

2019
NON-FINANCIAL REPORT



H&R GMBH & CO. KGAA



More than 800 chemical-pharmaceutical specialty products are produced in H&R's refineries.

REPORTING PROFILE AND ENVIRONMENT OF H&R

This non-financial report (NFR) of the H&R Group contains disclosures in accordance with Sections 289b-e of the German Commercial Code (HGB) in conjunction with 315b-c HGB 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. This year, it has been incorporated into the corporate magazine. All NFR content can be clearly identified by the use of a gray background.

The magazine, including the NFR, is also published at www.hur.com.

LEGAL REQUIREMENTS AND FRAMEWORK

No international framework has been applied in preparing the NFR, as the H&R Group's sustainability reporting

process is still under development. We have, however, taken the Global Reporting Initiative (GRI) Standards as a basis.

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, for example, in the automotive industry.

Today, we manufacture and sell our products worldwide through an organically developed network. We rely on our own facilities and sales/distribution units, as well as on production partnerships. We aim to use this strategy to boost the share in revenue attributable to ChemPharm Sales.

In the ChemPharm Refining segment, we are currently faced with the challenge of mounting competition in the base oil market and the effects of the simmering trade war between the United States and China. As a result, we implemented measures to enhance the operating model of the Hamburg refinery at the end of 2019. We aim to rise to the competition in the base oil segment, for example, by significantly reducing the proportion of base oils we produce and instead focusing on the production of high-quality specialty products.

At the same time, we are focusing more heavily on the topic of sustainability with our three-pillar strategy. This strategy outlines our transformation from using predominantly petroleum-based raw materials, to increasingly using renewable components, to producing synthetic qualities from green hydrogen and green carbon.

As far as our production sites in Germany are concerned, we have set ourselves the logical long-term target of implementing the “Green Refinery” concept. This reflects our efforts to reduce the proportion of combustion products to an absolute minimum and to significantly expand the production of these synthesized specialty products over the next ten years.

Following the implementation of personnel restructuring measures at the Coburg headquarters at the end of 2019, we are aiming to achieve a sustainable improvement in our competitive standing in the Plastics Division, particularly in toolmaking. Within this context, we plan to establish H&R KGaA as a producer of durable plastic components in response to the growing trend toward e-mobility.

We refer to this overarching strategic approach as G.A.T.E., as in “Gateway to the Future”: in line with our objective of achieving further internationalization, we see ourselves as a company that thinks on a Global scale. 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 sites are always on the cutting edge of technological development 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 representing a key step toward sustainability.

SUPPLIER MANAGEMENT

The H&R production and processing sites can call upon a flexible network of suppliers to secure their raw material requirements. These tend to be other refineries, some of which are operated by renowned oil companies operating in the fuel refining sector.

We share an H&R-wide Code of Conduct with our suppliers, expecting them to respect and adhere to the principles set out in the Code. The Code is based on the recognized principles of sustainability: economic growth with a view to the long term, respect for the environment, the careful use of resources, employee protection and the quest to improve quality of life for present and future generations alike.








Compliance with this Code of Conduct is an integral part of the supplier selection and evaluation process within the H&R Group. We use supplier audits based on ISO 9001 to check compliance with the Code, meaning that no supplier is added to our system without an audit being conducted. If complaints or indications that the Code has been breached arise during the course of the contractual relationship, the audit is repeated. If we discover any material breaches of the Code of Conduct, H&R KGaA also considers this to constitute a breach of the contractual relationship as a whole. The first step in such cases involves asking the supplier to remedy the breach. If the supplier fails to meet our request to our satisfaction, we reserve the right to terminate the contractual relationship.

MAJOR RISKS

In order to comply with the CSR Directive Implementation Act (CSR-RUG), we have to report the material risks associated with our business activities if they are very likely to materialize and could have a serious negative impact on non-financial aspects and on the business model. 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 identifying and managing risks. All 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:

POTENTIAL FINANCIAL IMPACT ¹⁾	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, for example, if EBITDA falls below €50.0 million in 2020.
Significant: substantial negative effects on business activity, financial position, results of operations and cash flows, for example, if EBITDA falls below €50.0 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 €50.0 million.

2) 1–33%: unlikely; 34–66%: possible; 67–99%: likely

 Low risk  Medium risk  High risk



Our own large-scale tank farm allows for the intermediate storage of our core and by-products.

In the risk process, a distinction is made between macroeconomic and industry risks, operating and corporate strategy risks, and financial risks. The system 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. The aforementioned risks are already being managed

by our Group-wide risk management system and shown in the table below. None of the