unlikely | Significant | Lower |
| Exchange rate risks | Possible | Moderate | Unchanged |
| Interest rate risks | Possible | Moderate | Lower |
| Risks from defaulting customers and banks | Unlikely | Moderate | Unchanged |

Unless stipulated otherwise below, the description of risks 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.

By contrast, in its capacity as the parent company, H&R KGaA holds equity investments in Group companies as its own original risk. The carrying amounts of these investments are subject to the risk of an impairment loss 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 net income.

Macroeconomic and Industry Risks

Demand and Margin Fluctuations (Risk Class: High). External influences can cause demand for our chemical-pharmaceutical specialty products and high-precision plastic parts to decline. These external factors may include periods of economic weakness, temporary price dumping by existing

competitors or the emergence of new suppliers in relevant markets.

We continue to generate the majority of our sales in Europe. Economic developments in this region therefore have an important influence on our sales and earnings trend.

In the Plastics Division, there is a risk of excessive dependence on direct suppliers to the automotive industry and/or individual customers, for example because automobile manufacturers' declining sales also affect H&R KGaA's business indirectly. Accordingly, we make every effort to diversify into new customer areas. Expanding our activities beyond Europe also furthers our global presence and makes us less dependent on developments in the domestic economy.

Closely correlated with the risk of weak demand is the risk of low product margins. As the fixed costs of complex plants in the chemical industry are relatively high, lower margins are often tolerated at times of weaker demand in order to maintain capacity-utilization rates. We counter this risk with the targeted expansion of the percentage of

our business that generates crude oil based specialty products that are less price sensitive.

As a rule, fluctuating raw material prices and low prices for base oils also result in product-margin volatility. Base oil is a by-product of our joint production process and is used to make motor oils, among other things. If commodity prices are high and base-oil prices are simultaneously low, this will affect margins accordingly. Even with moderate raw material prices, the effects can have a significant impact. The conversion of the specialty refinery in Salzbergen to contract production back in 2013 has significantly reduced the overall risk of these effects.

At the same time, for financial year 2017 as a whole, H&R KGaA benefited from a basically profitable relationship between the purchase price of raw materials and the selling price of base oil. The company was also able to take advantage of the opportunities the positive trend in primary and by-product prices offered in the form of better margins.

Moreover, because of the fact that the production process in the ChemPharm Refining segment takes several weeks, sharp and, in particular, rapid declines in crude oil prices such as those seen in 2014 may lead to a relative increase in material costs (i.e., an increase in the percentage of the product price accounted for by material costs), to lower margins and, in some cases, even to significant losses (so-called “windfall losses”) at H&R KGaA. The reason for this is that, on the date of their acquisition, the market prices for petroleum-based inputs are considerably higher than the market prices on the date when the primary products manufactured from such inputs are sold. This leads to a substantial increase in the relative material-use ratio for H&R KGaA, because production planning is based on a stable crude oil price for the duration of the production run and it is not economical to hedge fluctuations in commodity prices over that period. Similarly, sharp and, in particular, rapid increases in crude oil prices may also lead to a reverse scenario with correspondingly positive effects (so-called “windfall profits”).

Although the “windfall losses” and “windfall profits” that occurred in 2017 largely canceled each other out, the company rates this risk as “High”, based on the likelihood of occurrence and the significant impact it can have.

The high degree of competition in the plastics industry means that for many product groups, there is a risk of having to accept lower margins in order to safeguard or expand market share. We are therefore continuing to expand production in product segments with a more attractive market environment, such as medical technology. In some cases, the risk of increases in raw material prices can partly be passed on to our customers through escalation clauses. If the risk does materialize, the financial impact is also lower because of the lower business volume.

Risks Related to Raw Materials Procurement (Risk Class: Medium). At our specialty refineries in Hamburg and Salzbergen, the main raw material is a residue left over when fuels are produced from crude oil. To minimize the risk of supply shortages, we purchase this so-called long residue from different sources. At the same time, we diversify our sources of supply through annual volume agreements with well-known oil companies in different parts of the world and buy another portion on the spot market.

In the International Chemical-Pharmaceutical Division and the Plastics Division, our strategy for avoiding raw material supply shortages is based on always having several suppliers for important raw materials.

Risks from the Development of Substitute Products and General Competitive Pressure (Risk Class: Medium). One risk applicable to both divisions is the development of substitutes or alternative production methods for our products. Furthermore, for the Chemical-Pharmaceutical segments, there is a risk that customers may develop manufacturing processes, which rely to a lesser extent or not at all on crude oil based specialty products as feedstock. We address these risks through intensive research and development activities in all the Group’s operating divisions. This approach makes us the leading innovator in

some product groups. The high degree of diversification in our product portfolio also reduces the effects individual substitutes would have on Group income. Moreover, there are a number of limitations in terms of quality, performance, compatibility with established manufacturing processes, availability, environmental impact, and price for potential chemical and renewable raw material substitutes.

In addition to substitution risk, there is also the possibility, over the lifecycle of a given product, that competitors will develop and bring to market products of their own which are identical to our specialty products. This would expose us to greater competitive pressure.

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

Changes in the Tax and Legal Environment (Risk Class: Medium). 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 expenditures. We limit these risks by remaining involved as much as possible – either directly or through membership in various associations – in political decision-making processes, identifying and monitoring changing requirements through our compliance organization. We also address these objectives through technology and modernization projects, as part of our investment strategy. By implementing procedures to protect resources and lower emissions, we simultaneously improve our profitability and our reputation in the market.

The political framework for future changes in legal requirements is also defined in the Paris Agreement on climate change and will now be transposed step-by-step into international and domestic agreements.

Despite the measures described above and improvements made in recent years, our specialty refinery operations do entail emissions and the use of chemicals and are energy-intensive. 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 players.

In addition to the risks arising from changes to or the introduction of new tax or legal conditions, interpretations of existing laws or regulations may also entail risks. For example, H&R KGaA operates a raw material tank farm at the Hamburg site which the company has registered under customs and tax law as a so-called tax warehouse. Due to the complexity of the legal standards involved, and in particular because of uncertain legal terminology, there may be differences in legal opinions when interpreting the accrual of energy taxes. As a result, the competent authorities may impose additional energy taxes and/or claims for relief submitted may not be recognized.

Operating and Corporate Strategy Risks

Technical Production Risks (Risk Class: Medium). H&R KGaA's subsidiaries produce crude oil 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, flooding, fires or explosions 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 many production risks at an early stage and to adopt suitable countermeasures. We also regularly invest in environmental protection and safety measures at our specialty refineries. The certification of our production sites in accordance with strict ISO standards contributes significantly to ensuring that production processes are safe. 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.

Risks Associated with the Sales/Distribution Relationship with the Hansen & Rosenthal Group (Risk Class: High). Sales 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; the Group is also a significant customer of H&R KGaA.

If this contractual relationship comes to an end and the Hansen & Rosenthal Group is no longer available as sales/distribution partner, this would have a considerable negative impact on H&R KGaA's net assets, results of operations and financial position. 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. H&R KGaA would then have to come up with new funds to finance the refinery business at both locations.

H&R KGaA estimates the impact of such a risk, if it should occur, as "High"; however, it rates the probability that such a risk will materialize as "Unlikely": 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 one-sided only; on the contrary, 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 to maintain the added value and competitiveness of our existing production sites. In principle, investment projects may entail cost overruns and delays in construction. To mitigate these risks, we deploy project teams with in-depth knowledge of our plants who will therefore professionally coordinate and strictly monitor such value-maintenance measures. In addition, these measures predominantly take place at plants whose technology has already been tried and tested in practice and for which the financial costs can be estimated with above-average certainty.

Product-Liability Risks (Risk Class: Low). Our crude oil based specialty products and plastic parts are incorporated directly into our customers' products. Incorrect specifications for our products may result in damages to our customers and give rise to warranty claims. For this reason, all the products in both our Chemical-Pharmaceutical Division and our Plastics Division are subject to intensive quality controls. If we are faced with liability claims despite this, we are largely covered by insurance.

IT Risks (Risk Class: Medium). The increasingly networked nature of our complex information-technology systems carries risks. Vital data can be falsified or deleted by unauthorized access from outside, operating errors or faulty programming.

To address this risk, we have an external service provider make regular back-ups of our current data. To protect ourselves against malicious hackers, we have complex firewalls in place and virus scanners that update themselves continually. An extensive access-authorization system is also used to protect sensitive data. We have taken precautions against a complete breakdown of our data center by establishing a fallback data center that can take over most important IT functions at short notice. We also counter information-technology risks through ongoing investments in hardware and software and by continuously improving our system expertise. Our IT department is suitably equipped for a company the size

of the H&R Group and will continue to make every effort to optimize all our resources.

Human-Resources Risks (Risk Class: Low). Qualified and committed employees play an important role in our success. In the chemical industry, there is a great deal of competition for highly qualified staff to operate plants and refine production processes. We limit the associated risk of employee turnover through a number of personnel-policy measures: a pleasant working atmosphere, targeted development opportunities for junior staff and practical training and continuing education for professionals all help to create an attractive working environment.

Our Research & Development department has a wide range of cooperative arrangements with various universities, which help establish contact with high-potential candidates at an early stage. A flat hierarchy, good development opportunities, and a performance-related remuneration system also make us an attractive employer for experienced professionals.

We also boost our employees' motivation with attractive performance-related pay schemes, a company platform for making suggestions for improvement, and activities throughout the Group to encourage healthy living.

Financial Risks

Our subsidiaries receive the funds they use to execute business and production processes through H&R KGaA, which in turn ensures that such funds will be available. As a result, risks involving these financing instruments generally originate with H&R KGaA itself.

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 for our raw materials are subject to fluctuations. The prices for 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 we took out back in August 2015 has been earmarked as a risk cushion; at the end of 2017, €12.7 million had been utilized for cash loans and €3.5 million for letters of credit and guarantees. The possible utilization amount depends on the level of net working capital (borrowing-base mechanism) but cannot exceed €200.0 million. 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 earnings (EBITDA). If any of these covenants are breached, the banks are entitled to call in the loan.

Financial Covenant Breach Risk (Risk Class: High). Compliance with the financial covenants will also be a crucial part of the financing agreements in 2018. If these covenants were to be breached, this could jeopardize the continued existence of the financing arrangements and therefore the Group's financial and economic situation. Because of the possibility of occurrence and the potentially significant financial consequences, this is – from an objective standpoint – fundamentally a “High-Risk” issue. Overall, though, we rate the risk situation as non-critical.

Risks of Future Need to Refinance (Risk Class: Medium). The short-term financing figure represents our existing refinancing risks, which primarily consist of loans of our Chinese subsidiaries and maturities on KfW redeemable loans. The syndicated loan agreement for a maximum of €200.0 million accounts for the bulk of current refinancing risks.

However, there is no guarantee that it will be possible to refinance in the future under the same or more favorable terms and conditions.

In general, banks have shown a great deal of interest in a further loan commitment to H&R KGaA. Because the lending banks' risk would be manageable even if the company's financial and economic situation should deteriorate (inventories of raw materials and products can be sold at short notice), we assume that we will succeed in concluding any follow-up financing agreements required in the future. However, if ultimately we were 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 our subsidiaries' customers are limited by the 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 further. Trade-credit insurance has also been taken out for a number of major customers.

The default risk for banks with which we have arranged credit lines, entered into hedging transactions or invested funds has increased since the onset of the financial crisis. We counter this risk by only entering into financial transactions with top-rated banks and by spreading larger transactions among several banks.

Exchange Rate Risks (Risk Class: Medium). As an international Group, we are exposed to various exchange rate risks, which for cost-benefit reasons we generally do not hedge. The depreciation of a foreign subsidiary's local currency can diminish the cash flow generated there in terms of 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 Australian dollar, the pound sterling, the Thai baht, the Malaysian ringgit and the South African rand. For a sensitivity analysis of exchange rate fluctuations between the U.S. dollar and the euro, our Group currency, please refer to the notes to the consolidated financial statements. Nonetheless, despite the strong growth in our international business, around 80% of our sales are still invoiced in euros. Overall, we weigh the costs for hedging all foreign currency risks against the financial effects of a potential loss event.

The US dollar/euro exchange rate also affects our raw material costs, as we purchase our main raw materials – the crude oil derivatives long residue and vacuum gas oil – in US dollars. An appreciation of the US dollar against the euro therefore increases our raw material expenses; however, we are generally able to pass most of this increase on to our customers.

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. To increase planning certainty for the net interest result, we take out fixed-interest loans and fix some variable-interest financial liabilities.

On the one hand, in order to secure long-term Group financing, we increased our fixed-interest KfW funding in 2017. On the other hand, we reduced our existing syndicated line of credit from 2015 from €240.0 million to €200.0 million and extended the maturity date to August 2020. Currently, fixed-interest borrower's note loans totaling €7.0 million that mature in November 2018 are still outstanding. Variable-rate borrower's note loans in the amount of €40.0 million have been hedged at a fixed interest rate until November 2018 using an interest rate swap.

For the time being, we have avoided liquidating this interest rate swap, which currently still totals



For further
Information
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€40.0 million, as part of the repayment of the borrower's note loans. The reason for this was the current low-interest situation in the euro area. As we currently are not utilizing any variable-rate, euro-denominated financing, the interest rate swap currently entails a net interest rate risk from falling interest rates in the euro area.

There is additional exposure to falling interest rates in the form of the locally generated surplus cash of foreign equity investments in the respective currencies. The risk of increased interest expense from rising interest rates currently exists for our Chinese equity investments due to short-term fixed-interest loans denominated in Chinese yen and US dollar that will have to be refinanced when they mature in 2017.

There are also company retirement liabilities in the form of pension commitments. The actual amount of these commitments is based, on the one hand, on an actuarial forecast and, on the other hand, 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 on the Risk Situation

Assessment of the Risk Situation by Company Management

Our risk management system and the established planning and control systems are used to assess our overall risk situation. When all material individual risks are reviewed in aggregate, potential opportunities are not taken into account as off-sets. 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 Bundesbank classifies H&R KGaA as "eligible".

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 could have a positive effect on our results of operations, financial position or net assets over the next 12 to 18 months. Operating opportunities are identified and exploited in the various segments, because it is within the segments themselves that the greatest product and market knowledge is to be found. 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 Executive 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 & Development department and our sales and distribution partner Hansen & Rosenthal, which 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 probability of occurrence.

Specific Opportunities

Opportunities Arising from Macroeconomic Trends

Opportunity Class: Medium. The Chemical-Pharmaceutical segments could benefit from the gradual withdrawal of the big oil companies from the crude oil based specialty-products business. In Western Europe alone, production capacity for Group 1 refinery products has decreased over the past 24 months due to the shutdown and restructuring of major refinery sites. However, even if this decline does not continue, it cannot be assumed that capacities will be built up again. As a result, H&R's specialty refineries could play a more significant role in supplying the market, as they could continue to provide these products. The fact that a higher share of their capacity is devoted to specialty products than to lubricants might mean that they would have another advantage over the remaining Group 1 refineries. If, at the same time, demand for crude oil based specialty products increases during this financial year, for example due to changes in the competitive situation, our revenues and earnings could exceed our current expectations.

Over the past few years, we have laid the foundation for profitable business in a number of emerging markets in East Asia. Although economic researchers at the OECD do not expect the economies in the ASEAN-5 zone to pick up significantly in 2018 after average growth of 5.3% in 2017, the region will nevertheless remain attractive with a growth rate of 5.2% in 2018. In particular, experts are forecasting a 3.6% growth rate for Thailand – a noticeable recovery compared to the annual average of 2.9% over the last five years. If these Asian economies develop in line with the forecasts, this could have a positive impact on our company, our results of operations, and our cash flows and could lead to better overall performance than expected.



For further information see the glossary on page 170

In recent years, we have concentrated on developing environmentally friendly products that satisfy the highest quality standards. Stricter environmental regulations or mandatory disclosures about product characteristics in our customer industries could also create additional incentives to use our crude oil based specialty products and plastic parts.

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.

Strategic Opportunities for the Company

Opportunity Class: High. In the Chemical-Pharmaceutical segments, we see considerable opportunities in extending the value chain even further and increasing production efficiency with innovative manufacturing processes. In addition, our Research & Development department is working on innovative products that, once they are ready for market, could create significant added value for our customers. If we make faster progress in our research and development, this could be accompanied by the market launch of newer, improved products. This could have a positive effect on our sales revenues and our earnings and enable H&R KGaA to exceed current expectations.

Internationally, we actively monitor market trends and align regional opportunities with our international expansion strategy. To do this, we can rely on our existing network of subsidiaries as important strategic bridgeheads that will enable us to quickly penetrate emerging markets in a carefully targeted manner. An example here is the trend in China. Important players in the tire industry have relocated their manufacturing operations to Asia, where they demand the same quality they previously required at their European sites. China, which is such an important sales market for the automotive industry, will follow this trend and will

also ensure a high level of demand for high-quality tires that pose no risk to health. H&R KGaA possesses the know-how to manufacture such tire components and, since its takeover of the Hansen & Rosenthal Group's Chinese businesses, has also had the necessary local production capacity since 2014.

In the Chemical-Pharmaceutical Division, we are already taking advantage of joint-production agreements with local partners who enable us to develop new markets in a stable and successful manner. Our primary goal in expanding collaboration beyond the production area is to exploit synergies with our sales/distribution partners. Increasing the market penetration of our products could also have a positive effect on our business and lead to an improved earnings situation.

Basically, we should note that, thanks to our high degree of diversification, both at the product and customer levels, overall demand for our products is stable. Opportunities also arise from the fact that many of our specialty products are now used in several of our numerous customer industries. For example, our high-quality paraffins are used in the candle, building materials and food industries – sectors with very different economic cycles.

Economic Performance Opportunities

Opportunity Class: Medium. Operating specialty refineries is very energy-intensive. By investing in CO₂ reduction and lower energy consumption, H&R KGaA has already met important climate goals and conserved energy in the past. At the same time, we took advantage of the special compensation arrangements for energy-intensive businesses.

We can also benefit – in the form of higher margins – when the supply of our products becomes scarce, such as during shutdowns, closings or capacity reductions at our competitors' refineries. For the Western European Group 1 refineries alone, industry experts expect production capacity to drop further this year. Accordingly,

not only will the number of suppliers for many of our products decline; because our specialty refineries focus on high-grade specialty products while lubricants account for a smaller percentage, these refineries should have a competitive edge over competitors that are more heavily weighted toward lubricants.

More intensive, targeted marketing of our by-products will also create opportunities. For example, we are currently producing bitumen, which is primarily used in road building, as a by-product at our propane-deasphalting plant. However, by building new process-engineering plants, so-called cokers, we can also use bitumen as a feedstock for producing diesel and low-sulfur heating oil. As of 2015, two such cokers had already been built in Europe; others are expected to follow in the USA, Russia, India and Saudi Arabia. The more bitumen is used as a feedstock, the higher the demand may be for available high-quality bitumen for infrastructure projects.

In the Plastics Division, new large-scale orders from the automotive supply or medical technol-

ogy sectors could lift revenue and earnings above our expectations.

Overall Statement on Opportunities

Assessment of Opportunities by the Executive Board

Although the absolute number of reported risks is higher than the number of specific opportunities identified, overall, H&R KGaA rates the distribution of risks and opportunities as balanced.

During the past year, in which the distribution ratio was similar, H&R KGaA not only was able to benefit, but to benefit significantly from existing opportunities. Among other things, this was due to the fact that total sales revenues and earnings are supported by a variety of different chemical-pharmaceutical specialty products that are sold to different industries. We view this, our global presence and our good market position as the major drivers of opportunities in 2018. H&R KGaA will actively search for and develop additional opportunities.

Forecast Report

Future Focus of the Group

Companies and Segments

Statements concerning short-term company performance from 1 January to 31 December of financial year 2018 assume that, based on our current knowledge, there will be no fundamental legal or organizational changes in the structure of the Group.

How to deal with the trade-off between raw material prices and market conditions continues to be a major challenge for our company.

H&R KGaA is positioned so that it can actively take advantage of its flexibility at three different levels of the value chain: as a refinery operator and producer, in further processing and in distribution. 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.

At the same time, we need to take goal-oriented, individually tailored steps to achieve our 2018 targets.

In 2018, we will prepare our Chemical-Pharmaceutical Refining business – which as our core business was the main driver of total sales revenues and also made the biggest contribution to earnings during the reporting period – to tackle future challenges through extensive modernization and expansion efforts. Above all, this applies to the efficiency and degree of vertical integration at our specialty refineries. Here, we have already taken steps in the past to more clearly highlight the market-driven influences on our business that are only partly within our control while at

the same time increasing the level of certainty for medium-term corporate planning. This should minimize the adverse effect of these volatile factors on our earnings accordingly. For the Salzbergen site, this means continuing the contract-production model implemented in 2013, which adds stability and planning predictability to our forecasts of sales revenues and earnings.

In our view, improving performance at the production site in Hamburg is the one of the most effective tools we have for further optimizing our results. Here, too, we have already carried out important groundwork in previous years, for example by implementing our flexible, improved raw materials management system and by avoiding and/or more actively marketing by-products. We will continue along this path in 2018 by implementing additional technology-driven projects.

In the Chemical-Pharmaceutical Sales segment, our strategy of forming production partnerships to supplement our own production sites has proven to be successful. In its current form, our international business is already well positioned in the global markets for financial year 2018. The establishment of a Japanese subsidiary will underpin our presence in Asia. All in all, we expect the segment to support H&R KGaA's overall performance as a stable driver of sales and earnings.

The Plastics segment has largely completed its restructuring phase, which involved reorganizing its Sales units. In 2018, the Executive Board will intensify efforts to sustainably grow new customer business, which will mean focusing in particular on North America, Korea and Thailand. The goal is still to reduce dependence on individual customers and to operate the business profitably over the coming years with customary market returns.

Sales Markets

In the Chemical-Pharmaceutical business, Germany and other European countries will continue to be the main drivers of our sales. In view of the maturity of these markets, our growth strategy in this region is based less on increasing volumes than on improving the efficiency of production processes and manufacturing higher-quality products. At the same time, we intend to continue to benefit from our products' broad range of applications in over 100 different industries.

Outside of Europe, we are focusing on Asia. China continues to be more than just an important supply hub for our activities in the region. We continue to regard the country as a growth market for our specialty products and are focusing primarily on producing and marketing wax products and label-free plasticizers for the tire industry. For us, the significance of this market has already increased due to the relocation of many tire manufacturers from Europe to China.

Technologies and Processes

Constantly improving processes to increase efficiency and raise product quality is a core element of our corporate strategy.

By operating new equipment at our facilities, we increase the value added by our domestic production sites. This enables us to convert products previously not capable of being refined into high-grade crude oil based specialty products and to minimize the amount of waste residue left over by the production process. At the same time, we believe that the challenges posed by energy and climate-protection policies – which are currently the focus of attention – represent an opportunity and we intend to take advantage of that opportunity by pressing ahead with innovative ideas for interlinking sectors and, therefore, for using renewable energy sources in a systematic, holistic and environmentally friendly manner.

At both of our domestic production sites, we are planning corresponding investments to increase output and to improve the quality of our products.

In the Plastics Division, too, we are constantly working to improve our production processes.

Products and Services

In the future, we will continue to pursue our successful strategy of developing innovative products that are closely aligned with our customers' needs. In the Chemical-Pharmaceutical Division, our sales partner, Hansen & Rosenthal KG, serves as an interface between our customers and our R&D departments.

By constantly testing new product specifications, we aim to have our input materials contribute to further efficiency gains in our customers' production processes and further increase the quality of their products. One of the focal points of our research and development activities is to ensure the continued diversification of our primary products while increasing their percentage share of the overall product mix. We are already developing the next generation of products in order to maintain our technological lead in this field. Work is also under way to develop innovative processes for manufacturing white oils and other crude oil based specialty products. New sales and distribution strategies are designed to boost marketing of current by-products.

The Plastics Division enters this financial year in a stronger position. For example, GAUDLITZ GmbH has managed to reposition itself for former customers. At the same time, we aim to expand the customer base in medical technology and industry. We intend to attract new customers and to jointly tap into new markets with existing customers through a performance-oriented reorganization of Sales and of business organizational and production processes. In recent years, the company has managed to achieve double-digit growth rates in the profitable in-house development segment. We also plan to expand work in this area during the current financial year.

Expected Performance in Financial Year 2018

Macroeconomic Conditions

General Economic Environment

Overall, the International Monetary Fund (IMF) expects global economic growth to continue. For 2018, the IMF forecasts a 3.7% increase in global GDP and expects global growth to accelerate in almost every region except the Middle East.

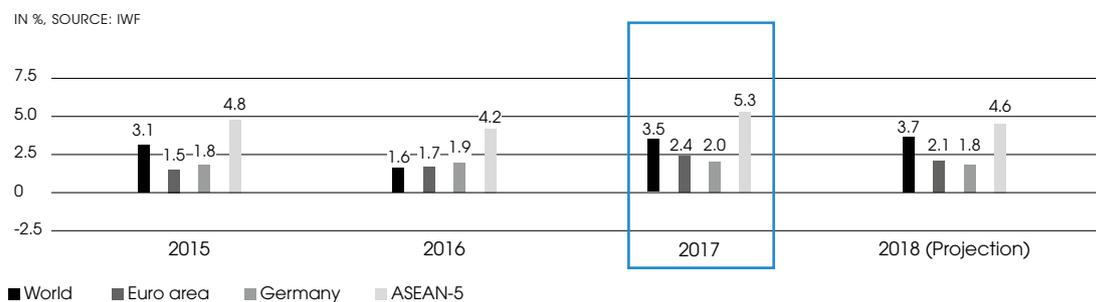
The recovery in Germany and the euro area is continuing. In Germany, the Council of Economic Experts expects real GDP growth of 2.2% in 2018. This is slightly more optimistic than the forecast by the IMF, which expects 1.8% growth. For the euro area, the Council of Experts is forecasting

real growth of 2.1% in 2018; here, too, the IMF forecast is somewhat lower, at 1.9%.

Our budget for financial year 2018 is based on a US dollar/euro exchange rate which we set at 1.15 at the beginning of the planning process for 2018.

For crude oil prices, we rely on the estimates published by the economics departments of major banks. For budget year 2018, on the planning date, we assumed a price of US\$55/barrel Brent, which was roughly equal to the annual average price in 2017 as well.

G. 13 GLOBAL ECONOMIC GROWTH FORECAST



Industry Environment

The Verband der Chemischen Industrie, VCI, the German Chemical Industry Association, expects further growth in the industry in 2018: the VCI expects production to increase by 2%. With prices increasing slightly, sales should increase by 3%. As a result, the industry's annual results could exceed the €200 billion threshold for the first time in 2018.

In the chemical-pharmaceutical sector, the shortage of Group 1 production capacity for specialty products in Western Europe initially slowed down, after declining significantly in 2015 and 2016. At the same time, demand and customer requirements have remained high, so the remaining pro-

ducing refineries have now become even more important to ensuring an unrestricted supply to customers.

Over the coming years, we expect the highly fragmented plastics industry to consolidate through mergers and takeovers. Especially in the battle over the automotive industry – a major customer – only those companies capable of manufacturing high-quality products dependably and efficiently will prevail. The medical devices industry is another sector that is gaining in importance as a customer thanks to technological progress and demographic trends.

Company's Performance

Sales Revenues and Earnings

The following table compares the actual values of the main or key control figures used by H&R KGaA for the past financial year with the original forecast and shows the outlook for financial year 2018:

T. 35 COMPARISON OF ACTUAL VALUES WITH FORECAST

| Key Figure | Original Forecast FY 2017 | Actual FY 2017 | Outlook FY 2018 |
|---|-----------------------------------|------------------------------|---|
| Consolidated sales | €950 million to €1.2 billion | €1.0251 billion | €950.0 million to €1.1 billion |
| of which Refining | 62% | €616.8 million (approx. 59%) | 60% |
| of which Sales | 32% | €357.2 million (approx. 35%) | 34% |
| of which Plastics | 6% | €59.6 million (approx. 6%) | 6% |
| Reconciliation with consolidated sales | n.a. | €-8.5 million | n.a. |
| Consolidated EBITDA | ~ €86.0 million to €100.0 million | €97.9 million | approx. €94.0 million to €106.0 million |
| of which Refining | 67% | €63.7 million (approx. 61%) | 65% |
| of which Sales | 31% | €34.3 million (approx. 35%) | 31% |
| of which Plastics | 2% | €3.7 million (approx. 4%) | 4% |
| Reconciliation with consolidated EBITDA | n.a. | €-3.8 million | n.a. |

Sales. Our revenue is affected considerably by the cost of raw materials for our Chemical-Pharmaceutical Division, which we pass on to our customers through our product prices. The price of our most important raw material, long residue, is closely correlated with the price of crude oil.

If our planning assumptions for crude oil prices and the US dollar/euro exchange rate prove correct, we anticipate that prices for raw materials and products will remain constant overall. We also expect higher sales volumes in the ChemPharm Refining segment and an improved ratio of primary products to by-products to boost our sales revenues. We believe there is also further potential in the ChemPharm Sales segment.

All in all, we expect consolidated sales for 2018 to match the level of €1.03 billion we generated in 2017. The ChemPharm Refining segment will contribute approximately 60% of that number,

while the ChemPharm Sales business will contribute around 34%, i.e., a higher percentage than in the previous year. The Plastics Division again will contribute around 6%.

Earnings. The past three financial years have been quite positive for our company. Following the organizational and structural changes carried out in 2015, H&R KGaA's operations were profitable and successful in both 2016 and 2017. As a result, despite extensive maintenance work at the Hamburg facility, our specialty refineries were able to deliver the required volumes of products to our customers and to satisfy demand Group-wide in 2017. Accordingly, operating income was strong, totaling €97.9 million by year-end, i.e., almost at the same level as in the previous year and at the upper end of the projections published at the beginning of the year.

In the specialty business, we believe the key to repeating the positive earnings trend in 2018 lies

in continuing with the contract-production model in Salzbergen and taking advantage of the potential at the Hamburg site. There, it will be important to focus on ensuring the future viability of the site while increasing performance as well as the yield of primary products. By 2020, around 90% of raw materials used will be converted into high-grade products. Another reason this is important is that higher capital expenditures will result in higher depreciation and amortization charges, including in subsequent years, and therefore must be economically justifiable.

Accordingly, we are redoubling our efforts to sell and distribute by-products and intend to increase our sales volumes in this product segment, in particular.

All in all, we expect business in the ChemPharm Refining segment to be better than in 2017.

To accomplish this, we will also focus on continuing to optimize our specialized production processes, with corresponding cost effects.

In the ChemPharm Sales segment, by focusing heavily on the high-margin international specialty-products business, we expect stable, positive EBITDA contributions at the same level as last year. As in 2017, we expect sales revenues and earnings at our international subsidiaries in Asia to be mixed, but for the year as a whole, they will also meet our expectations.

In conclusion, we are expecting consolidated operating income (EBITDA) of between €94.0 million and €106.0 million in 2018.

The earnings contribution from our ChemPharm Refining segment will account for around 65% of this amount. The international business will make up approximately 31%. The Plastics Division should contribute around 4% to the Group's operating income (EBITDA).

No structural changes to the income statement are expected for 2018.

Liquidity

After having adjusted our financing in 2015, we do not see a need for further structural changes in the current financial year. Thanks to the credit lines available under our syndicated loan, our liquidity is secured on a sustainable basis until 2020, even in the event of higher crude oil prices and the associated increase in working capital requirements. Financing requirements for long-term capital expenditures are covered both by current operating cash flow and by long-term financing. In 2018, liquidity will also be supported by earnings which are expected to be at a similarly strong level as in 2017.

Capital Expenditures

After several years of moderate capital expenditures, we are planning to significantly increase our investments in maintenance, modernization, and added value at our facilities during the current financial year. Around 81% of total capital expenditures will be in the ChemPharm Refining segment. Around 13% of capital expenditures will be in the Sales segment and approximately 6% will be focused on investments in the Plastics Division and on other items. Together with other measures intended to increase the efficiency and cost-effectiveness of our production processes, our capital expenditures will exceed our ordinary depreciation and amortization charges.

Financing Measures

The Annual Shareholders' Meeting has authorized H&R KGaA to increase the share capital in exchange for cash or contributions-in-kind, so that corporate actions are also a possibility when reviewing strategic options or other plans that exceed the scope of normal investments. At the moment, no specific corporate actions are planned.

H&R KGaA has entered into various loan agreements and borrower's note loans with banks. In 2017, we used our own funds to prematurely reduce our financing from borrower's note loans from €18.0 million to €7.0 million and in August we reduced our widely syndicated loan to €200.0 million while extending the term until August 2020. This boosts our financial flexibility. Loans from KfW form another important pillar of our

financing; at year-end, a total amount of €77.5 million was outstanding. Because of the positive environmental aspects of projects at our specialty refineries, KfW loans will continue to be available as an important option for our long-term financing.

Various financial covenants have been agreed for the borrower's note loans and the syndicated loan.

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 Developments

The past steps H&R KGaA has taken to ensure sustainable positive business performance proved to be a good basis for further growth in 2017. As a result, we ended the financial year with strong operating earnings (EBITDA) of €97.9 million.

According to experts in the regions and countries in which we operate, the economic data will continue to be positive in 2018 as well. Pushing ahead with international expansion will therefore continue to be an important factor in our success.

We will increase stability in Germany by focusing on operating highly specialized refineries whose yields of high-grade – and above all high-demand – products make them superior to conventional lubricant refineries. For us, 2017 demonstrated that in a shrinking market, our products enabled us to become a more significant player. To hold onto this position, we must invest more in the future viability of our locations in 2018 and in the years to come.

Overall, if our planning assumptions prove to be correct, our sales revenues should improve noticeably in 2018. Although changes in sales revenues in the Chemical-Pharmaceutical Raw Materials Division in the past two years were driven primarily by prices of raw materials, we expect the high level of demand and sales volumes to persist in 2018 and the ratio of primary products to by-products to improve simultaneously, with corresponding price effects. As a consequence, this should also have a positive impact on the earnings trend.

H&R KGaA with which we are "entering the race" in 2018 is stronger than ever. At the same time, the company faces a global political situation that is becoming increasingly complex for interconnected companies with international operations. It is therefore with self-confidence, but also a dose of realism, that we are drawing up our forecasts for 2018 and setting as our target an operating income (EBITDA) figure that should range between €94.0 million and €106.0 million.

CONSOLIDATED FINANCIAL STATEMENTS

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

as of 31 December 2017

| ASSETS | | | |
|---------------------------------------|-------|----------------|----------------|
| IN € THOUSAND | Notes | 31/12/2017 | 31/12/2016 |
| Current assets | | | |
| Cash and cash equivalents | (6) | 58,952 | 57,999 |
| Trade receivables | (7) | 107,479 | 109,154 |
| Income tax claims | | 259 | 200 |
| Inventories | (8) | 129,150 | 121,431 |
| Other financial assets | (9) | 4,076 | 1,366 |
| Other assets | (10) | 8,194 | 7,168 |
| Current assets | | 308,110 | 297,318 |
| Non-current assets | | | |
| Property, plant and equipment | (11) | 292,631 | 270,334 |
| Goodwill | (12) | 22,446 | 25,035 |
| Other intangible assets | (12) | 19,467 | 28,741 |
| Shares from holdings valued at-equity | (13) | 4,469 | 4,302 |
| Other financial assets | (9) | 6,489 | 6,762 |
| Other assets | (10) | 1,393 | 1,436 |
| Deferred tax assets | (33) | 7,606 | 14,224 |
| Non-current assets | | 354,501 | 350,834 |
| Total assets | | 662,611 | 648,152 |

LIABILITIES AND SHAREHOLDERS' EQUITY

| IN € THOUSAND | Notes | 31/12/2017 | 31/12/2016 |
|---|-------|----------------|----------------|
| Current liabilities | | | |
| Liabilities to banks | (14) | 44,384 | 38,187 |
| Trade payables | (15) | 83,328 | 77,234 |
| Income tax liabilities | | 7,442 | 11,959 |
| Other provisions | (16) | 11,599 | 19,561 |
| Other financial liabilities | (17) | 5,597 | 11,652 |
| Other liabilities | (18) | 11,647 | 11,042 |
| Current liabilities | | 163,997 | 169,635 |
| Non-current liabilities | | | |
| Liabilities to banks | (14) | 68,351 | 62,041 |
| Pension provisions | (19) | 77,598 | 83,558 |
| Other provisions | (16) | 3,223 | 4,288 |
| Other financial liabilities | (17) | 2 | 1,940 |
| Other liabilities | (18) | 1,792 | 1,983 |
| Deferred tax liabilities | (33) | 4,904 | 7,310 |
| Non-current liabilities | | 155,870 | 161,120 |
| Equity | | | |
| Subscribed capital | (20) | 93,404 | 91,573 |
| Capital reserve | (21) | 41,364 | 42,753 |
| Retained earnings | (22) | 171,989 | 136,271 |
| Other reserves | (23) | -1,004 | 5,202 |
| Equity of H&R GmbH & Co. KGaA shareholders | | 305,753 | 275,799 |
| Non-controlling interests | (24) | 36,991 | 41,598 |
| Equity | | 342,744 | 317,397 |
| Total liabilities and shareholders' equity | | 662,611 | 648,152 |

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

1 January 2017 to 31 December 2017

| IN € THOUSAND | Notes | 1/1 to 31/12/2017 | 1/1 to 31/12/2016 |
|---|---------|-------------------|--------------------|
| Sales revenues | (26) | 1,025,108 | 942,653 |
| Changes in inventories of finished and unfinished goods | (8) | 9,816 | 9,168 |
| Other operating income | (27) | 26,524 | 21,570 |
| Cost of materials | (28) | -764,341 | -671,765 |
| Personnel expenses | (29) | -85,974 | -86,715 |
| Depreciation, impairments and amortization | (11.12) | -43,102 | -43,240 |
| Reversals of impairments to property, plant and equipment | (11) | - | 6,047 |
| Other operating expenses | (30) | -113,746 | -114,056 |
| Income from operations | | 54,285 | 63,662 |
| Income from holdings valued at-equity | (13) | 492 | 513 |
| Financial income | (31) | 1,811 | 3,130 |
| Financing costs | (32) | -10,357 | -13,144 |
| Earnings before taxes (EBT) | | 46,231 | 54,161 |
| Income taxes | (33) | -16,728 | -14,874 |
| Consolidated income | | 29,503 | 39,287 |
| of which attributable to non-controlling interests | | -2,628 | 913 |
| of which attributable to shareholders of H&R GmbH & Co. KGaA | | 32,131 | 38,374 |
| Earnings per share (undiluted), € | (34) | 0.88 | 1.05 ¹⁾ |
| Earnings per share (diluted), € | (34) | 0.88 | 1.05 ¹⁾ |

¹⁾ Prior-year figures adjusted to reflect issuance of bonus shares; for details, see Note (34)

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

1 January 2017 to 31 December 2017

| IN € THOUSAND | Notes | 1/1 to 31/12/2017 | 1/1 to 31/12/2016 |
|--|-------|-------------------|-------------------|
| Consolidated income | | 29,503 | 39,287 |
| of which attributable to non-controlling interests | | -2,628 | 913 |
| of which attributable to shareholders of H&R GmbH & Co. KGaA | | 32,131 | 38,374 |
| Positions that will not be reclassified into profit or loss | | | |
| Remeasurement of defined-benefit pension plans | | 5,052 | -8,610 |
| Deferred taxes | | -1,465 | 2,542 |
| Change in the amount included in equity (remeasurement of defined-benefit pension plans) | | 3,587 | -6,068 |
| Positions that may subsequently be reclassified into profit or loss | | | |
| Changes in the fair value of financial assets held for sale | | -45 | 2 |
| Deferred taxes | | 13 | -1 |
| Change in the amount included in equity (assets held for sale) | | -32 | 1 |
| Change in the currency translation adjustment item | | -8,578 | -1,186 |
| Other comprehensive income | | -5,023 | -7,253 |
| thereof attributable to non-controlling interests | | -2,404 | -1,673 |
| thereof amount to which shareholders of H&R GmbH & Co. KGaA are entitled | | -2,619 | -5,580 |
| Total comprehensive income | | 24,480 | 32,034 |
| thereof attributable to non-controlling interests | | -5,032 | -760 |
| thereof amount to which shareholders of H&R GmbH & Co. KGaA are entitled | | 29,512 | 32,794 |

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

as of 31 December 2017

| IN € THOUSAND | Subscribed capital (20) | Capital reserves (21) | Retained earnings (22) |
|--|-------------------------------|-----------------------------|------------------------------|
| 1/1/2016 | 91,573 | 42,753 | 104,055 |
| Acquisition of non-controlling interests | - | - | -90 |
| Consolidated income | - | - | 38,374 |
| Other comprehensive income | - | - | -6,068 |
| Total comprehensive income | - | - | 32,306 |
| 31/12/2016 | 91,573 | 42,753 | 136,271 |
| Issuance of bonus shares | 1,831 | -1,831 | - |
| Capital increase | - | 442 | - |
| Consolidated income | - | - | 32,131 |
| Other comprehensive income | - | - | 3,587 |
| Total consolidated income | - | - | 35,718 |
| 31/12/2017 | 93,404 | 41,364 | 171,989 |

| Other reserves/ cumulative other comprehensive income | | | | | |
|--|--|---|--|---------|--|
| Market valuation of financial assets (23) | Foreign currency translation differences (23) | Equity share attributable to shareholders of H&R GmbH & Co. KGaA | Non- controlling interests (24) | Total | |
| 195 | 4,519 | 243,095 | 42,268 | 285,363 | |
| - | - | -90 | 90 | - | |
| - | - | 38,374 | 913 | 39,287 | |
| 1 | 487 | -5,580 | -1,673 | -7,253 | |
| 1 | 487 | 32,794 | -760 | 32,034 | |
| 196 | 5,006 | 275,799 | 41,598 | 317,397 | |
| - | - | - | - | - | |
| - | - | 442 | 425 | 867 | |
| - | - | 32,131 | -2,628 | 29,503 | |
| -32 | -6,174 | -2,619 | -2,404 | -5,023 | |
| -32 | -6,174 | 29,512 | -5,032 | 24,480 | |
| 164 | -1,168 | 305,753 | 36,991 | 342,744 | |

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

1 January 2017 to 31 December 2017

| IN € THOUSAND | | Notes | 2017 | 2016 |
|---------------|--|-------|----------------|----------------|
| 1. | Consolidated income | | 29,503 | 39,287 |
| 2. | Income taxes | | 16,728 | 14,874 |
| 3. | Net interest result | | 9,863 | 12,669 |
| 4. | +/- Fixed assets depreciation, impairments, amortization/reversals of writedowns | | 43,102 | 37,193 |
| 5. | +/- Increase/decrease in non-current provisions | | -3,406 | -2,256 |
| 6. | + Interest received | | 493 | 475 |
| 7. | - Interest paid | | -8,672 | -11,213 |
| 8. | +/- Income tax received/paid | | -17,845 | -7,778 |
| 9. | +/- Other non-cash expenses/income | | 5 | 496 |
| 10. | +/- Increase/decrease in current provisions | | -7,749 | 6,444 |
| 11. | -/+ Gain/loss from disposal of fixed assets | | -71 | 434 |
| 12. | -/+ Changes in net working capital | | -6,701 | -18,488 |
| 13. | +/- Changes in remaining net assets/other non-cash items | | -9,056 | 3,317 |
| 14. | = Cash flow from operating activities (sum of items 1 to 13) | (36) | 46,194 | 75,454 |
| 15. | + Proceeds from disposals of tangible fixed assets | | 234 | 2,644 |
| 16. | - Payments for investments in tangible fixed assets | | -56,809 | -38,961 |
| 17. | - Payments for investments in intangible assets | | -634 | -896 |
| 18. | - Payments for investments in financial assets | | -893 | -1,575 |
| 19. | = Cash flow from investing activities (sum of items 15 to 18) | (36) | -58,102 | -38,788 |
| 20. | = Free cash flow (sum of items 14 and 19) | | -11,908 | 36,666 |
| 21. | + Dividends received from holdings valued at-equity | | 325 | 336 |
| 22. | - Payments for settling financial liabilities | | -42,828 | -99,054 |
| 23. | + Receipts from taking up financial liabilities | | 57,807 | 39,847 |
| 24. | = Cash flow from financing activities (sum of items 21 to 23) | (36) | 15,304 | -58,871 |
| 25. | +/- Changes in cash and cash equivalents (sum of items 14, 19 and 24) | | 3,396 | -22,205 |
| 26. | + Cash and cash equivalents at the beginning of the period | | 57,999 | 79,274 |
| 27. | Change in cash and cash equivalents due to changes in exchange rates | | -2,443 | 930 |
| 28. | = Cash and cash equivalents at the end of the period | | 58,952 | 57,999 |

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

as of 31 December 2017

(1) General Information

H&R GmbH & Co. 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 GmbH & Co. KGaA is managed by the managing directors of H&R Komplementär GmbH. H&R GmbH & Co. KGaA's parent company is H&R Komplementär GmbH.

Pursuant to Section 315e of the German Commercial Code (HGB), H&R GmbH & Co. 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 GmbH & Co. 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) whose application 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 12 months of the reporting date. Pension provisions as well as deferred tax claims and/or liabilities are in principle treated as being non-current.

The 2017 consolidated financial statements were prepared using the euro (€) as the functional currency. 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 GmbH & Co. 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

| Title | IASB effective date | Date of EU endorsement | EU effective date | Material impact on H&R |
|---|---------------------|------------------------|-------------------|------------------------|
| Amendments to IAS 12 – Recognition of Deferred Tax Assets for Unrealized Losses | 1/1/2017 | 6/11/2017 | 1/1/2017 | none |
| Amendments to IAS 7 – Disclosure Initiative | 1/1/2017 | 6/11/2017 | 1/1/2017 | none |
| Annual Improvements to IFRSs 2014–2016 Cycle – Amendments to IFRS 12 | 1/1/2017 | 8/2/2018 | 1/1/2017 | 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 Interpretations Committee (IFRIC) but application of the standards was not yet mandatory.

PUBLISHED STANDARDS AND INTERPRETATIONS THAT ARE NOT YET BEING APPLIED

| Standard/ Interpre- tation | Title | IASB effective date | Date of EU endorsement | EU effective date | Material impact on H&R |
|----------------------------------|--|---------------------------|---------------------------|----------------------|------------------------------|
| IFRS 9 | Financial Instruments | 1/1/2018 | 22/11/2016 | 1/1/2018 | see explanation |
| | Amendments to IFRS 9 – Prepayment Features with Negative Compensation | 1/1/2019 | Expected in Q1 2018 | To be determined | None |
| IFRS 15 | Revenue from Contracts with Customers | 1/1/2018 | 22/9/2016 | 1/1/2018 | see explanation |
| | Clarifications of IFRS 15 | 1/1/2018 | 31/10/2017 | 1/1/2018 | see explanation |
| IFRS 16 | Leases | 1/1/2019 | 31/10/2017 | 1/1/2019 | see explanation |
| IFRS 17 | Insurance Contracts | 1/1/2021 | Open | To be determined | None |
| IFRIC 22 | Foreign Currency Transactions and Advance Consideration | 1/1/2018 | Expected in Q1 2018 | To be determined | None |
| IFRIC 23 | Uncertainty over Income Tax Treatments | 1/1/2019 | Expected in Q3 2018 | To be determined | None |
| | Amendments to IFRS 2 – Classification and Measurement of Share-Based Payment Transactions | 1/1/2018 | Expected in Q1 2018 | To be determined | None |
| | Amendments to IFRS 4 – Applying IFRS 9 – Financial Instruments with IFRS 4 – Insurance Contracts | 1/1/2018 | 3/11/2017 | 1/1/2018 | None |
| | Annual Improvements to IFRSs 2014–2016 Cycle: Amendments to IFRS 1 and IAS 28 | 1/1/2018 1/1/2017 | 7/2/2018 | 1/1/2018 | None |
| | Amendments to IAS 40 – Transfers of Investment Property | 1/1/2018 | Expected in Q1 2018 | To be determined | None |
| | Amendments to IAS 28 – Long-Term Interests in Associates and Joint Ventures | 1/1/2019 | Expected in 2018 | To be determined | None |
| | Annual Improvements to IFRSs 2015–2017 Cycle | 1/1/2019 | Expected in 2018 | To be determined | None |
| | Amendments to IAS 19 – Plan Amendment, Curtailment or Settlement | 1/1/2019 | Expected in 2018 | To be determined | None |

In July 2014, the IASB published the final version of IFRS 9 – “Financial Instruments”. In the future, it will replace IAS 39 – “Financial Instruments” and is mandatory for financial years beginning on or after 1 January 2018. In particular, IFRS 9 contains new rules on classifying and measuring financial assets, on accounting for impairment losses to financial assets and on hedge accounting. In the future, the classification and measurement of financial assets will depend on the company’s business model and the characteristics of the financial asset’s contractual cash flows; in case of the consolidated financial statements of H&R GmbH & Co. KGaA, this will not lead to any major

changes. The new loss-impairment model means that instead of losses that have actually occurred, entities are now required to recognize expected losses. This may lead to a slight increase in risk provisions for defaults from expected credit risks on financial assets, especially for trade receivables in the consolidated financial statements of H&R GmbH & Co. KGaA. However, this will depend on the level of trade receivables on the reporting date. The purpose of the new hedge accounting rules is to enhance disclosures about a company’s risk-management activities. As the H&R Group is not currently using hedge accounting, this will have no effect on the consolidated financial state-

ments. Aside from additional disclosures in the notes, the H&R Group overall does not expect the first time application of IFRS 9 to have any material impact on the Group's net assets, financial position and results of operations.

In May 2014, the IASB published IFRS 15 – “Revenue from Contracts with Customers”, which in the future will be the main standard governing revenue recognition. IFRS 15 replaces IAS 11 – “Construction Contracts” and IAS 18 – “Sales Revenue”, as well as the related interpretations, and is mandatory for financial years beginning on or after 1 January 2018. The H&R Group will introduce IFRS 15 in accordance with the Modified Retrospective Method, under which the cumulative effects of initial application will be recognized as an adjustment to retained earnings on 1 January 2018 and comparative periods are not restated. The H&R Group generates revenues from the sale of products and from services; in the overwhelming majority of cases, revenue recognition involves contracts with only one performance obligation. Variable remuneration components and construction contracts are rare. More information gained during the implementation of IFRS 15 confirm that the first time application of this standard will not have a material impact on the consolidated financial statements of H&R GmbH & Co. KGaA. The required adjustment is expected to be in the low single-digit millions range.

In January 2016, the IASB published IFRS 16 – “Leases”, which will replace the previous standard on leasing, IAS 17. It introduces a single lessee accounting model under which the lessee must recognize assets and liabilities for all leases with a term of more than 12 months unless the underlying asset is of low value. The new standard is to be applied for financial years beginning on or after 1 January 2019. The H&R Group is currently investigating which method should be used for the first time application of IFRS 16. The first time application of IFRS 16 will lead to an extension of the statement of financial position in H&R GmbH & Co. KGaA's consolidated financial statements due to the mandatory recognition of right-of-use assets and the corresponding liabilities.

This, along with the future recognition of depreciation/amortization and interest expense instead of other operating expenses on the statement of comprehensive income will result in a change in financial indicators and ratios that are important to the H&R Group, especially EBITDA. The H&R Group is currently reviewing the extent to which the first time application of IFRS 16 will change these financial indicators and ratios. Based on current information, H&R expects an increase in EBITDA in the single-digit millions range and a related increase in balance sheet total due to the recognition of right-of-use assets and the corresponding recognition of lease liabilities. This increase in total assets and liabilities will therefore lead to a lower equity ratio. Finally, the first time application of IFRS 16 will also require additional disclosures in the notes to the consolidated financial statements regarding H&R Group's leases.

H&R will not avail itself of the option for early application of the standards and interpretations that have not yet been applied.

(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 which, according to the criteria listed in IFRS 10, are controlled by H&R GmbH & Co. KGaA. Accordingly, H&R GmbH & Co. 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 GmbH & Co. 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 intra-Group 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”, company mergers 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 in accordance with the rules set forth in IFRS 10. In the case of a company purchase, the prorata 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 euro 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 and/or 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 at their fair value at the time of acquisition. Any amount remaining on the asset side after set-off is treated as goodwill. Pursuant to IFRS 3, any negative amount resulting from reassessment of the net assets acquired is immediately charged against income.

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 GmbH & Co. KGaA manages jointly with a third party. H&R GmbH & Co. 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 GmbH & Co. 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. For companies whose financial statements are prepared in accordance with the equity method, an impairment loss must be recognized if the recoverable amount is below the carrying amount. As of 31 December 2017, four joint ventures and associates were being accounted for using this method.

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 on the income statement.

the exchange rate on the respective reporting date. Any changes taking place during the year, as well as profit and loss items, are converted into euros at the average annual exchange rate. With the exception of revenues and expenses directly recognized in equity, the equity is carried at historical exchange rates. The resulting variances are recognized in equity but are not reported on the income statement until the subsidiary is sold.

In the consolidated financial statements, the assets and liabilities are converted into euros at

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

EXCHANGE RATES FOR THE MAIN CURRENCIES

| | Closing rate on the reporting date 31/12/2017 | Closing rate on the reporting date 31/12/2016 | Average rate 2017 | Average rate 2016 |
|--------------------|---|---|----------------------|----------------------|
| US dollar | 1.1993 | 1.0541 | 1.1293 | 1.1066 |
| British pound | 0.8872 | 0.8562 | 0.87614 | 0.8189 |
| Australian dollar | 1.5346 | 1.4596 | 1.4729 | 1.4886 |
| South African rand | 14.8054 | 14.457 | 15.0434 | 16.2772 |
| Thai baht | 39.121 | 37.726 | 38.279 | 39.042 |
| Chinese yuan | 7.8044 | 7.3202 | 7.6264 | 7.3496 |
| Czech crown | 25.535 | 27.021 | 26.327 | 27.034 |
| Malaysian ringgit | 4.8536 | 4.7287 | 4.8501 | 4.5842 |

Cash and Cash Equivalents. Cash and cash equivalents comprise cash in hand, checks received, and credit balances at banks and have a maximum term of three months at the time of acquisition or investment. Cash and cash equivalents are valued at acquisition cost.

Financial Assets. Financial assets comprise cash and cash equivalents, loans issued and receivables, equity and debentures acquired, and derivatives with positive fair values.

Financial Instruments. Financial instruments are contractually agreed claims or obligations that lead to an inflow or outflow of financial assets or to the issuance of equity capital rights. They also comprise derivative claims or obligations from underlying financial instruments. According to IAS 39, financial instruments are recognized on the income statement at the point in time of inclusion in the following valuation categories: financial assets or liabilities at fair value through profit and loss, loans and receivables, available-for-sale financial assets, and held-to-maturity investments as well as other liabilities.

Financial assets are recognized and measured in accordance with the criteria stipulated in IAS 39. According to these criteria, financial assets are recognized on the statement of financial position if H&R GmbH & Co. KGaA or another consolidated subsidiary has a contractual right to receive cash or other financial assets. Financial assets are booked at the value on the trading day on which the Group has committed to buy the asset. Financial assets are categorized upon initial recognition. Loans and receivables as well as financial assets available for sale are initially recognized at their fair value plus transaction costs.

Loans and receivables are non-derivative financial assets with contractually fixed or determinable payments that are not quoted on an active market. They are shown on the statement of financial position under trade receivables and other financial assets. Loans and receivables are subsequently measured at amortized cost using the effective-interest method. If there are objective and substantial signs of an impairment in value, an impairment test is carried out. Signs of an impairment in value include, among others, the high probability of insolvency proceedings, significant financial difficulties of a debtor or the disappearance of an active market for financial assets.

Financial assets available for sale are non-derivative financial assets that were either specifically and explicitly assigned to this category or that could not be assigned to any other category of financial assets. After their initial recognition, available-for-sale financial assets are measured at fair value. Changes in fair value are recognized in equity, without any effect on profit or loss, until the assets are disposed of. Permanent impairment losses are reported on the income statement. Reversals of impairment losses are offset against equity without any effect on profit or loss, unless they concern a debt instrument and the reversal of the impairment loss relates to an impairment loss previously recognized through profit or loss. If no fair value can be determined, the interests are valued at amortized cost.

The financial assets valued at fair value and recognized through profit or loss concern securities classified as current assets as well as derivative financial instruments with a positive fair value not included in a hedge (hedge accounting).

Assets are derecognized at the time of the extinction and/or the transfer of the rights to payments arising out of the asset and thus at the point in time at which essentially all risks and opportunities related to ownership were transferred.

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 counter-party for the recognized carrying amounts.

Financial assets and financial liabilities are not offset, apart from the reimbursement right against BP (see Notes (09) and (19)), since no such offset agreements exist.

Derivative Financial Instruments. Derivative financial instruments are used in order to reduce currency and interest rate risks, e.g., in the form of currency forward contracts and interest rate swaps.

Derivative financial instruments are carried on the statement of financial position at fair value 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. To the extent expedient, derivative financial instruments that satisfy hedge accounting criteria pursuant to IAS 39 are designated either to hedge the fair value of an asset or a debt (fair value hedge) or to hedge the risk of fluctuating cash flows from future transactions that are very likely to occur (cash flow hedge). No hedge accounting was applied during the financial year.

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 process), 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 and unfinished goods 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 primary products. Financing costs are not taken into account.

Property, Plant and Equipment. Tangible fixed assets are valued at acquisition or manufacturing costs 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. Expenses for the ongoing repair and maintenance of tangible fixed assets are included in 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 fixed asset.

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 property consists 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 scheduled straight-line depreciation over their respective useful lives; residual amounts are taken into account. These useful economic lifespans 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 in profit or loss. The useful lifespans used can be summarized as follows:

| ASSETS | |
|-----------------------------------|-----------------------------|
| | Useful 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 |

Borrowing Costs. Essentially, the cost of borrowed capital is recognized in profit or loss in the period in which the external capital expense is incurred. According to IAS 23, borrowing costs that are directly attributable to the construction, acquisition or production of a qualifying asset are capitalized as part of the cost of that asset. In financial year 2017, as in the previous year, no borrowing costs were capitalized.

Leasing. 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. Leasing transactions are classified either as finance leases or as operating leases. If the H&R Group, as the lessee in leasing transactions, bears all essential risks and opportunities related to ownership, then such transactions are treated as finance leases. In that case, the Group capitalizes the leased property at the lower of the fair value and the present value of the minimum lease payments and thereafter depreciates the leased property over the estimated useful life or the lease term, whichever is shorter. At the same time, a matching financial liability is recognized at the lower of the fair value of the leased property and the present value of the minimum lease payments; interest and principal payments will subsequently be made, and the liability adjusted accordingly, using the effective-interest method. All remaining lease agreements in which the Group is the lessee are treated as operating leases. In this case, lease payments made are recorded under expenses and lease payments received are recorded as income.

Goodwill. The first time it is reported, the goodwill resulting from a merger 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 first-time 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.

The annual goodwill impairment tests take place at the level of the cash-generating units (CGUs) that are relevant for the test. The cash-generating unit represents the lowest level at which goodwill is monitored for internal management purposes. H&R GmbH & Co. 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. Goodwill impairment is determined by comparing the carrying amount of the cash-generating unit, including the goodwill to be allocated to it, with the recoverable amount for the cash-generating unit. 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 Division's recoverable amount, an impairment loss equal to the difference must be recognized on the income statement. If the calculated impairment loss is equal to, or higher than, the carrying amount of the goodwill, the goodwill must be written off entirely. The remaining impairment loss is, as a rule, allocated to the remaining non-current assets of the cash-generating unit in proportion to their carrying amounts.

The expected cash flows of the cash-generating units are derived from 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. The plan is based, in particular, on assumptions concerning the trend in sales revenues, 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 to date no cash outflows have occurred are not included. In addition, a stable margin was assumed for a number of products for all five plan years.

Average costs of capital were used for the discounted cash flow; these capital costs are calculated based on market values. The after-tax discount rates used were 6.3% in the ChemPharm Refining segment (previous year: 6.4%) and between 7.2% and 12.5% in the ChemPharm Sales segment (previous year: between 7.0% and 13.1%). That is equal to pre-tax interest rates of 8.9% in the ChemPharm Refining segment (previous year: 8.9%) and 9.3% to 17.3% in the ChemPharm Sales segment (previous year: 8.7% to 18.3%). 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.

Other Intangible Assets. Other intangible assets are capitalized at their acquisition or manufacturing costs. Insofar as they have determinable useful lives, they are subject to depreciation on a straight-line basis over their respective useful lives. The following useful lifespans were assumed in determining depreciation:

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 |

The H&R Group has received CO₂ emission rights free of charge in connection with the introduction of emissions trading in the European Union; they are valued at a zero acquisition cost. Additional CO₂ emission rights acquired are stated at amortized cost.

Any expenses that arise in connection with the registration of products pursuant to the EU Chemicals Regulation (REACH) are capitalized under other intangible assets and amortized over an expected useful life of ten years.

Permanent impairment losses to other intangible assets are accounted for under impairment. In the event the reasons for unscheduled depreciation/amortization no longer apply, the appropriate reversals are effected to the extent that the amortized cost is not exceeded. The reasons for unscheduled depreciation/amortization are reviewed on each reporting date.

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.

Financial Liabilities. Financial liabilities include liabilities to banks, trade payables, and derivatives with negative fair values as well as other 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.

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

Other Receivables and Payables. Accruals and deferrals and other non-financial assets and liabilities are initially recognized at amortized 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.

Pensions and Similar Obligations. Company pensions of the H&R Group 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, turn-over rates, and death rates as well as 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 result 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's assets is deducted from the present value of the pension obligations recorded on the statement of financial position. The plan's 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's assets exceed the corresponding pension liability, the excess amount is shown as "Other receivable", 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 and 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 CO₂ 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 revenues and other operating income are recognized when the service is provided or when the risk is transferred to the customer or when the claim originates. Moreover, sales revenues are also realized from sales in which legal ownership has been transferred to the customer but delivery has been postponed at the customer's request. Ultimately, it must be possible to determine the amount of sales revenues in a reliable manner and it must be possible to assume that the receivable is recoverable. Sales revenues are reported after deducting value-added tax, after applying reductions in selling price such as returns, discounts or price reductions and after eliminating intercompany sales. Intercompany transactions are conducted as arm's-length transactions.

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 differences between the time when asset and liability amounts are reported in the consolidated financial statements under accounting rules and the time when the corresponding amounts are 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. In that case, the current and deferred taxes are also recognized in other comprehensive income.

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 with matching periods will be available against which the temporary differences and still unused loss carryforwards can be utilized. The amount of deferred tax assets recognized for temporary differences and tax-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, associated companies, 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 specific 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. 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. In principle, contingent liabilities are not reported on 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, to a certain extent assumptions and estimates must be made that will affect the asset and liability, income and expense and contingent liability amounts reported for the reporting period. Estimates are based on empirical values and other assumptions that are deemed to be appropriate given the circumstances.

Assumptions and estimates are used in particular in determining overhead surcharges when valuing inventories, in determining the useful economic lives of tangible fixed assets throughout the Group in a uniform manner, in estimating the recoverability of receivables and in reporting and valuing provisions. Moreover, discretionary decisions and estimates are necessary in testing intangible assets for impairment and in measuring the amount of deferred tax assets relating to loss carryforwards to recognize. Further details on the individual items can be found in each section.

Identifying signs of an impairment loss and determining recoverable amounts and fair values also involve the use of estimates. These include, in particular, estimates of future cash flows, of the applicable discount rates, of expected useful lives and of residual values.

For sensitivity analyses, generally a possible fluctuation range of 10% is assumed, as a change of up to this amount seems possible, especially over the long term. Sensitivity analyses were carried out in particular for the goodwill impairment tests at the level of the cash-generating units and in connection with financial instruments. For pension provisions, the sensitivity analysis assumes a 50-basis-point change in the interest rate and a 50-basis-point change in the pension trend.

Other important estimated values are the discount rate and the underlying mortality tables in connection with pension provisions and similar commitments, as well as estimates of necessary expenditures for the circumstances taken into account for other provisions. This also applies to the possibility of a cash outflow due to dismantling obligations, which is described in greater detail in Note (39). Details on sensitivity analyses and the bases for estimates in the area of pension provisions can be found in Note (19).

Assumptions and estimates are based on currently available information. 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. Developments in these macroeconomic conditions that deviate from the assumptions and are outside of Management's control may cause the actual amounts to deviate from the original estimates. In such cases, the assumptions and, if necessary, the carrying amounts of the assets and liabilities affected will be adjusted accordingly.

(5) Scope of Consolidation and Holdings

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

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

CHANGE IN THE NUMBER OF CONSOLIDATED COMPANIES

| H&R KGaA and consolidated companies | Germany | Abroad | Total |
|--|----------------|---------------|--------------|
| 31/12/2016 | 17 | 17 | 34 |
| Additions | 2 | 2 | 4 |
| Disposals | - | - | - |
| 31/12/2017 | 19 | 19 | 38 |

The additions in Germany refer to the two newly established companies at the Hamburg site. The additions abroad include the newly established H&R Africa Holdings (Pty) Ltd. in South Africa and the formation of H&R Japan K.K.

H&R GmbH & Co. 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. Although controlled by H&R GmbH & Co. KGaA, three companies were not included in the scope of consolidation, as they have no material significance for the net assets, financial position and results of operations of H&R GmbH & Co. KGaA.

The following disclosures concerning the holdings satisfy the requirements of Section 313 HGB. With the exception of the 2017 additions, these shareholdings are unchanged from the previous year.

FULLY CONSOLIDATED SUBSIDIARIES

| Company name | Company headquarters | Segment | % Held by H&R GmbH & Co. KGaA |
|---|------------------------|---------|-------------------------------------|
| 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 |
| H&R Benelux B.V. | Nuth, The Netherlands | b | 100 |
| H&R ChemPharm (UK) Ltd. | Tipton, Great Britain | b | 100 |
| H&R ANZ Pty Ltd. | Victoria, Australia | b | 100 |
| H&R Singapore Pte. Ltd. | Singapur, 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 |
| 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 South Africa Sales (Pty) Limited | Durban, South Africa | 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. | Ningbo 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 |
| H&R Group Services 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 INVESTMENTS

| Company name | Company headquarters | Geo-graphic segment | % Held by H&R GmbH & Co. KGaA | Income after taxes (in € thousand) | Equity (in € thousand) |
|--|----------------------|---------------------|-------------------------------|------------------------------------|------------------------|
| Joint ventures | | | | | |
| Westfalen Chemie GmbH & Co. KG | Salzbergen, Germany | a | 50 | | |
| Westfalen Chemie Verwaltungsgesellschaft mbH | Salzbergen, Germany | a | 50 | | |
| HRI IT-Service GmbH | Berlin, Germany | d | 50 | | |
| Associates | | | | | |
| IGEPA IT-Service GmbH | Münster, Germany | d | 45 | | |
| Unconsolidated subsidiaries | | | | | |
| H&R India Sales Private Limited | Mumbai, India | b | 99 | – ²⁾ | – ²⁾ |
| Wafa Kunststofftechnik GmbH & Co. KG, i.K. | Augsburg, Germany | c | 100 | – ²⁾ | – ²⁾ |
| Wafa Kunststofftechnik Verwaltungs GmbH, i.K. | Augsburg, Germany | c | 100 | – ²⁾ | – ²⁾ |
| Other investments | | | | | |
| SRS EcoTherm GmbH | Salzbergen, Germany | a | 10 | 1,398 | 16,561 |
| Betreibergesellschaft Silbersee II Haltern am See mit beschränkter Haftung | Essen, Germany | d | 8 | – ²⁾ | – ²⁾ |

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

¹⁾ Including holdings held in trust: The holdings in the following companies are only indirectly held, via trust companies: H&R GmbH & Co. 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 60.98% in H&R ChemPharm (Thailand) Limited, Bangkok, Thailand. A further 38.98% are held by a subsidiary whose shares are wholly-owned by H&R GmbH & Co. KGaA. The remaining 0.04% 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 | 31/12/2017 | 31/12/2016 |
|---------------|---------------|---------------|
| Cash on hand | 16 | 23 |
| Cash in banks | 58,936 | 57,976 |
| Total | 58,952 | 57,999 |

(7) Trade Receivables

| IN € THOUSAND | 31/12/2017 | 31/12/2016 |
|-----------------------------------|----------------|----------------|
| Trade accounts receivable (gross) | 108,077 | 109,696 |
| Impairment losses | -598 | -542 |
| Total | 107,479 | 109,154 |

No trade receivables (previous year: €0 thousand) were pledged as credit guarantees. Receivables from related parties are listed under Note (42).

TRADE RECEIVABLES

| IN € THOUSAND | Carrying amount | Thereof: neither impaired nor overdue at the year-end date | Thereof: not impaired at the year-end date and overdue in the following aging periods | | | | | |
|---------------|-----------------|--|---|------------------------|------------------------|-------------------------|--------------------------|--------------------|
| | | | Less than 30 days | Between 31 and 60 days | Between 61 and 90 days | Between 91 and 180 days | Between 181 and 360 days | More than 360 days |
| 31/12/2017 | 107,479 | 93,943 | 11,022 | 1,960 | 270 | 236 | 33 | 16 |
| 31/12/2016 | 109,154 | 98,044 | 8,588 | 1,133 | 910 | 132 | 200 | 149 |

With regard to the trade receivables that are neither impaired nor overdue, there were no indications that the debtors would not honor their payment obligations.

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

IMPAIRMENTS OF TRADE RECEIVABLES

| IN € THOUSAND | 2017 | 2016 |
|----------------------------------|------------|------------|
| As of 1/1 | 542 | 761 |
| Addition | 203 | 118 |
| Utilization | - | - |
| Reversals | -125 | -320 |
| Currency translation differences | -22 | -17 |
| As of 31/12 | 598 | 542 |

Overdue impaired trade receivables are shown in the following aging schedule:

TRADE RECEIVABLES

| IN € THOUSAND | Less than 30 days | Between 31 and 60 days | Between 61 and 90 days | Between 91 and 180 days | Between 181 and 360 days | More than 360 days |
|---------------|-------------------|------------------------|------------------------|-------------------------|--------------------------|--------------------|
| 31/12/2017 | 170 | 134 | 86 | 21 | 81 | 105 |
| 31/12/2016 | - | - | 94 | 45 | 67 | 336 |

(8) Inventories

| IN € THOUSAND | 31/12/2017 | 31/12/2016 |
|---|----------------|----------------|
| Raw, auxiliary and production materials | 57,209 | 56,041 |
| Work in progress | 22,499 | 18,290 |
| Finished products and products for sale | 45,769 | 44,474 |
| Prepayments made on inventories | 3,673 | 2,626 |
| Total | 129,150 | 121,431 |

Individual inventory impairment losses 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 €3,324 thousand during the year under review (previous year: € 1,649 thousand).

Pursuant to IAS 2.34, €399 thousand of impairment losses to net realizable values were recognized as expenses during the reporting period (previous year: €148 thousand). These affected the ChemPharm Refining and Plastics segments. For more information on expenditures relating to inventories, please consult Note (28).

No inventories (previous year: €0 thousand) were pledged as collateral for liabilities.

(9) Other Financial Assets

| IN € THOUSAND | 31/12/2017 | | 31/12/2016 | |
|------------------------|---------------|--------------------|--------------|--------------------|
| | Total | Of which long-term | Total | Of which long-term |
| Loans and receivables | 2,963 | 2,604 | 2,844 | 2,594 |
| Bills receivable | 2,932 | - | - | - |
| Receivable due from BP | 1,632 | 1,632 | 1,594 | 1,594 |
| Other securitities | 1,109 | 1,033 | 1,193 | 1,077 |
| Other interests | 1,052 | 1,052 | 1,052 | 1,052 |
| Other financial assets | 877 | 168 | 1,445 | 445 |
| Total | 10,565 | 6,489 | 8,128 | 6,762 |

The loans and receivables essentially comprise receivables from SRS Ecotherm as well as a loan to a joint venture. Bills receivable refer to receivable claims in China secured by bills of exchange. Further to 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 set-off 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 (€1,632 thousand; previous year: €1,594 thousand) pursuant to IAS 1.32.

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

| IN € THOUSAND | 2017 | 2016 |
|---|---------------|---------------|
| As of 1/1 | 11,757 | 10,985 |
| Interest income | 195 | 257 |
| Reassessment of the compensation claims | -189 | 1,121 |
| Claims paid | -608 | -606 |
| As of 31/12 | 11,155 | 11,757 |

Other securities include in particular fund units of Correnta Funds I and II. These securities are carried at their market value on the reporting date.

Changes are shown under other comprehensive income. This item also includes other short-term securities, which totaled €76 thousand on the reporting date (previous year: €116 thousand).

The holdings mainly comprise the shares in SRS EcoTherm GmbH, Salzbergen, with a value of €1,050 thousand (previous year: €1,050 thousand). The holdings are carried at acquisition cost, as these financial investments are not listed on any active market and therefore have no market price, and other valuation methods would not have led to more reliable fair values.

Of the remaining financial assets, as of 31 December 2017, €6 thousand (previous year: €6 thousand) had specific valuation allowances.

(10) Other Assets

| IN € THOUSAND | 31/12/2017 | | 31/12/2016 | |
|------------------------|--------------|--------------------|--------------|--------------------|
| | Total | Of which long-term | Total | Of which long-term |
| Reinsurance contracts | 1,376 | 1,376 | 1,361 | 1,361 |
| Other tax receivables | 5,702 | - | 4,051 | - |
| Accruals and deferrals | 1,174 | 17 | 1,743 | 75 |
| Other assets | 1,335 | - | 1,449 | - |
| Total | 9,587 | 1,393 | 8,604 | 1,436 |

The short-term accrual comprises prepaid amounts for which the pertinent expense is to be allocated to the following year. In the financial year under review, this item mainly includes

insurance premiums paid, advance rent payments and accrued IT maintenance fees. Other tax receivables mainly refer to VAT receivables.

(11) Property, Plant and Equipment

CHANGES IN 2017

| IN € THOUSAND | Land and buildings | Technical equipment/machinery | Other facilities/operating and office equipment | Prepayments and construction in progress | Total |
|---|--------------------|-------------------------------|---|--|----------------|
| Acquisition and production costs | | | | | |
| As of 31/12/2016 | 91,323 | 432,676 | 21,417 | 14,393 | 559,809 |
| Additions | 2,309 | 27,783 | 1,784 | 26,627 | 58,503 |
| Disposals | -19 | -4,988 | -892 | -78 | -5,977 |
| Currency translation | -2,803 | -2,267 | -190 | -4 | -5,264 |
| Reclassifications | 610 | 10,717 | 874 | -12,206 | -5 |
| As of 31/12/2017 | 91,420 | 463,921 | 22,993 | 28,732 | 607,066 |
| Cumulative depreciation | | | | | |
| As of 31/12/2016 | 34,270 | 239,440 | 15,762 | 3 | 289,475 |
| Scheduled depreciation | 3,388 | 27,010 | 1,841 | - | 32,239 |
| Reversal of impairment losses | - | - | - | - | - |
| Disposals | -6 | -4,930 | -882 | - | -5,818 |
| Reclassifications | - | - | - | - | - |
| Currency translation | -406 | -950 | -105 | - | -1,461 |
| As of 31/12/2017 | 37,246 | 260,570 | 16,616 | 3 | 315,435 |
| Carrying amounts | | | | | |
| As of 31/12/2017 | 54,174 | 203,351 | 6,377 | 28,729 | 292,631 |
| As of 31/12/2016 | 57,053 | 193,236 | 5,655 | 14,390 | 270,334 |

CHANGES IN 2016

| IN € THOUSAND | Land and buildings | Technical equipment/machinery | Other facilities/operating and office equipment | Prepayments and construction in progress | Total |
|---|--------------------|-------------------------------|---|--|----------------|
| Acquisition and production costs | | | | | |
| As of 1/1/2016 | 92,240 | 402,552 | 23,189 | 13,028 | 531,009 |
| Additions | 903 | 22,351 | 2,299 | 13,784 | 39,337 |
| Disposals | -764 | -7,261 | -448 | -62 | -8,535 |
| Currency translation | -1,089 | -866 | -51 | -3 | -2,009 |
| Reclassifications | 33 | 15,900 | -3,572 | -12,354 | 7 |
| As of 31/12/2016 | 91,323 | 432,676 | 21,417 | 14,393 | 559,809 |
| Cumulative depreciation | | | | | |
| As of 1/1/2016 | 31,153 | 224,229 | 18,457 | 3 | 273,842 |
| Scheduled depreciation | 3,500 | 24,546 | 1,607 | - | 29,653 |
| Reversal of impairment losses | - | -6,047 | - | - | -6,047 |
| Disposals | -280 | -6,747 | -428 | - | -7,455 |
| Reclassifications | - | 3,868 | -3,868 | - | - |
| Currency translation | -103 | -409 | -6 | - | -518 |
| As of 31/12/2016 | 34,270 | 239,440 | 15,762 | 3 | 289,475 |
| Carrying amounts | | | | | |
| As of 31/12/2016 | 57,053 | 193,236 | 5,655 | 14,390 | 270,334 |
| As of 31/12/2015 | 61,087 | 178,323 | 4,732 | 13,025 | 257,167 |

Land and buildings are essentially the Group companies' production sites and the technical plant and machinery are production facilities.

The additions to plant assets in 2017 were primarily for the production sites in Salzbergen and Hamburg. In Salzbergen, capital expenditures were made to modernize facilities and improve infrastructure. At the Hamburg site, the additions primarily refer to investments to optimize production facilities and product logistics. Here, we should also highlight the €10 million investment made to build a hydrogen electrolysis plant. This plant is currently the world's biggest dynamic unit using PEM (Proton Exchange Membrane) technology and it will increase the degree of vertical integration – and therefore added value – at the Hamburg production site. Moreover, expenditures for major overhauls at both sites were capitalized.

The impairment loss reversal of €6.1 million in 2016 related to the H&R Ölwerke Schindler GmbH cash-generating unit (CGU) from the Refining segment and was included under reversals of impairments to property, plant and equipment on the income statement. This impairment loss reversal was caused by material improvements in the market environment and economic conditions as well as a positive outlook. The impairment tests were conducted using a pre-tax interest rate of 8.72% (after-tax interest rate: 6.35%) and yielded a recoverable amount of €328 million. The CGU's recoverable amount is its value in use.

The H&R Group has entered into a number of finance and operating lease agreements for technical equipment, operating and office equipment as well as intangible assets.

The results for H&R GmbH & Co. KGaA include income from compensation payments by third parties for write-offs of property, plant and equipment totaling €20 thousand (previous year: €832 thousand).

Finance Lease. The finance leases essentially include land-use rights and an agreement that meets the requirements of IFRIC 4 and relates to the supply of energy as well as of cooling and boiler feed water. The lease agreement has a term of 20 years and ends on 30 June 2023.

Tangible fixed assets used under finance leases are reported under property, plant and equipment with a carrying amount of €24,045 thousand (previous year: €24,230 thousand). This amount is further broken down into technical equipment and machinery, with a carrying amount of €16,839 thousand (previous year: €16,358 thousand), and land-use rights, with a carrying amount of €7,206 thousand (previous year: €7,872 thousand). These amounts were paid in full in advance. As of the reporting date, the acquisition costs of these fixed assets totaled €40,564 thousand (previous year: €38,734 thousand).

Because payments were made in advance for both the land-use rights and for the contract treated as a finance lease under IFRIC 4, no further lease payments will be due under finance leases in subsequent periods (previous year: €17 thousand). The lease payments in the previous year did not contain any future financing costs.

None of the assets underlying the finance leases may be disposed of during the term of their respective leases.

Operating Lease. In addition to the finance leases, other lease and/or rental agreements were also entered into which must be classified as operating leases based on their contents, as ownership of the property constituting the subject matter of the lease or rental agreement is attributable to the lessor or landlord. This involves, in particular, land and buildings, hardware, vehicles, forklift trucks, office machines and tank railcars. For technical equipment and operating and office equipment, the terms are generally between two and five years. For land and buildings, the terms are longer than five years. The agreements generally terminate automatically at the end of their term, although in some cases there are renewal options.

Operating leases entailed expenses totaling €6,380 thousand (previous year: €5,477).

Future minimum lease payments based on non-cancelable operating leases will become due in future periods as follows:

| IN € THOUSAND | Up to 1 year | | 1 to 5 years | | Longer than 5 years | | Total | |
|--------------------------------|--------------|--------------|---------------|---------------|---------------------|---------------|---------------|---------------|
| | 31/12/2017 | 31/12/2016 | 31/12/2017 | 31/12/2016 | 31/12/2017 | 31/12/2016 | 31/12/2017 | 31/12/2016 |
| Land and buildings | 1,530 | 1,377 | 4,639 | 4,945 | 18,333 | 19,422 | 24,502 | 25,744 |
| Technical equipment | 1,516 | 1,701 | 1,710 | 2,139 | - | - | 3,226 | 3,840 |
| Operating and office equipment | 2,120 | 2,510 | 5,014 | 3,684 | 6,267 | 1,322 | 13,401 | 7,516 |
| Total | 5,166 | 5,588 | 11,363 | 10,768 | 24,600 | 20,744 | 41,129 | 37,100 |

(12) Goodwill and Other Intangible Assets

The table below shows changes in intangible assets during financial year 2017:

CHANGES IN 2017

| IN € THOUSAND | Other intangible assets | | | | | | Subtotal | Total |
|---|-------------------------|---------------------------------|---------------|--------------------------|----------------------------------|--------------|---------------|----------------|
| | Goodwill | Distribution and similar rights | Software | Licenses/ Product rights | Patents/ (Production) technology | Other rights | | |
| Acquisition and production costs | | | | | | | | |
| As of 31/12/2016 | 55,449 | 19,166 | 11,296 | 4,987 | 14,242 | 217 | 49,908 | 105,357 |
| Additions | - | - | 257 | 251 | - | 50 | 558 | 558 |
| Disposals | - | - | -122 | - | - | - | -122 | -122 |
| Currency translation | -503 | -1,102 | -22 | -17 | -870 | - | -2,011 | -2,514 |
| Reclassifications | - | - | 1,520 | -1,311 | - | -204 | 5 | 5 |
| As of 31/12/2017 | 54,946 | 18,064 | 12,929 | 3,910 | 13,372 | 63 | 48,338 | 103,284 |
| Cumulative depreciation/amortization | | | | | | | | |
| As of 31/12/2016 | 30,414 | 4,035 | 10,097 | 3,571 | 3,381 | 83 | 21,167 | 51,581 |
| Scheduled depreciation/amortization | - | 1,137 | 546 | 201 | 1,345 | - | 3,229 | 3,229 |
| Impairment losses | 2,477 | 4,261 | - | - | 895 | - | 5,156 | 7,633 |
| Disposals | - | - | -122 | - | - | - | -122 | -122 |
| Currency translation | -391 | -288 | -18 | -6 | -247 | - | -559 | -950 |
| Reclassifications | - | - | 1,362 | -1,279 | - | -83 | - | - |
| As of 31/12/2017 | 32,500 | 9,145 | 11,865 | 2,487 | 5,374 | - | 28,871 | 61,371 |
| Carrying amounts | | | | | | | | |
| As of 31/12/2017 | 22,446 | 8,919 | 1,064 | 1,423 | 7,998 | 63 | 19,467 | 41,913 |
| As of 31/12/2016 | 25,035 | 15,131 | 1,199 | 1,416 | 10,861 | 134 | 28,741 | 53,776 |

CHANGES IN 2016

| IN € THOUSAND | Other intangible assets | | | | | | Subtotal | Total |
|---|-------------------------|--|---------------|--------------------------------|--|-----------------|---------------|----------------|
| | Goodwill | Distribu- tion and similar rights | Software | Licenses/ Product rights | Patents/ (Pro- duction) tech- nology | Other rights | | |
| Acquisition and production costs | | | | | | | | |
| As of 1/1/2016 | 55,744 | 19,824 | 10,452 | 4,734 | 14,757 | 409 | 50,176 | 105,920 |
| Additions | - | - | 584 | 249 | - | 101 | 934 | 934 |
| Disposals | - | - | - | - | - | - | - | - |
| Currency translation | -295 | -658 | -14 | -8 | -515 | - | -1,195 | -1,490 |
| Reclassifications | - | - | 274 | 12 | - | -293 | -7 | -7 |
| As of 31/12/2016 | 55,449 | 19,166 | 11,296 | 4,987 | 14,242 | 217 | 49,908 | 105,357 |
| Cumulative depreciation/amortization | | | | | | | | |
| As of 1/1/2016 | 20,109 | 2,909 | 9,627 | 3,441 | 2,045 | 83 | 18,105 | 38,214 |
| Scheduled depreciation/amortization | - | 1,180 | 476 | 135 | 1,396 | - | 3,187 | 3,187 |
| Impairment losses | 10,400 | - | - | - | - | - | - | 10,400 |
| Disposals | - | - | - | - | - | - | - | - |
| Currency translation | -95 | -54 | -6 | -5 | -60 | - | -125 | -220 |
| As of 31/12/2016 | 30,414 | 4,035 | 10,097 | 3,571 | 3,381 | 83 | 21,167 | 51,581 |
| Carrying amounts | | | | | | | | |
| As of 31/12/2016 | 25,035 | 15,131 | 1,199 | 1,416 | 10,861 | 134 | 28,741 | 53,776 |
| As of 31/12/2015 | 35,635 | 16,915 | 825 | 1,293 | 12,712 | 326 | 32,071 | 67,706 |

The carrying amount of goodwill can be broken down as follows:

| IN € THOUSAND | | | |
|--------------------|----------------------------|---------------|---------------|
| Reporting segment | Cash Generating Unit (CGU) | 31/12/2017 | 31/12/2016 |
| ChemPharm Refining | Salzbergen CGU | 16,738 | 16,738 |
| ChemPharm Sales | H&R China CGU | - | 2,580 |
| ChemPharm Sales | H&R ChemPharm (UK) CGU | 282 | 282 |
| ChemPharm Sales | Asia CGU | 362 | 371 |
| ChemPharm Sales | South Africa CGU | 5,064 | 5,064 |
| Total | | 22,446 | 25,035 |

Goodwill. In performing the impairment test on the CGU, Management must make certain future-oriented valuation assumptions. 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 CGU, thereby triggering recognition of an impairment loss. The CGUs' recoverable amounts are equal to their values in use.

The impairment tests carried out during the reporting period resulted in unscheduled write-downs of goodwill totaling €2.5 million (previous year: €10.4 million) which are included on the income statement under the item "Depreciation, impairments and amortization".

As a result of a persistently tough local market environment for the China CGU, the Group once again believes that future cash flows will

grow more slowly than originally expected. The impairment test yielded a recoverable amount of €110.6 million (previous year: €112.1 million), which required recognizing a goodwill impairment loss of €2.5 million (previous year: €2.5 million). The carrying amount of the China CGU's goodwill decreased by a total of €2.6 million (previous year: €2.7 million) due to €0.1 million of additional currency translation effects (previous year: €0.2 million).

The China CGU consists of the legal entities in the Chemical-Pharmaceutical Division. The CGU's pre-tax interest rate, which was used for the impairment test, was 10.4% (previous year: 10.5%); this was equivalent to an after-tax interest rate of 7.8% (previous year: 8.1%).

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%, increasing the weighted cost of capital by 10% and lowering the growth rate by one percentage point were analyzed. For the cash-generating units that had already suffered an impairment during the financial year, each negative change in a parameter would result in further impairment losses. In the case of the South African CGU, a 0.3% increase in the cost of capital or a 2.3% reduction in cash flow would cause the recoverable amount to be equal to the carrying value. For the remaining cash-generating units, the sensitivity analyses indicated that none of these CGUs would require recognition of an impairment loss.

Other Intangible Assets. Other intangible assets primarily consist of customer relationships with a residual carrying amount of €8.9 million (previous year: €15.1 million) and (production) technologies with a residual carrying amount of €8.0 million (previous year: €10.9 million). Moreover, expenses arising in connection with the registration of products pursuant to the EU Chemicals Regulation (REACH) were also capitalized under other intangible assets. The remaining other intangible assets are mainly production and

application software as well as production, control and process flow licenses. The additions in financial year 2017 primarily refer to the acquisition of new software licenses.

An impairment loss of €5,156 thousand had to be recognized for other intangible assets (previous year: €0); this amount, which is shown under the item "Depreciation, impairments and amortization" on the income statement, included €895 thousand for production technologies and €4,261 thousand for a customer base. Both assets belong to the ChemParm Sales segment. These extraordinary impairments were the result of a persistently tough local market environment for the China CGU, which once again has caused the Group to conclude that future cash flows will grow more slowly than originally expected. In each case, the recoverable amount is equal to the value in use; it amounted to €8.9 million for the customer relationships and €4.3 million for the production technologies. For calculating the recoverable amounts, an 8.0% after-tax interest rate was used for the customer relationships and a 7.6% rate was used for the production technologies. That corresponds to pre-tax interest rates of 10.3% and 9.7%, respectively.

(13) Holdings Valued at-Equity

The reported shares in holdings valued at-equity concern, on the one hand, the 50% share in the joint venture Westfalen Chemie GmbH & Co. KG as well as the related general partner with full personal liability Westfalen Chemie Verwaltungsgesellschaft mbH. Westfalen operates a hydrogen production and bottling facility at the Salzbergen site, from which the Salzbergen specialty refinery obtains hydrogen for its own production. In addition, H&R GmbH & Co. KGaA has a 50% stake in the joint venture HRI IT-Service GmbH, Berlin, as well as a 45% interest in IGEPA IT Service GmbH, Münster.

Disclosures on holdings valued at-equity consolidated into the H&R Group are based on the Group's uniform accounting and measurement principles. As with the H&R Group, the joint ventures' and associate's financial year coincides with the calen-

dar year. The following table shows the aggregate financial information of these joint ventures and/or associates that are classified as immaterial under IFRS 12:

| IN € THOUSAND | Joint ventures | | Associate | |
|------------------------------------|----------------|------------|--------------|------------|
| | 31/12/2017 | 31/12/2016 | 31/12/2017 | 31/12/2016 |
| Assets | | | | |
| Non-current assets | 1,874 | 2,384 | 164 | 181 |
| Current assets | 1,221 | 1,475 | 1,778 | 1,705 |
| Liabilities | | | | |
| Non-current liabilities | - | 259 | 231 | 198 |
| Current liabilities | 2,533 | 3,352 | 677 | 721 |
| Cumulative equity | 562 | 248 | 1,034 | 967 |
| Income | 11,636 | 11,336 | 5,927 | 5,920 |
| Expenses | -11,112 | -11,009 | -5,141 | -5,153 |
| Earnings after income taxes | 524 | 327 | 786 | 767 |
| Other comprehensive income | - | - | - | - |
| Total consolidated income | 524 | 327 | 786 | 767 |

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

| IN € THOUSAND | 2017 | 2016 |
|----------------------------------|--------------|--------------|
| Carrying amounts on 1/1 | 4,302 | 975 |
| Addition | - | 3,150 |
| Proportionate share of result | 492 | 513 |
| Distribution | -325 | -336 |
| Carrying amounts on 31/12 | 4,469 | 4,302 |

(14) Liabilities to Banks

Liabilities to banks include the following items:

| IN € THOUSAND | Carrying amount on 31/12/2017 | Residual term up to one year | Residual term 2019 to 2022 | From 2023 onward |
|--------------------------|-------------------------------|------------------------------|----------------------------|------------------|
| Loans under KfW programs | 77,979 | 10,296 | 42,831 | 24,852 |
| Syndicated loan | - | - | - | - |
| Borrower's note loans | 7,000 | 7,000 | - | - |
| Other loans | 27,756 | 27,088 | 668 | - |
| Total | 112,735 | 44,384 | 43,499 | 24,852 |
| of which secured | 823 | | | |

| IN € THOUSAND | Carrying amount on 31/12/2016 | Residual term up to one year | Residual term 2018 to 2021 | From 2022 onward |
|--------------------------|-------------------------------|------------------------------|----------------------------|------------------|
| Loans under KfW programs | 53,654 | 10,344 | 35,123 | 8,187 |
| Syndicated loan | - | - | - | - |
| Borrower's note loans | 17,897 | - | 17,897 | - |
| Other loans | 28,677 | 27,843 | 834 | - |
| Total | 100,228 | 38,187 | 53,854 | 8,187 |
| of which secured | 1,619 | | | |

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.

Borrower's Note Loan. The borrower's note loan consists of one fixed-interest tranche issued in 2011 with an original term of seven years. The conditions and termination rights are dependent on compliance with certain stipulations and financial ratios such as the net debt to EBITDA

ratio and the equity ratio (covenants). In the event of a change of control, the party extending the borrower's note loan is entitled to terminate the agreement.

Syndicated Loan. A broadly syndicated loan with a maximum amount of €240 million has been available to H&R since 24 August 2015 and will remain available until 23 August 2018; after that date, a maximum amount of €200 million will be available. The maximum possible drawdown under this loan changes in line with working capital (borrowing-base mechanism), thereby ensuring that financing will be available at attractive conditions even when working capital requirements increase. The syndicated loan is utilized by H&R GmbH & Co. KGaA and by Group companies via branch lines. In mid-2017, the maturity was extended by one year to 24 August 2020.

The availability and conditions are linked to certain ratios (financial covenants). In the event of a breach of a 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. The syndicated loan was only utilized to a minor extent in financial year 2017.

Other Loans. Other loans include 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 the debt/equity ratio and the equity ratio are included in the agreements for the borrower's note loans and the syndicated loans as well as for bilateral loans. The financial covenants were fully met both at the reporting date and also during the course of the year.

Collateral. As in the previous year, collateral assignments have been provided for a redeemable loan in South Africa originally totaling the equivalent of €2 million.

No collateral has been pledged for the KfW loans, the syndicated loan or the borrower's note loan.

(15) Trade Payables

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

(16) Other Provisions

| IN € THOUSAND | HR provisions (16.1) | Environmental protection (16.2) | Energy taxes (16.3) | Trade-related commitments (16.4) | Miscellaneous provisions (16.5) | Total |
|-------------------------------------|-------------------------|---------------------------------------|------------------------|--|---------------------------------------|---------------|
| As of 1/1/2017 | 14,759 | 1,184 | 4,128 | 2,237 | 1,541 | 23,849 |
| of which long-term | 3,304 | 984 | - | - | - | 4,288 |
| Utilization | -10,660 | -659 | -49 | -1,767 | -402 | -13,537 |
| Reversal | -601 | - | -3,716 | -166 | -1,325 | -5,808 |
| Additions | 7,155 | - | - | 1,624 | 1,722 | 10,501 |
| Compounding/ discounting | 31 | - | - | - | - | 31 |
| Currency translation differences | -118 | - | - | -56 | -40 | -214 |
| As of 31/12/2017 | 10,566 | 525 | 363 | 1,872 | 1,496 | 14,822 |
| of which long-term | 3,223 | - | - | - | - | 3,223 |

The following cash outflows are expected in connection with the provisions shown on the statement of financial position for 2017:

EXPECTED CASH OUTFLOWS FOR OTHER PROVISIONS

| IN € THOUSAND | HR provisions | Environmental protection | Energy taxes | Trade-related commitments | Miscellaneous provisions | Total |
|----------------|---------------|--------------------------|--------------|---------------------------|--------------------------|---------------|
| 2018 | 7,343 | 525 | 363 | 1,872 | 1,496 | 11,599 |
| 2019 | 518 | - | - | - | - | 518 |
| 2010-2022 | 652 | - | - | - | - | 652 |
| 2023-2027 | 1,147 | - | - | - | - | 1,147 |
| 2028 and later | 906 | - | - | - | - | 906 |
| Total | 10,566 | 525 | 363 | 1,872 | 1,496 | 14,822 |

(16.1) HR Provisions

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

The long-term HR provisions consist of early retirement pensions and service anniversaries.

(16.2) Environmental Protection

Subsoil contamination with hazardous materials resulting from the production of ammunition (grenades) under the supervision of the armed forces during the two world wars and from the decommissioning of military explosives were already discovered some time ago on a piece of land belonging to a Group company that is used by third parties to produce such explosive materials. The affected soil was disposed of some years ago. However, due to the size and diversity of the plot of land, areas contaminated with hazardous substances are being discovered on a regular basis; these must be remediated by professionals. The level of hazardous materials in the ground and surface water is regularly measured and monitored in coordination with the relevant authorities. The explosives business was sold in 2007; however, the land was not transferred to the buyer, but, rather, was leased to the explosives company, which continues to operate there.

SYTHENGRUND GmbH had various tests carried out to assess the hazardous materials situation. These assessments revealed that the plume of pollutants extending beyond the site borders cannot be removed using current technology. The company is therefore focusing its ongoing measures on monitoring and securing the pollutants, carrying out long-term research into potential additional contamination and supporting research projects into developing more advanced chemical/physical treatment methods. All steps to monitor and secure the pollutants, as well as to decontaminate affected areas, are carried out in close cooperation with the regulatory authorities of the Recklinghausen District.

In August 2015, the quartz sand deposits, which cover an area of around 50 hectares, were sold to a nearby quartz sand producer. Most of the remaining land (around 210 hectares) was sold to the Recklinghausen District in a notarized purchase agreement dated 16 September 2016. Hand-over of the land is scheduled for 1 January 2019. On that date, the explosives manufacturer must cease its operations on this site. This purchase agreement with the Recklinghausen District represents a final settlement of the company's liability as site owner, thereby eliminating, from today's perspective, the risk of many years of litigation to determine the extent of the liability. The remaining areas are insignificant and will gradually be sold. Responsibility for traffic safety at the site will also transfer to the Recklinghausen

District on 1 January 2019. In addition, the investment in the operating company *Betreiber-gesellschaft Silbersee II Haltern am See mbH* was sold to the District in this purchase agreement.

(16.3) Energy Taxes

The provisions for energy taxes also include provisions for electricity taxes. The €3,716 thousand reversal refers to the new provisions set up in the previous year for energy and electricity taxes, because according to a clarification with the main

customs office, the reasons for setting aside these provisions no longer apply.

(16.4) Trade-Related Commitments

Provisions for trade-related commitments primarily include provisions for complaints, rebates, discounts and price reductions.

(16.5) Miscellaneous Provisions

Miscellaneous provisions primarily include provisions for waste disposal and other obligations.

(17) Other Financial Liabilities

| IN € THOUSAND | 31/12/2017 | | 31/12/2016 | |
|---------------------------------------|--------------|--------------------|---------------|--------------------|
| | Total | Of which long-term | Total | Of which long-term |
| Lease liabilities | - | - | 17 | - |
| Loan liabilities | - | - | 3,184 | - |
| Liabilities arising from derivatives | 1,216 | - | 2,537 | 1,200 |
| Liabilities from company acquisitions | 3,969 | - | 5,344 | 738 |
| Other financial liabilities | 414 | 2 | 2,510 | 2 |
| Total | 5,599 | 2 | 13,592 | 1,940 |

Liabilities arising from derivatives result from transactions intended to hedge interest rate risks. Further details about derivatives can be found in Note (37.2).

Liabilities from acquisitions relate to existing liabilities from the acquisition of the Chinese businesses in 2014 and the purchase of the shares of *IGEPA IT Service GmbH*.

(18) Other Liabilities

| IN € THOUSAND | 31/12/2017 | | 31/12/2016 | |
|------------------------|---------------|--------------------|---------------|--------------------|
| | Total | Of which long-term | Total | Of which long-term |
| Tax liabilities | 4,883 | - | 5,264 | - |
| Accruals and deferrals | 4,118 | 1,792 | 4,595 | 1,983 |
| Payments received | 3,479 | - | 2,243 | - |
| Other liabilities | 959 | - | 923 | - |
| Total | 13,439 | 1,792 | 13,025 | 1,983 |

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

The subsidy, which had been applied for in 1996, was approved in 1998 and constitutes 15% of the investment sum. Recognition takes place on a pro rata temporis basis in accordance with the respective useful lives of the subsidized assets.

The accruals and deferrals include an investment subsidy received by *H&R Lube Blending GmbH* from the German State (Land) of Lower Saxony.

(19) 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 areas and activities. These benefits apply exclusively to companies based in Germany. All of the H&R Group's pension plans are closed or frozen, so that H&R GmbH & Co. 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 equalizing risks arising from either assets or liabilities.

H&R GmbH & Co. KGaA was formed from the merger of Schmierstoffraffinerie Salzbergen GmbH (SRS GmbH) and H&R GmbH & Co. KGaA in 2001. Because of the works agreement dated 7 October 1986, all employees transferred over from Wintershall by SRS GmbH have a right to company retirement benefits in accordance with the Wintershall pension agreement dated 1 January 1987. The works agreement dated 9 March 1994 terminated the works agreement of 7 October 1986 effective 30 June 1994, thereby closing the pension scheme 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 7 October 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 GmbH & Co. KGaA have a right to company pension benefits in accordance with the version of the pension agreement dated 1 January 1986, last amended by the works agreement of 4 June 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 so-called contractual pensions based on individual contractual commitments. The benefit requirements and calculations differ in individual agreements.

Pursuant to the 18 December 1978 version of GAUDLITZ GmbH's pension agreement, all employees who joined the company by 10 June 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 1 January 1986 in the 4 June 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 31 July 1991.

Pension obligations for a total of 183 employees were transferred to H&R Ölwerke Schindler GmbH effective 2 January 2004 with the takeover of BP's specialty product businesses. 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 24 June 1991
- Pension scheme for employees of Aral AG on union rates dated 15 October 1985
- Aral AG 1999 pension agreement
- Pension charter dated 1 January 1980 pursuant to the central works agreement dated 30 November 1979
- Additional pension for shift work in accordance with letter f of the pension charter of 1 January 1980 pursuant to the central works agreement dated 30 November 1979
- 1988 pension charter based on the central works agreement dated 2 December 1987
- Pension charter dated 1 January 1988, Section 13 (Sections 40-46), pension for shift work on the basis of the central works agreement dated 2 December 1987
- Pension plan of Burmah Oil (Deutschland) GmbH dated 1 January 1992
- Salary conversion in accordance with the 1999 Model ARAL pension agreement
- Raab Karcher transitional pension scheme dated 1 March 1989
- Central works agreement dated 1 February 1993 (1975 pension plan)
- Central works agreement dated 1 January 1993 (1986 pension plan)
- Central works agreement dated 1 February 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 has not only assumed pension obligations for eligible employees of the company (so-called 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, so-called 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 31 December 2017 are shown in the following table:

| IN € THOUSAND | 31/12/2017 | 31/12/2016 |
|---------------|------------|------------|
| Group 1 | 39,659 | 48,087 |
| Group 3 | 11,155 | 11,757 |

A further category (so-called Group 2) comprises employees of BP who were not taken on by H&R Ölwerke Schindler. For this group of 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 €9,523 thousand (previous year: €10,163 thousand). Pursuant to IAS 1.32, these obligations were netted against a receivable from BP arising from a reimbursement claim for pension obligations assumed amounting to €11,155 thousand (previous year: €11,757 thousand), which also arose as part of the takeover of the specialty business (see Note (9)). The net receivable of €1,632 thousand (previous year: €1,594 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 benefit plans is shown below:

| IN € THOUSAND | 2017 | 2016 |
|--|---------------|---------------|
| As of 1/1 | 85,206 | 76,847 |
| Current service cost | 877 | 834 |
| Interest expense | 1,406 | 1,809 |
| Reassessments | -4,948 | 8,881 |
| of which due to changes in financial assumptions | -3,867 | 9,615 |
| of which due to empirical adjustments | -1,081 | -734 |
| Payments made | -3,249 | -3,165 |
| As of 31/12 | 79,272 | 85,206 |

The plan assets of H&R GmbH & Co. KGaA consist of a reinsurance policy for the pension commitment to a former member of the Executive Board that is measured at fair value. The plan assets are not listed on any active market. H&R GmbH & Co. KGaA does not have any specific risk exposure from these plan assets beyond the normal risk. Annual contributions of H&R GmbH & Co. KGaA to this reinsurance policy totaled €249 thousand and were due for the last time in 2016.

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

| IN € THOUSAND | 2017 | 2016 |
|-----------------------|--------------|--------------|
| As of 1/1 | 1,648 | 1,362 |
| Interest income | 28 | 33 |
| Reassessments | 18 | 4 |
| Contributions to plan | - | 249 |
| As of 31/12 | 1,694 | 1,648 |

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

| IN € THOUSAND | 2017 | 2016 |
|--|---------------|---------------|
| As of 1/1 | 83,558 | 75,487 |
| Current service cost | 877 | 834 |
| Interest expense | 1,378 | 1,776 |
| Payments made | -3,249 | -3,165 |
| Employee contributions to the plan | - | -249 |
| Reassessments | -4,966 | 8,875 |
| of which return on plan assets | -18 | -4 |
| of which due to changes in financial assumptions | -3,867 | 9,613 |
| of which due to empirical adjustments | -1,081 | -734 |
| of which due to changes in demographic assumptions | - | - |
| As of 31/12 | 77,598 | 83,558 |

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

| | 31/12/2017 | 31/12/2016 |
|----------------|-------------|-------------|
| Interest rate | 2.0% | 1.7% |
| Salary trend | 4.0% | 4.0% |
| Pension trend | 2.0% | 2.0% |
| Retirement age | 60/61/63/65 | 60/61/63/65 |

The likelihood of leaving is based on the 2005G 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 2017.

Payments totaling €3,823 thousand are expected for the next financial year (previous year: €3,844 thousand). The average duration of the benefit obligations is 15.9 years.

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

CHANGE IN PENSION OBLIGATION

| | Change in indicator | 31/12/2017 | 31/12/2017 | 31/12/2016 | 31/12/2016 |
|----------------------------------|---------------------|---|---|---|---|
| | | 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% | -5,789 | 6,556 | -6,427 | 7,309 |
| Change in expected salary trend | 0.50% | 1,324 | -1,235 | 1,516 | -1,396 |
| Change in expected pension trend | 0.50% | 1,165 | -1,074 | 3,339 | -3,580 |
| Change in expected mortality | 1 year | -3,216 | 3,172 | 644 | -685 |

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 affect 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 used last year.

All pension plans within the H&R Group are closed; no new employees are admitted. Only H&R Ölwerke Schindler GmbH has active employees with a pension claim.

(20) Subscribed Capital

Due to an increase in capital from company funds connected with the issuance of 716,403 new shares (issuance of bonus shares), subscribed capital increased by €1,831 thousand effective 28 June 2017 (previous year: €0 thousand). This increase in share capital also entailed reducing capital by retiring four shares, thereby reducing subscribed capital by €10.23 (previous year: €0).

As of the reporting date, subscribed capital consequently totaled €93,404 thousand (previous year: €91,573 thousand), divided into 36,536,553 ordinary no-par bearer shares (previous year: 35,820,154 ordinary 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 in. 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 12 May 2019 by a maximum of €22.4 million by issuing up to 8,748,348 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 (2014 Approved 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. The most recent amendment (reduction in the approved capital) was recorded in the Commercial Register on 25 September 2014.

(21) 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 financial year 2017, the capital reserve decreased from €42,753 thousand to €41,364 thousand (change in previous year: €0 thousand). The issuance of bonus shares reduced the capital reserve by €1,831 thousand (previous year: €0 thousand) (see Note (20)). In the current financial year, the periods prior to the contribution of H&R China Holding GmbH to H&R GmbH & Co. KGaA in 2014 resulted in a tax expense of €868 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% is attributable to the shareholders of H&R GmbH & Co. KGaA; this led to a €443 thousand increase in the Group's capital reserve.

(22) Retained Earnings

On the reporting date, retained earnings totaled €171,989 thousand (previous year: €136,271 thousand). The reassessed net liability under defined benefit pension plans recorded under other comprehensive income totaled €-21,547 thousand (previous year: €-25,134 thousand) on the reporting date. Other retained earnings totaled €2,293 thousand as of the reporting date (previous year: €2,293 thousand).

Dividends. At the Annual Shareholders' Meeting on 18 May 2017, it was decided that no dividends would be distributed from H&R GmbH & Co. KGaA's annual net income for financial year 2016 as determined in accordance with the German Commercial Code (HGB). The Executive Board and the Supervisory Board will propose to the Annual Shareholders' Meeting on 24 May

2018 that a dividend of €0.40 be distributed for financial year 2017, equal to a total amount of €14,615 thousand. This proposal is subject to approval by the shareholders at the Annual Shareholders' Meeting.

(23) Other Reserves

Other reserves refer to cumulative other comprehensive income and include the currency translation adjustment and adjustments from the marking-to-market of financial assets. As of the reporting date, reserves relating to the marking-to-market of securities totaled €164 thousand (previous year: €196 thousand). The foreign-currency translation adjustment totaled €-1,168 thousand on the reporting date (previous year: €5,006 thousand).

(24) Non-Controlling Interests

Non-controlling interests include shares of earnings and capital held by shareholders outside the Group; during the year under review, these changed as follows.

| IN € THOUSAND | 2017 | 2016 |
|---|---------------|---------------|
| As of 1/1 | 41,598 | 42,268 |
| Capital increase | 425 | - |
| Currency translation differences | -2,404 | -1,673 |
| Proportionate share of net income or loss | -2,628 | 913 |
| Disposals | - | 90 |
| As of 31/12 | 36,991 | 41,598 |

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 | 31/12/2017 | 31/12/2016 |
|---|---------------|---------------|
| Current assets | 61,193 | 62,795 |
| Non-current assets | 62,720 | 78,852 |
| Current liabilities | 43,757 | 49,739 |
| Non-current liabilities | 4,627 | 6,976 |
| Cumulative equity | 75,529 | 84,932 |
| Non-controlling interests' proportionate share of net assets | 37,009 | 41,617 |

| IN € THOUSAND | 2017 | 2016 |
|--|---------------|---------------|
| Income | 144,571 | 127,346 |
| Expenses | -149,933 | -125,468 |
| Net income/loss | -5,362 | 1,878 |
| Non-controlling interests' proportionate share of net income/loss | -2,627 | 920 |
| Other comprehensive income | -4,909 | -3,360 |
| Non-controlling interests' proportionate share of other comprehensive income | -2,405 | -1,646 |
| Total comprehensive income | -10,271 | -1,482 |
| Non-controlling interests' proportionate share of total comprehensive income | -5,033 | -726 |
| Cash flow from operating activities | -1,086 | 5,406 |
| Non-controlling interests' proportionate share of cash flow from operating activities | -532 | 2,649 |
| Cash flow from investing activities | -724 | -1,754 |
| Non-controlling interests' proportionate share of cash flow from investing activities | -355 | -859 |
| Cash flow from financing activities | 1,523 | 3,977 |
| Non-controlling interests' proportionate share of cash flow from financing activities | 746 | 1,949 |

Notes to the Consolidated Income Statement

(25) Research and Development Costs

In financial year 2017, research and development activities in the Chemical-Pharmaceuticals Division focused on further improving 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 2017, research and development expenditures totaled €2,423 thousand (previous year: €2,054 thousand). For further information regarding research and development costs, please consult the pertinent section in the Management Report.

(26) Sales Revenues

Sales revenues – less revenue reductions – are recognized at the time when the service is provided or when risk is transferred to the customer. Segment reporting gives an overview of the trend in sales by division and by geographical segment (see Note (35)).

(27) Other Operating Income

| IN € THOUSAND | 2017 | 2016 |
|---|---------------|---------------|
| Exchange rate gains from foreign currency items | 7,994 | 6,976 |
| Income from services | 5,377 | 5,461 |
| Income from cost transfers | 3,653 | 3,272 |
| Income from insurance claims | 20 | 857 |
| Income from the disposal of assets | 146 | 184 |
| Income from the reversal of provisions | 4,873 | 981 |
| Income from rents and leases | 995 | 977 |
| Miscellaneous | 3,466 | 2,862 |
| Total | 26,524 | 21,570 |

Income from passing on costs results mainly from the re invoicing of consumption taxes, project-related costs and current costs to the companies in which there is a participating interest, Westfalen Chemie GmbH & Co. KG and SRS EcoTherm GmbH. Income from services mainly refers to IT services provided.

(28) Cost of Materials

| IN € THOUSAND | 2017 | 2016 |
|--|----------------|----------------|
| Raw materials | 544,566 | 465,984 |
| Auxiliary and production materials | 16,799 | 15,294 |
| Products for sale | 160,640 | 152,898 |
| Cost of raw materials, auxiliary and production materials and merchandise purchased | 722,005 | 634,176 |
| Energy costs | 41,248 | 36,518 |
| Other external services | 1,088 | 1,071 |
| Total expenditures on purchased services | 42,336 | 37,589 |
| Total | 764,341 | 671,765 |

(29) Personnel Expenses

| IN € THOUSAND | 2017 | 2016 |
|--|---------------|---------------|
| Wages and salaries | 72,243 | 73,704 |
| Social security payments | 11,821 | 11,149 |
| Defined benefit pension plan expenses | 846 | 981 |
| Defined contribution pension plan expenses | 537 | 483 |
| Other social security expenses | 527 | 398 |
| Total | 85,974 | 86,715 |

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 result.

AVERAGE NUMBER OF EMPLOYEES

| | 2017 | 2016 |
|--------------------|--------------|--------------|
| ChemPharm Refining | 679 | 648 |
| ChemPharm Sales | 388 | 358 |
| Plastics | 577 | 556 |
| Other | 28 | 28 |
| Total | 1,672 | 1,590 |

(30) Other Operating Expenses

| IN € THOUSAND | 2017 | 2016 |
|--|----------------|----------------|
| Freight costs, dispatch systems and other distribution costs | 26,259 | 26,131 |
| Third-party goods and services | 20,846 | 18,110 |
| Third-party repairs and maintenance | 15,650 | 12,270 |
| Rents and leases | 9,202 | 9,069 |
| Loss from foreign currency translation | 7,156 | 8,400 |
| IT costs | 8,609 | 8,047 |
| Legal and consulting fees, expenses for annual financial statements and Annual Shareholders' Meeting | 3,735 | 4,979 |
| Insurance premiums, fees and contributions | 3,685 | 3,747 |
| Cost transfers | 3,516 | 3,090 |
| Other taxes | 1,732 | 2,126 |
| Other personnel expenses | 2,274 | 2,553 |
| Leasing costs | 1,896 | 1,878 |
| Travel expenses | 1,510 | 1,448 |
| Commissions | 1,457 | 1,311 |
| Miscellaneous | 6,219 | 10,897 |
| Total | 113,746 | 114,056 |

(31) Financial Income

| IN € THOUSAND | 2017 | 2016 |
|---|--------------|--------------|
| Interest income from short-term bank deposits | 379 | 443 |
| Income from loans | 13 | 30 |
| Other interest and similar income | 13 | 2 |
| Total interest income | 405 | 475 |
| Income from derivatives | 1,406 | 2,255 |
| Other financial income | - | 400 |
| Miscellaneous financial income | 1,406 | 2,655 |
| Financial Income | 1,811 | 3,130 |

(32) Financing Expenses

| IN € THOUSAND | 2017 | 2016 |
|---|---------------|---------------|
| Interest expense relating to loan interest | 5,114 | 5,490 |
| Interest expense relating to derivatives | 1,351 | 2,510 |
| Interest expense from the compounding of pension provisions | 1,379 | 1,776 |
| Credit commission | 895 | 808 |
| Other interest and similar expenses | 1,618 | 2,560 |
| Total interest expense | 10,357 | 13,144 |
| Expenses related to derivatives | - | - |
| Other financial expenses | - | - |
| Miscellaneous financial expenses | - | - |
| Financing costs | 10,357 | 13,144 |

(33) Income Taxes

Since 1 January 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 13.18% (previous year: 13.18%), this amounts to a combined income tax rate for the Group in Germany of 29.00% (previous year: 29.00%). As in the previous year, income tax rates for 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 | 2017 | 2016 |
|---|----------------|----------------|
| Current income tax expenses | -14,532 | -13,725 |
| Current income tax refunds | 559 | 107 |
| Total current taxes | -13,973 | -13,618 |
| Deferred taxes from temporary differences | 107 | -1,092 |
| Deferred taxes from loss carryforwards | -2,862 | -164 |
| Total deferred taxes | -2,755 | -1,256 |
| Total | -16,728 | -14,874 |

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 GmbH & Co. KGaA, domestic tax loss carryforwards led to the recognition of €7,757 thousand of deferred tax assets (previous year: €10,619 thousand). Overall, in Group companies that reported a loss in the prior or the current year, a surplus of deferred tax assets totaling €7 thousand was recognized (previous year: €878 thousand). Recognition of the deferred tax assets is justified since the Group expects positive future taxable income to 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 €934 thousand (previous year: €612 thousand) and trade tax losses of €876 thousand (previous year: €553 thousand) whose realization is not sufficiently guaranteed and for which therefore no deferred tax assets 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 €13,632 thousand (previous year: €13,167 thousand) and essential-

ly may be utilized without restriction within one to five years. No deferred tax assets were recognized for deductible temporary differences totaling €1,572 thousand (previous year: €1,216 thousand). The deferred tax expense was reduced by €1,517 thousand (previous year: €4,038 thousand) in the year under review through the use of previously unrecognized deferred tax assets relating to loss carryforwards.

For reassessed defined benefit pension obligations, deferred tax assets totaling €1,465 thousand were reversed (previous year: addition of €2,542 thousand) and recognized in other comprehensive income. The change in financial assets available for sale measured at fair value led to a change in the deferred taxes recognized in other comprehensive income (with no effect on profit or loss) in the amount of €13 thousand (prior year: €-1 thousand).

For €12,008 thousand of temporary differences in the retained earnings of subsidiaries (previous year: €12,249 thousand), no deferred tax liabilities were recognized because of existing control pursuant to IAS 12.39.

The expected income tax expense and the reported income tax expense can be reconciled as follows:

| IN € THOUSAND | 2017 | 2016 |
|---|---------------|---------------|
| Earnings before income tax | 46,231 | 54,161 |
| Theoretical income tax rate: 29.00% (previous year: 29.00%). | 13,407 | 15,707 |
| Effects from tax rate differences | -1,487 | -2,335 |
| Effects from previous years' taxes | -496 | -2,139 |
| Tax effects from the reversal of deferred taxes | - | -329 |
| Non-deductible expenses | 1,010 | 1,171 |
| Goodwill impairment | 718 | 725 |
| Tax free income | -88 | -66 |
| Foreign withholding tax | 2,843 | 1,450 |
| Effects from changes in tax rates | 1 | -85 |
| Unrecognized deferred tax assets for loss carryforwards | 963 | 754 |
| Utilization of loss carryforwards | -410 | -4 |
| Other tax effects | 267 | 25 |
| Income tax expense as per consolidated income statement | 16,728 | 14,874 |

The deferred tax items were attributable to the following individual statement of financial position items:

| IN € THOUSAND | 31/12/2017 | | 31/12/2016 | |
|-------------------------------|---------------------|--------------------------|---------------------|--------------------------|
| | Deferred tax assets | Deferred tax liabilities | Deferred tax assets | Deferred tax liabilities |
| Intangible assets | 201 | 5,919 | 348 | 8,173 |
| Property, plant and equipment | 268 | 11,688 | 243 | 10,420 |
| Financial assets | 27 | 207 | 16 | 483 |
| Inventories | 519 | - | 585 | - |
| Receivables and other assets | 94 | 47 | 129 | 34 |
| Pension provisions | 10,402 | - | 12,228 | - |
| Other provisions | 902 | 13 | 947 | 38 |
| Liabilities | 524 | 118 | 1,044 | 97 |
| Tax loss carryforwards | 7,757 | - | 10,619 | - |
| Subtotal | 20,694 | 17,992 | 26,159 | 19,245 |
| of which long-term | 11,315 | 17,860 | 13,872 | 19,153 |
| Netting | -13,088 | -13,088 | -11,935 | -11,935 |
| Total | 7,606 | 4,904 | 14,224 | 7,310 |

(34) Earnings per Share

Earnings per share are calculated according to IAS 33 (“Earnings per Share”) by dividing consolidated income by the average number of ordinary shares outstanding during the reporting period. The increase in H&R GmbH & Co. KGaA’s share capital which took effect on 28 June 2017 caused the following changes in the number of ordinary shares in circulation:

| | 2017 | 2016 |
|--|------------|------------|
| Number of shares issued at the beginning of the period | 35,820,154 | 35,820,154 |
| Redemption of shares | -4 | - |
| Issuance of bonus shares effective 28 June 2017 | 716,403 | - |
| Number of shares issued at the end of the period | 36,536,553 | 35,820,154 |

Because the issuance of bonus shares does not lead to a change in resources, in order to calculate earnings per share, the weighted average number of shares in circulation must be adjusted to reflect the change in the number of ordinary shares in circulation, as if the bonus shares had been issued at the beginning of the first period shown. Accordingly, the earnings per share figure is calculated as follows:

| | 2017 | 2016 |
|--|------------|------------|
| Consolidated income attributable to shareholders in € thousand | 32,131 | 38,374 |
| Average number of shares in circulation | 36,536,553 | 36,536,553 |
| Earnings per ordinary share (undiluted) in € | 0.88 | 1.05 |
| Earnings per ordinary share (diluted) in € | 0.88 | 1.05 |

The diluted earnings per share ratio is equal to the basic earnings per share ratio, because H&R GmbH & Co. KGaA has not issued any potentially dilutive equity instruments.

Additional Notes

(35) Segment Reporting

Pursuant to IFRS 8, the business segments for reporting purposes were determined by identifying the individual divisions whose performance is monitored as part of internal reporting as a basis for management decisions.

The summary listing of the operating 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 that operate specialty refineries; at these sites, the 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.

The ChemPharm Sales segment encompasses foreign companies that process chemical-pharmaceutical raw materials and distribute these new products and other merchandise. 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.

| IN € THOUSAND | Chemical-Pharmaceutical Raw Materials | | | |
|--|---------------------------------------|---------|-----------------|---------|
| | ChemPharm Refining | | ChemPharm Sales | |
| | 2017 | 2016 | 2017 | 2016 |
| External sales | 608,325 | 558,119 | 357,162 | 328,023 |
| Consolidated sales | 8,507 | 9,083 | - | - |
| Sales revenues by segment | 616,832 | 567,202 | 357,162 | 328,023 |
| Depreciation, impairments and amortization | -25,379 | -22,688 | -16,318 | -19,023 |
| of which impairment losses | - | - | -7,633 | -10,400 |
| Appreciation | - | 6,047 | - | - |
| Interest income | - | 1 | 579 | 489 |
| Interest expense | -4,698 | -5,186 | -2,230 | -2,661 |
| Earnings before income tax | 33,590 | 42,645 | 16,312 | 18,196 |
| EBIT | 38,287 | 47,829 | 17,963 | 20,368 |
| EBITDA | 63,666 | 64,470 | 34,281 | 39,391 |
| Capital expenditures | 54,182 | 34,658 | 3,917 | 4,479 |
| Income from holdings valued at-equity | 210 | 301 | - | - |
| Shares in holdings valued at-equity | 965 | 755 | - | - |

“Other activities” are those associated with non-operating companies, as well as segments exempt from mandatory reporting. This includes H&R GmbH & Co. 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. In addition, the Other Activities segment generates income from IT services and from leasing land and buildings.

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 proceeds 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 intercompany transactions as well as intra-divisional receivables and payables.

The valuation principles for H&R GmbH & Co. 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 | | Other Activities | | Reconciliation | | Total | |
|----------|--------|------------------|--------|------------------------------|--------|-----------|---------|
| Plastics | | Other Activities | | Consolidation/Reconciliation | | | |
| 2017 | 2016 | 2017 | 2016 | 2017 | 2016 | 2017 | 2016 |
| 59,621 | 56,511 | - | - | - | - | 1,025,108 | 942,653 |
| - | - | - | - | -8,507 | -9,083 | - | - |
| 59,621 | 56,511 | - | - | -8,507 | -9,083 | 1,025,108 | 942,653 |
| -1,220 | -1,328 | -185 | -201 | - | - | -43,102 | -43,240 |
| - | - | - | - | - | - | -7,633 | -10,400 |
| - | - | - | - | - | - | - | 6,047 |
| 18 | 6 | 4,136 | 4,983 | -4,258 | -5,004 | 475 | 475 |
| -563 | -1,053 | -7,131 | -9,249 | 4,265 | 5,005 | -10,357 | -13,144 |
| 1,977 | 214 | -5,577 | -7,078 | -71 | 184 | 46,231 | 54,161 |
| 2,498 | 1,234 | -3,893 | -5,439 | -78 | 183 | 54,777 | 64,175 |
| 3,718 | 2,562 | -3,708 | -5,238 | -78 | 183 | 97,879 | 101,368 |
| 848 | 1,025 | 113 | 110 | - | - | 59,060 | 40,272 |
| - | - | 282 | 212 | - | - | 492 | 513 |
| - | - | 3,504 | 3,547 | - | - | 4,469 | 4,302 |

The H&R Group generated €459.7 million of sales revenues (previous year: €422.5 million), or more than 10% of consolidated sales revenues, with one customer in the ChemPharm Refining segment. External sales in the ChemPharm Refining

segment included €78.0 million of revenues from services rendered (previous year: €73.2 million). All other sales revenues are derived from the delivery of segment-specific products.

GEOGRAPHICAL INFORMATION

| IN € THOUSAND | Non-current assets | | External sales | |
|----------------|--------------------|----------------|------------------|----------------|
| | 31.12.2017 | 31.12.2016 | 2017 | 2016 |
| Germany | 246,070 | 220,209 | 570,142 | 526,985 |
| Rest of Europe | 3,346 | 3,444 | 117,169 | 110,008 |
| Rest of world | 85,127 | 100,457 | 337,797 | 305,660 |
| Group | 334,543 | 324,110 | 1,025,108 | 942,653 |

RECONCILIATION OF OPERATING INCOME TO CONSOLIDATED INCOME

| IN € THOUSAND | 2017 | 2016 |
|---|---------------|----------------|
| Operating income of segments (EBITDA) | 101,665 | 106,423 |
| Reconciliation | -3,786 | -5,055 |
| Operating income (EBITDA) of H&R GmbH & Co. KGaA | 97,879 | 101,368 |
| Depreciation, impairments and amortization | -43,102 | -43,240 |
| Reversals of impairments to property, plant and equipment | - | 6,047 |
| Financial income | 1,811 | 3,130 |
| Financing expenses | -10,357 | -13,144 |
| Income taxes | -16,728 | -14,874 |
| Consolidated income | 29,503 | 39,287 |

(36) 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 deposits, cash in hand, and checks.

Non-cash operating expenses and earnings and gains from disposals of property, plant and equip-

ment 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, fixed and financial assets, including holdings consolidated for the first time in the financial year.

Cash flow from financing activities includes new borrowings and repayments of financial liabilities and prepayments received from customers, as well as dividend payments.

CHANGE IN LIABILITIES FROM FINANCING ACTIVITIES

| | 31/12/2016 | Changes affecting cash flow | | | | Non-cash changes | | 31/12/2017 |
|---|------------|-----------------------------|-------------|---|--------------------|-------------------------------------|----------------------------------|------------|
| | | Repay-ments | Borrow-ings | Changes due to fluctuations in interest rates | Reclassifi-cations | Change in accrued/deferred interest | Netting against trade receivable | |
| Current liabilities to banks | 38,187 | -19,389 | 20,328 | -1,993 | 7,000 | 251 | - | 44,384 |
| Non-current liabilities to banks | 62,041 | -20,662 | 34,000 | -28 | -7,000 | - | - | 68,351 |
| Loan liabilities | 3,184 | -2,777 | - | -407 | - | - | - | - |
| Prepayments received | 2,243 | - | 3,479 | 138 | - | - | -2,381 | 3,479 |
| Total liabilities from financing activities | 105,655 | -42,828 | 57,807 | -2,290 | - | 251 | -2,381 | 116,214 |

The general form in which the statement of cash flows is presented and the reporting options exercised are unchanged from the previous period.

(37) Financial Instruments
(37.1) General Information

On the assets side, financial instruments primarily comprise cash and cash equivalents, trade receivables, and other financial assets. Financial assets available for sale are reported at fair value. Other financial assets are reported at amortized cost. The fair values of financial assets available for sale 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.

On the liabilities side, financial instruments mainly include liabilities valued at acquisition cost. The portfolio of financial instruments is reported in the statement of financial position. The level 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.

As an international company, the H&R Group 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 (46), Risk Management Policy, Capital Management and Hedging Measures.

(37.2) Information Concerning Derivatives

Derivative financial instruments are employed to hedge currency fluctuations from the operating business and risks from changes in interest rates related to financing transactions. The types of instruments employed are primarily currency forward contracts and interest rate hedging (swaps).

There were no hedge accounting items to report as of 31 December 2017.

The following tables show the reported fair values of the various derivative financial instruments as of 31 December 2017 and 31 December 2016.

NOMINAL AND MARKET VALUES OF DERIVATIVES IN 2017

| | Nominal value | Currency | Maturity | Carrying amounts 31/12/2017 in € thousand |
|---------------------------|---------------|----------|------------|---|
| Interest rate swap | T€ 40,000 | € | until 2018 | -1,216 |
| Currency forward contract | T\$ 11,155 | \$ | until 2018 | 67 |
| Currency forward contract | THKD 27,334 | HKD | until 2018 | 18 |

NOMINAL AND MARKET VALUES OF DERIVATIVES IN 2016

| | Nominal value | Currency | Maturity | Carrying amounts 31/12/2016 in € thousand |
|---------------------------|---------------|----------|------------|---|
| Interest rate swap | T€ 40,000 | € | until 2018 | -2,509 |
| Currency forward contract | T\$ 15,360 | \$ | until 2017 | -27 |

In financial year 2017, the net profit on financial instruments measured at fair value through profit or loss totaled €1,406 thousand (previous year: €2,207 thousand).

(37.3) Maturity Analysis

The H&R Group'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:

2017

| IN € THOUSAND | Carrying amount | 2018 Cash flows | | 2019 Cash flows | |
|---|-----------------|-----------------|------------|-----------------|------------|
| | | Interest | Redemption | Interest | Redemption |
| Trade payables | 83,328 | - | 83,328 | - | - |
| Liabilities to banks | 112,735 | 3,773 | 44,384 | 1,690 | 11,950 |
| Finance lease liabilities | - | - | - | - | - |
| Liabilities arising out of derivatives with no hedge accounting items | 1,216 | - | 1,216 | - | - |
| Other financial liabilities | 4,383 | - | 4,381 | - | - |

2017

| IN € THOUSAND | 2020-2022 Cash flows | | 2023-2027 Cash flows | | Cash flows 2028 and beyond | |
|---|----------------------|------------|----------------------|------------|----------------------------|------------|
| | Interest | Redemption | Interest | Redemption | Interest | Redemption |
| Trade payables | - | - | - | - | - | - |
| Liabilities to banks | 2,695 | 31,549 | 902 | 24,852 | - | - |
| Finance lease liabilities | - | - | - | - | - | - |
| Liabilities arising out of derivatives with no hedge accounting items | - | - | - | - | - | - |
| Other financial liabilities | - | - | - | 2 | - | - |

2016

| IN € THOUSAND | Carrying amount | 2017 Cash flows | | 2018 Cash flows | |
|---|-----------------|-----------------|------------|-----------------|------------|
| | | Interest | Redemption | Interest | Redemption |
| Trade payables | 77,234 | - | 77,234 | - | - |
| Liabilities to banks | 100,228 | 2,598 | 38,187 | 2,107 | 28,313 |
| Finance lease liabilities | 17 | - | 17 | - | - |
| Liabilities arising out of derivatives with no hedge accounting items | 2,537 | - | 1,337 | - | 1,200 |
| Other financial liabilities | 11,038 | 37 | 10,297 | - | 739 |

2016

| IN € THOUSAND | 2019-2021 Cash flows | | 2022-2026 Cash flows | | Cash flows 2027 and beyond | |
|---|----------------------|------------|----------------------|------------|----------------------------|------------|
| | Interest | Redemption | Interest | Redemption | Interest | Redemption |
| Trade payables | - | - | - | - | - | - |
| Liabilities to banks | 2,103 | 25,541 | 333 | 8,187 | - | - |
| Finance lease liabilities | - | - | - | - | - | - |
| Liabilities arising out of derivatives with no hedge accounting items | - | - | - | - | - | - |
| Other financial liabilities | - | 7,090 | 53 | 7,088 | - | - |

(37.4) 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 following table shows the carrying amounts of the individual financial assets and liabilities for each individual financial instrument category. Together with the disclosure on the financial instruments measured at fair value, the reconciliation against the statement of financial position items gives the reader an insight into the type and nature of the financial instruments held by H&R GmbH & Co. KGaA.

31/12/2017

| IN € THOUSAND | Valuation category according to IAS 39 | Carrying amounts | Statement of financial position valuation acc. to IAS 39 | | Carrying amount according to IAS 17 | Fair value (for information) |
|--|--|------------------|--|---|-------------------------------------|------------------------------|
| | | | Amortized cost | Fair value without impact on net income | | |
| Assets | | | | | | |
| Cash and cash equivalents | LaR | 58,952 | 58,952 | | | 58,952 |
| Trade receivables | LaR | 107,479 | 107,479 | | | 107,479 |
| Other financial assets | | | | | | |
| Loans and receivables | LaR | 3,840 | 3,840 | | | 3,840 |
| Other short-term securities | FAHft | 76 | | | 76 | |
| Financial assets available for sale | AfS | 2,082 | 1,052 | 1,030 | | |
| Liabilities | | | | | | |
| Trade payables | FLAC | 83,328 | 83,328 | | | 83,328 |
| Liabilities to banks | FLAC | 112,735 | 112,735 | | | 114,533 |
| Other financial liabilities | | | | | | |
| Finance lease liabilities | | | | | | |
| Derivatives without hedge accounting item | FLHft | 1,216 | | | 1,216 | |
| Other financial liabilities | FLAC | 4,383 | 4,383 | | | 4,383 |
| Loans and receivables | LaR | 170,271 | 170,271 | | | 170,271 |
| Financial assets available for sale | AfS | 2,082 | 1,052 | 1,030 | | |
| Financial assets held for trading | FAHft | 76 | | | 76 | |
| Financial liabilities measured at amortized cost | FLAC | 200,446 | 200,446 | | | 202,244 |
| Financial liabilities held for trading | FLHft | 1,216 | | | 1,216 | |

31/12/2016

| IN € THOUSAND | Valuation category according to IAS 39 | Carrying amounts | Statement of financial position valuation acc. to IAS 39 | | | Carrying amount according to IAS 17 | Fair value (for information) |
|--|--|------------------|--|---|--------------------------------------|-------------------------------------|------------------------------|
| | | | Amortized cost | Fair value without impact on net income | Fair value with impact on net income | | |
| Assets | | | | | | | |
| Cash and cash equivalents | LaR | 57,999 | 57,999 | | | | 57,999 |
| Trade receivables | LaR | 109,154 | 109,154 | | | | 109,154 |
| Other financial assets | | | | | | | |
| Loans and receivables | LaR | 4,289 | 4,289 | | | | 4,289 |
| Other short-term securities | FAHT | 116 | | | 116 | | |
| Financial assets available for sale | AfS | 2,129 | 1,052 | 1,077 | | | |
| Liabilities | | | | | | | |
| Trade payables | FLAC | 77,234 | 77,234 | | | | 77,234 |
| Liabilities to banks | FLAC | 100,228 | 100,228 | | | | 103,947 |
| Other financial liabilities | | | | | | | |
| Finance lease liabilities | | 17 | | | | 17 | |
| Derivatives without hedge accounting item | FLHFT | 2,537 | | | 2,537 | | |
| Other financial liabilities | FLAC | 11,039 | 11,039 | | | | 11,039 |
| Loans and receivables | | | | | | | |
| Loans and receivables | LaR | 171,442 | 171,442 | | | | 171,442 |
| Financial assets available for sale | | | | | | | |
| Financial assets available for sale | AfS | 2,129 | 1,052 | 1,077 | | | |
| Financial assets held for trading | | | | | | | |
| Financial assets held for trading | FAHT | 116 | | | 116 | | |
| Financial liabilities measured at amortized cost | | | | | | | |
| Financial liabilities measured at amortized cost | FLAC | 188,501 | 188,501 | | | | 188,501 |
| Financial liabilities held for trading | | | | | | | |
| Financial liabilities held for trading | FLHFT | 2,537 | | | 2,537 | | |

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 report-

ing 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, 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:

2017

| IN € THOUSAND | Loans and receivables | Financial assets held for trading | Financial liabilities held for trading | Financial liabilities measured at amortized cost | Total |
|---------------------------------|-----------------------|-----------------------------------|--|--|---------------|
| Interest income | 391 | 1 | - | - | 392 |
| Interest expense | - | - | -1,351 | -7,496 | -8,847 |
| Impairments | 37 | - | - | - | 37 |
| Other financial expenses/income | -284 | - | 1,406 | -277 | 845 |
| Net income/(loss) | 144 | 1 | 55 | -7,773 | -7,573 |

2016

| IN € THOUSAND | Loans and receivables | Financial assets held for trading | Financial liabilities held for trading | Financial liabilities measured at amortized cost | Total |
|---------------------------------|-----------------------|-----------------------------------|--|--|---------------|
| Interest income | 457 | 1 | - | - | 458 |
| Interest expense | - | - | -2,510 | -8,128 | -10,638 |
| Impairments | 56 | - | - | - | 56 |
| Other financial expenses/income | 478 | - | 2,207 | -164 | 2,521 |
| Net income/(loss) | 991 | 1 | -303 | -8,292 | -7,603 |

There were no reclassifications to the income statement relating to financial instruments available for sale; losses recognized in other comprehensive income totaled €32 thousand (previous year: gain of €1 thousand).

(37.5) Additional Information Concerning Financial Instruments

GAUDLITZ GmbH holds financial assets available for sale in the form of securities that were stated at fair value as of the reporting date. The reported market value was €1,030 thousand (previous year: €1,075 thousand).

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 and last 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 GmbH & Co. KGaA measured at fair value are allocated to the aforementioned levels by category, as follows:

| IN € THOUSAND | 31/12/2017 | | | 31/12/2016 | | |
|---|--------------|--------------|----------|--------------|--------------|----------|
| | Level 1 | Level 2 | Level 3 | Level 1 | Level 2 | Level 3 |
| Assets | | | | | | |
| Financial assets available for sale | 1,033 | - | - | 1,075 | - | - |
| Financial assets held for trading | 76 | - | - | 116 | - | - |
| Derivatives without hedge accounting item | - | 85 | - | - | - | - |
| Total | 1,109 | 85 | - | 1,191 | - | - |
| Liabilities | | | | | | |
| Derivatives without hedge accounting item | - | 1,216 | - | - | 2,509 | - |
| Total | - | 1,216 | - | - | 2,509 | - |

The Level 2 financial liabilities are interest rate swaps carried on the statement of financial position at their fair value. The fair values are determined using observable market interest rate curves. There were no reclassifications among the individual levels in financial year 2017.

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 | 31/12/2017 | | | 31/12/2016 | | |
|----------------------|------------|---------|---------|------------|---------|---------|
| | Level 1 | Level 2 | Level 3 | Level 1 | Level 2 | Level 3 |
| Liabilities | | | | | | |
| Liabilities to banks | - | 114,533 | - | - | 103,947 | - |

The fair values are determined using observable market interest rate curves. The expected cash flows were discounted accordingly. There were no reclassifications among the individual levels in financial year 2017.

No offsetting between financial assets and financial liabilities took place, since no such offset agreements exist.

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 individual impairments and global impairments. Non-recoverable receivables are derecognized and the impairment recorded in the allowance for doubtful accounts (contra-asset account) 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.

(38) Order Commitments

Capital expenditures for which contractual obligations existed on the reporting date, but which have not yet been incurred, totaled €20,188 thousand as of 31 December 2017 (previous year: €13,567 thousand).

(39) Contingent Liabilities

On the reporting date, H&R GmbH & Co. KGaA had joint liability for pension commitments totaling €45 thousand (previous year: €50 thousand).

A portion of the operating premises at the Hamburg production site 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 the 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; as a result, no outflow of resources is assumed 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 raw materials to the specialty refinery operated at the Hamburg-Neuhof site, the company maintains an extensive tank farm which is fully registered as a so-called tax warehouse under customs and tax laws. Due to the existence of a tax warehouse, the timing of the accrual of an energy tax is shifted from the date on which energy products – mainly petroleum – are placed into storage to the date on which they are withdrawn from the tax warehouse, and therefore to the date on which they are consumed as raw materials by the specialty refinery. During a routine audit of the tax warehouse by the competent customs administration, the customs administration complained about discrepancies between the previously reported tanks and the currently existing tanks. They concluded that specific tanks had not been part of the tax warehouse in calendar years 2014 and 2015 and that this therefore resulted in energy taxes

totaling €9.0 million under Section 8 of the Energy Tax Act (EnergieStG). The legal opinion issued by the customs administration has also been evaluated by experts with whom the company consulted. The H&R Group does not consider it highly probable that the energy tax claim will be enforceable (contingent liability). If, contrary to expectations, the energy tax claim is enforceable, it would be offset by €9.0 million of contingent receivables claimed under applications for relief.

The prior-year financial statements contained €1.78 million of probability-weighted contingent liabilities and receivables for value-added taxes relating to deliveries of lubricants. In 2017, this issue with the tax authorities was resolved and both the contingent liability and the corresponding contingent receivable were eliminated.

(40) Other Financial Obligations

Financial obligations under long-term rental and lease agreements and other obligations stretching over several years are shown in the following table (nominal amounts):

| IN € THOUSAND | 31/12/2017 | 31/12/2016 |
|----------------------------|---------------|---------------|
| Due within one year | 12,539 | 10,223 |
| Due > 1 year and < 5 years | 20,244 | 16,368 |
| Due > 5 years | 27,350 | 23,862 |
| Total | 60,133 | 50,453 |

Other financial liabilities at the Hamburg site mainly include a long-term lease agreement with Hamburg Port Authority, Hamburg.

In addition, other financial liabilities at the Salzbergen location include contracts for the delivery of natural gas, compressed air and nitrogen as well as maintenance and servicing contracts for the process control system.

Further information about finance and operating lease agreements can be found in Note (11).

(41) Governance Bodies of H&R GmbH & Co. KGaA

EXECUTIVE BOARD OF H&R KOMPLEMENTÄR GMBH

| | Membership of Supervisory and Advisory Boards |
|--|--|
| Niels H. Hansen Chairman of the Executive Board Hamburg | - |
| Detlev Wösten Member of the Executive Board Buchholz | Member of the Supervisory Board of Glasgaard-AG, Lollar/Salzböden |

SUPERVISORY BOARD OF H&R GMBH AND 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, Partner in Weiss-Walter-Fischer-Zernin, Munich | Member of the Supervisory Board of Togal Werk AG, Munich |
| Sven Hansen 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 |
| Dr.-Ing. Peter J. Seifried Chemical Engineer, Independent Consultant | Chairman of the Executive Board of the German Lubricants Industry Association (Verband der Schmierstoffindustrie e.V./VSI) Elected Member of the Executive Board of UNITI, the German Association of Small and Medium-Sized Lubricant Manufacturers and Retailers (Bundesverband mittelständischer Mineralölunternehmen e.V.) Member of the Board of Trustees and the Board of Directors of the Oest Group Member of the Advisory Board, Hermann Lothar + Co Mineralölhandelsgesellschaft mbH, Hamburg Member of the Advisory Board, Tiramizoo GmbH, Munich |
| Dr. Hartmut Schütter Consulting Engineer, Schwedt/Oder | - |

SUPERVISORY BOARD OF H&R GMBH & CO. KGAA (EMPLOYEE REPRESENTATIVES)

| | Membership of Supervisory and Advisory Boards |
|--|---|
| Reinhold Grothus Works Council Chairman at H&R ChemPharm GmbH, Salzbergen | - |
| Holger Hoff (Since 26/4/2017) Works Council Chairman at H&R Ölwerke Schindler GmbH, Hamburg | - |
| Matthias Eri (Until 26/4/2017) GAUDLITZ GmbH, Coburg | - |
| Harald Januszewski GAUDLITZ GmbH, Coburg | - |

(42) Disclosures of Relationships with Related Parties

Related-party transactions were carried out on arm's-length terms. There were no transactions of material significance with unconsolidated subsidiaries.

Most transactions with related parties involve the companies of the Hansen Family (hereinafter referred to as Hansen & Rosenthal).

There is a mutual business relationship with Hansen & Rosenthal. The supply of goods for chemical-pharmaceutical products from the Salzbögen 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. In addition, Hansen & Rosenthal receives a commission fee for marketing certain products from the Hamburg site which are delivered under a long-term commission contract. Moreover, H&R Group subsidiaries provide production, IT and staffing services to the Hansen & Rosenthal Group.

Sales revenues from goods and services to Hansen & Rosenthal totaled €465,050 thousand in financial year 2017 (previous year: €427,362 thousand). Most of this amount was for supplies of chemical-pharmaceutical products (2017: €381,719 thousand; previous year: €349,290 thousand) and for contract manufacturing services (€77,965 thousand; previous year: €73,177 thousand). Goods and services purchased from Hansen & Rosenthal in financial year 2017 amounted to €97,421 thousand (previous year: €94,513 thousand). The bulk of this amount was for purchases of chemical-pharmaceutical products (€88,335 thousand; previous year: €86,153 thousand).

As of 31 December 2017, receivables due from Hansen & Rosenthal totaled €47,083 thousand (previous year: €47,596 thousand); liabilities owed to Hansen & Rosenthal amounted to €5,170 thousand (previous year: €15,026 thousand).

Goods and services provided to joint ventures generated €860 thousand in sales revenues in financial year 2017 (previous year: €860 thousand). Goods and services purchased from joint ventures in financial year 2017 amounted to €6,575 thousand (previous year: €6,168 thousand), mainly for energy and IT services.

As of 31 December 2017, receivables due from joint ventures totaled €253 thousand (previous year: €736 thousand); liabilities owed to joint ventures amounted to €118 thousand (previous year: €169 thousand).

Supervisory Board and Executive Board. Key management positions are limited to the Supervisory Board and Executive Board of H&R GmbH & Co. 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 €1,323 thousand in financial year 2017 (previous year: €1,151 thousand). Of this sum, the performance-related components of the remuneration accounted for €583 thousand (previous year: €472 thousand) and non-performance-related components accounted for €740 thousand (previous year: €679 thousand). The performance-related remuneration includes a sustainability component. 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 €38 thousand (previous year: €127 thousand) owed to H&R Komplementär GmbH.

Former members of the Executive Board and their survivors received payments totaling €207 thousand during the financial year (previous year: €207 thousand). For former members of the Executive Board and their survivors, pension commitments amounted to €3,394 thousand (previous year: €3,616 thousand).

Remuneration for members of the Supervisory Board included basic remuneration plus additional compensation for committee work and fees for attending meetings and totaled €465 thousand (previous year: €465 thousand).

In addition to their Supervisory Board remuneration, the employee representatives on the Supervisory Board receive fees that are not related to their work for the Supervisory Board. These fees totaled €185 thousand in financial year 2017 (previous year: €198 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 31 December 2017.

Data on the remuneration of members of the Executive Board and the Supervisory Board are provided in the Remuneration Report, which is an integral part of the Combined Management Report. The Remuneration Report can be found in the section on other legally required disclosures on page 72.

In October of 2012, H&R GmbH & Co. KGaA established an Advisory Board which advises the Executive Board. Expenses of €120 thousand were incurred for the activities of the Advisory Board in 2017 (prior year: €127 thousand). In 2017, fees paid to members of the governing bodies of H&R GmbH & Co. KGaA within the scope of consultancy agreements amounted to €98 thousand (previous year: €98 thousand). As of 31 December 2017, liabilities owed to members of the governing bodies totaled €465 thousand (previous year: €550 thousand).

(43) 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 2017. It is published on the Internet at www.hur.com and is included in this Annual Report.

(44) Group Audit Fees

The following expenses for the services provided by Warth & Klein Grant Thornton AG Wirtschaftsprüfungsgesellschaft were recognized for the financial year:

| IN € THOUSAND | 31/12/2017 | 31/12/2016 |
|---|-------------------|------------|
| Audits | 447 ¹⁾ | 327 |
| Other certification or valuation services | 18 | 4 |
| Tax counseling | - | - |
| Other services | - | - |
| Total | 465 | 331 |

¹⁾ of which €25 thousand relating to the previous year

The 2017 fee for auditing services charged by the auditors covers the statutory audit of the annual financial statements and the consolidated financial statements of H&R GmbH & Co. KGaA as well as the statutory and voluntary audits of annual financial statements, the audit of interim financial statements, and the audit of an end-of-period statement of financial position within the meaning of Section 17, paragraph 2 of the Reorganization Act (UmwG) for the German subsidiaries of H&R GmbH & Co. KGaA. The other certification services primarily refer to audits under the German Renewable Energy Sources Act for subsidiaries of H&R GmbH & Co. KGaA.

(45) 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, 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 Chemisch-Pharmazeutische Spezialitäten GmbH
- GAUDLITZ 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
- SYTHENGRUND Wasagchemie Grundstückerwertungs-gesellschaft Haltern mbH
- H&R Group Services GmbH

(46) Risk Management Policy, Capital Management and Safeguards

The operating business and the financing transactions of the H&R Group, as a company with international operations, are subject to various financial risks. In particular, these include liquidity risk and counterparty default risk as well as risks associated with fluctuations in raw material prices, currency exchange rates, and interest rates. These risks are limited through systematic risk management measures, including hedging transactions.

H&R GmbH & Co. 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 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. The purchase of derivative financial instruments for speculative purposes is not permitted. All transactions with derivative financial instruments must be approved by the Executive Board.

The Group companies are subject to strict risk management. Dealing authorizations, responsibilities and supervision procedures are established on a binding basis in internal guidelines. 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. Credit risk exposure to contractual partners is investigated systematically when a contract is signed and is monitored on an ongoing basis. In addition, credit risk is reduced using appropriate types of collateral.

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 GmbH & Co. KGaA strives to maintain a capital structure that optimizes the costs of capital provided by our investors and our lenders, while retaining strategic flexibility. Further important control parameters applicable to our capital structure are net debt and net gearing, which refers to the ratio between net debt and equity. These ratios are constantly monitored by the Executive Board.

The borrower's note loans, the syndicated loans and the bilateral loans require the company to meet financial covenants relating to its capital base and the ratio of net debt to operating income (EBITDA).

CAPITAL STRUCTURE

| | 2017 | 2016 | 2015 | 2014 | 2013 |
|-------------------|------|------|------|------|------|
| Net debt/EBITDA | 0.55 | 0.41 | 1.00 | 3.47 | 2.24 |
| Equity ratio in % | 51.7 | 49.0 | 45.4 | 35.1 | 31.8 |
| Net gearing in % | 16.0 | 15.1 | 31.4 | 47.2 | 42.2 |

Liquidity Risks. The H&R Group 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 GmbH & Co. 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 further. Based on the information currently available, existing del credere risks are covered through bad debt provisions/allowances for doubtful accounts.

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 financial transactions with banks that have good credit ratings and by spreading larger transactions among several banks.

Raw Materials Price Risks. The H&R Group 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 refineries specify fixed prices for a period of three months at most. Moreover, the production process at a specialty refinery 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 time 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 in the ChemPharm Refining and ChemPharm Sales segments (see Note (35)).

Currency Risks. The international orientation of the H&R Group 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 transactions 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\$ |
| 31/12/2017 | -9,052 |
| 31/12/2016 | -10,512 |

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 statement of financial position.

The following table shows the effects on the income statement and on equity of exchange rate fluctuations in the currencies most significant to the H&R Group. The effects of projected cash flows for the next twelve months are not included.

| IN € THOUSAND | Impact on: | 31/12/2017 | 31/12/2016 |
|--------------------|-------------------------------|------------|------------|
| | | US\$ | US\$ |
| Exchange rate +10% | Consolidated Income Statement | 823 | 956 |
| | Shareholders' equity | 752 | 921 |
| Exchange rate -10% | Consolidated Income Statement | -1,006 | -1,168 |
| | Shareholders' equity | -1,077 | -1,125 |

Interest Rate Risks. The H&R Group 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. Such transactions may also be entered into on a decentralized basis within the H&R Group, but require the prior approval of the Executive Board.

A sensitivity analysis for interest rate risk is performed on financial liabilities with variable interest rates. As of the 31 December 2017 reporting date, a hypothetical 0.5% (or 50 basis points) increase in the interest rate would have increased interest expense by €200 thousand (previous year: €200 thousand) and would have reduced the amount of equity shown accordingly.

(47) Events after the Reporting Date

During the period between 31 December 2017 and the date of approval of the consolidated financial statements, there were no events with a material impact on the net assets, financial position or results of operations of H&R GmbH & Co. KGaA.

(48) Approval of the Financial Statements

The financial statements were approved and released for publication by the Executive Board on 21 February 2018.

Salzbergen, 21 February 2018

The Executive Board



Niels H. Hansen
Chairman
of the Executive Board



Detlev Wösten
Member
of the Executive Board

Independent Auditor's Report

To H&R GmbH & Co. KGaA

Report on the Audit of the Consolidated Financial Statements and of the Consolidated 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 2017, and the consolidated income statement and consolidated statement of comprehensive income, the consolidated statement of changes in shareholders' equity, the consolidated cash flow statement and the notes to the consolidated financial statements for the financial year from 1 January 2017 to 31 December 2017 including a summary of significant accounting policies. In addition, we have audited the group management report of H&R GmbH & Co. KGaA which has been combined with the management report (hereinafter: group management report) for the financial year from 1 January 2017 to 31 December 2017. In accordance with the German legal requirements, we have not audited the content of the statement on Corporate Governance pursuant to Section 289f HGB [Handelsgesetzbuch: German Commercial Code] and Section 315d HGB as well as the non-financial statement pursuant to Section 315b HGB.

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 para. 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 2017 and of its financial performance for the financial year from 1 January 2017 to 31 December 2017, 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 content of the above listed Declaration on Corporate Governance and Corporate Governance Report pursuant to Section 289f HGB and Section 315d HGB as well as the non-financial statement pursuant to Section 315b HGB.

Pursuant to Section 322 para. 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). 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 2017 to 31 December 2017. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, we do not provide a separate audit opinion on these matters.

From our point of view the following matters were most significant during our audit:

- Impairment of goodwill and other intangible assets
- Presentation of risks from energy taxes in the consolidated financial statements

Our presentation of the key audit matters has been structured as follows:

- Financial statement risk
- Audit approach
- Reference to related disclosures

Impairment of Goodwill and other Intangible Assets

Financial Statement Risk

In the consolidated financial statements of H&R GmbH & Co. KGaA under the statement of financial position item 'Goodwill' goodwill is reported with a book value amounting to EUR 22.4 million. Furthermore, under the statement of financial position item 'Other intangible assets' primarily

customer relationships with a book value of EUR 8.9 million and production technology know how with a remaining book value of EUR 8.0 million are reported. The company allocates those assets to the relevant cash generating units (hereinafter: "CGU") of the respective business segments. At the balance sheet date these assets undergo an impairment test in which the values in use are compared to the book values of the respective cash generating units. To determine the values in use of the respective CGUs, the discounted cash flow method is applied. The future cash flows discounted are derived from the mid-term planning of the H&R group which was adopted by the Management of H&R GmbH & Co. KGaA and approved by the Supervisory Board. The discount rate is determined by using the weighted average capital costs of the respective CGU.

The Management of H&R GmbH & Co. KGaA concluded that with one exception the respective goodwill and the book values of the CGUs in total are covered by the discounted expected cash flows at the balance sheet date. However for the CGU H&R China of the segment ChemPharm Sales impairments on goodwill amounting to EUR 2.5 million and on other intangible assets of this CGU amounting to EUR 5.2 million were required.

The values in use are accounting estimates which are mainly influenced by the estimation of future cash flows and the discount rate applied and are subject to significant estimation uncertainties. Against this background and due to the complexity of the implementation of the valuation method, in our view this matter was of particular importance in our audit.

Audit Approach

As part of our audit, among other things, we analysed the methodical approach for the impairment test and the determination of the weighted average capital costs. We also evaluated the derivation of the forecasted cash flows from the mid-term planning. We analyzed the planning assumptions of the mid-term planning for consistency

and reasonableness and assessed the feasibility of significant planned measures against the background of actual and expected circumstances of the relevant markets and our understanding of the relevant economic environment of the CGUs. Due to the sensitivity of the values in use determined in regard to changes of the discount rate, we analysed the parameters used and evaluated the calculation model to determine the discount rate. Additionally we performed our own sensitivity analyses for specific CGUs; the selection was based on the amount of deviations between the respective book values from the values in use as well as on qualitative aspects.

Reference to related Disclosures

The disclosures of H&R Group regarding goodwill and other intangible assets as well as their recoverability are presented in section 12 of the notes to the consolidated financial statements.

Presentation of Risks from Energy Taxes in the Consolidated Financial Statements**Financial Statement Risk**

The company runs a specialty refinery at Hamburg Neuhof with extensive tank farm storage for raw materials, which in the view of the Management of the company is fully registered as tax storage for customs and charges. The existence of tax storage shifts the timing of energy taxation from the time of storage to the time of removal of the energy products, mainly mineral oil, from the tax storage and thus to the point of consumption as a raw material in the specialty refinery. During a routine audit of the tax storage by the responsible customs authorities, deviations between former declared tanks and the actual existing tanks were noted. The authorities concluded that single tanks have not been part of the tax storage in the years 2014 and 2015 and therefore pursuant to Section 8 EnergieStG [Energiesteuergesetz: German Energy Tax Law] energy tax amounting to EUR 9.0 million was due. The legal position of the customs authorities is disputed by the Management. Whether due to the divergent legal interpretations a provision

is required to cover the energy tax risk and if so to what extent, is highly dependent on the estimation and assumptions of the Management due to the complexity of the relevant legislation and specifically uncertain legal terms. Against this background and due to the high monetary amounts involved, the energy tax risks and their presentation as contingent liabilities and contingent assets in our view were of particular importance in our audit.

Audit Approach

As part of our audit, among other things, we assessed the process implemented by the company to determine and evaluate the outcome of the dispute with the customs authorities which secures the presentation of energy tax issues in the consolidated financial statements. Moreover, we had discussions with the departments of the H&R Group involved in order to receive explanations on current developments and the reasons for the corresponding estimations. Additionally, we critically assessed two expert opinions which were obtained by the H&R Group and discussed further questions resulting from that with representatives of the company and one of the two experts. The development of the respective energy tax issues including the estimation of the Management regarding the possible outcome of the dispute with the customs authorities was made available to us in writing by the H&R Group. We analysed the estimation of the Management regarding this energy tax dispute based on the potential bases for legal claims raised to the H&R Group by the customs authorities.

Reference to related Disclosures

Disclosures concerning the contingent liabilities and contingent assets regarding the energy tax dispute are presented in section 39 of the notes to the consolidated financial statements of H&R Group.

Other Information

The Management is responsible for the other information. The other information comprises the following information which we obtained prior to the date of this auditor's report:

- the non-financial statement pursuant to Section 315b HGB
- the Corporate Governance Report pursuant to Section 3.10 of the German Corporate Governance Code including the Declaration on Corporate Governance and Corporate Governance Report pursuant to Section 289f HGB and Section 315d HGB
- the Responsibility Statement pursuant to Section 297 para. 2 sentence 4 HGB regarding the consolidated financial statements and the Responsibility Statement pursuant to Section 315 para. 1 sentence 5 HGB regarding the group management report

as well as the remaining parts of the annual report expected to be made available after that date to us except for the consolidated financial statements and the group management report and our auditor's report.

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 or our knowledge obtained in the audit, or
- otherwise appears to be materially misstated.

If, based on the work we have performed on the other information that we obtained prior to the date of this auditor's report, 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 Management and the Supervisory Board for the Consolidated Financial Statements and the Group Management Report

The Management 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 para. 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 Management 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 or error.

In preparing the consolidated financial statements, the Management 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, they are 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 Management 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 Management 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 for one 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 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 Management and the reasonableness of estimates made by the Management and related disclosures.
- Conclude on the appropriateness of the Management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in the auditor's report to the related disclosures in the consolidated financial statements and in the 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 state-

ments 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 para. 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 Management in the group management report. On the basis of sufficient appropriate audit evidence we evaluate, in particular, the significant assumptions used by the Management as a basis for the prospective information, and evaluate the proper derivation of the prospective information from

these assumptions. We do not express a separate audit opinion on the prospective information and on the assumptions used as a basis. There is a substantial unavoidable risk that future events will differ materially from the prospective information.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit. We also provide those charged with governance with a statement that we have complied with the relevant independence requirements, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, the related safeguards.

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

Further Information pursuant to Section 10 of the EU Audit Regulation

We were elected as group auditor by the annual general meeting on 18 May 2017. We were engaged by the Supervisory Board on 27 September 2017. We have been the group auditor of H&R GmbH & Co. KGaA 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 Section 11 of the EU Audit Regulation (long-form audit report).

German Public Auditor Responsible for the Engagement

The German Public Auditor responsible for the engagement is Cornelia von Oertzen

Hamburg, 21 February 2018

Warth & Klein Grant Thornton AG
Wirtschaftsprüfungsgesellschaft

Dr. Senger

Wirtschaftsprüfer

[German Public Auditor]

von Oertzen

Wirtschaftsprüfer

[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 presents 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, 21 February 2018

The Executive Board



Niels H. Hansen
Chairman
of the Executive Board



Detlev Wösten
Member
of the Executive Board

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Contact, Imprint, Disclaimer

Glossary

ASEAN-5

Association of Southeast Asian Nations (Malaysia, Indonesia, Thailand, Singapore and the Philippines).

ATRES

Short for **A**tmospheric **R**esidue, also known as “long residue”. It is a by-product of crude oil distillation and is used as a feedstock by H&R to manufacture primary products at its refineries.

Barrel

Unit of measurement for liquid; in relation to oil products, a barrel contains 159 litres.

Blending

In the production of lubricants, blending refers to the mixing of oil and additives to form automotive and industrial lubricants.

Brent

Leading type of oil from the North Sea.

Cash flow

Key financial figure: cash balance of inflow and outflow of funds; split between current operations, investment activity, and financing activity.

CONCAWE Standard

Safety figures LWIF (**l**ost **w**orkday **i**njury **f**requency) and LWIS (**l**ost **w**orkday **i**njury **s**everity). The LWIF figure shows the frequency of accidents (number of work accidents with at least one day lost for every one million working hours). The LWIS figure shows the severity of accidents (number of days lost per work accident).

Earnings per Share

Key financial figure: net income for year divided by the weighted average number of outstanding shares; shows how high the profit is for each share.

EBITDA

(**E**arnings **b**efore **i**nterest, **t**axes, **d**epreciation and **a**mortisation) Key financial figure: defined as consolidated earnings before interest earnings, taxes on income as well as depreciation on tangible assets and amortisation of goodwill. In the case of H&R, operation income.

Equity Ratio

Key financial figure: shows the ratio of equity to total assets and represents the finance structure.

Free cash flow

Key performance indicator: the sum of cash flow from operating activities and cash flow from investing activities; provides information about the liquid funds held after capital expenditure has been deducted.

German Corporate Governance Code

Recommendations and suggestions on conduct from the governmental commission of the same name on corporate management and supervision for listed companies in Germany.

Group I Refinery

Refineries can be divided into various groups (Groups I to IV). This is done by reference to various properties of the base oil, such as the sulphur content and the viscosity index.

Net debt

The parameters defining net debt as a basis for calculating covenants are different to those defining the key figure net financial debt – financial liabilities less cash and cash equivalents, current financial assets and market value of derivative financial instruments – and result from the respective financing agreements. Thus, derivatives are not included, for example; net debt indicates the amount of debt if and when all cash and cash equivalents were used for debt redemption.

Net Gearing Ratio

Key performance indicator: the ratio of net financial debt to equity; provides an insight into the financing structure.

Net Working Capital

Key performance indicator: net working capital is defined as trade receivables plus inventories less trade payables.

Paraffin

Products of special refinery production: paraffin is oil-based wax which is used in over 100 different industries and sectors for manufacturing a wide variety of products.

Plasticisers

Product of special refinery production: extracts are used as softening agents in the rubber and caoutchouc industry (in particular in tyre production).

Propane Deasphalting Unit (PDU)

Extraction unit which produces deasphalted oil and asphalt from vacuum residue using propane as solvent.

REACH

Registration, **E**valuation, **A**uthorization, and **R**estriction of **C**hemicals. The acronym stands for the name of the EU regulation on chemical substances.

Return on Capital Employed (ROCE)

Key performance indicator: the ratio of EBIT to average capital employed (equity plus net financial debt, pension provisions, and other non-current provisions); crucial for value-based corporate management at H&R AG.

Return on Equity

Key performance indicator: the ratio of profit (consolidated net profit before minority interests) to average equity; provides information about the amount of interest paid on capital from equity providers.

Speciality Refinery Activities

Production of highly refined raw materials for the chemical and pharmaceutical industries using oil-based materials.

Syndicated Loan

Granting of a fixed credit line for a specified period of time by a consortium of several banks.

Tool

Designation for the injection mould in the manufacture of plastic parts.

Value Creation

Increase in value of goods used in the production process.

VGO

Vacuum **G**as **O**il, like ATRES, is created from the process of refining crude oil and is also used as an input material for H&R's refineries.

WACC

Weighted **A**verage **C**ost of **C**apital.

White Oil

Product of speciality refinery production: highly refined and purified oil which is used especially as an input material.

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Six-Year Overview H&R Group Key Figures (IFRS)

T. 36

| | | 2017 | 2016 | 2015 | 2014 | 2013 | 2012 |
|--|-----------|---------|-------|-------|----------|----------|----------|
| Sales volume (main products) ¹⁾ | KT | 832 | 849 | 762 | 697 | 734 | 839 |
| Sales revenue | € MILLION | 1,025.1 | 942.7 | 982.9 | 1,058.60 | 1,214.40 | 1,228.90 |
| Operating income (EBITDA) | € MILLION | 97.9 | 101.4 | 85.4 | 31.5 | 32.6 | 49.4 |
| EBIT | € MILLION | 54.3 | 64.2 | 48.7 | 5.8 | -4.1 | 25.5 |
| Earnings before income tax | € MILLION | 46.2 | 54.2 | 34.2 | -7.8 | -16.8 | 1.6 |
| Consolidated net income | € MILLION | 29.5 | 39.3 | 26.8 | -15.6 | -14 | 0.4 |
| Consolidated income attributable to shareholders | € MILLION | 32.1 | 38.4 | 26.9 | -15.4 | -14 | 0.5 |
| Consolidated income per share (undiluted) in € | € | 0.88 | 1.05 | 0.75 | -0.49 | -0.47 | 0.02 |
| Dividend per share | € | 0.4 | 0 | 0 | 0 | 0 | 0 |
| Market capitalisation as at 31/12 | € MILLION | 553.4 | 535.5 | 330.9 | 270.1 | 260.7 | 354.4 |
| Balance sheet total | € MILLION | 662.6 | 648.2 | 628.8 | 706.6 | 594.7 | 623.1 |
| Net working capital | € MILLION | 153.3 | 153.4 | 139.5 | 127.4 | 104.2 | 188.9 |
| Equity | € MILLION | 342.7 | 317.4 | 285.4 | 248.9 | 189.2 | 213.3 |
| Equity ratio | % | 51.7 | 49 | 45.4 | 35.2 | 31.8 | 34.2 |
| Net debt | € MILLION | 53.7 | 42.1 | 86.7 | 107.3 | 73.1 | 146.3 |
| Net gearing | % | 16.0 | 15.1 | 31.4 | 45.8 | 38.6 | 68.6 |
| Operating cash flow | € MILLION | 46.2 | 75.5 | 56.4 | -0.4 | 88.9 | 84.7 |
| Free cash flow | € MILLION | -11.9 | 36.7 | 28.4 | -10.5 | 72.8 | 50.9 |

¹⁾ Chemical-Pharmaceutical Raw Materials Division.

Financial Calendar



www.hur.com

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.

| | |
|------------------|---------------------------------------|
| 21 March 2018 | Publication of Annual Report 2017 |
| 15 May 2018 | Publication of Q1 2018 |
| 24 May 2018 | Annual Shareholders' Meeting, Hamburg |
| 15 August 2018 | Publication of Q2 2018 |
| 15 November 2018 | Publication of Q3 2018 |

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Disclaimer

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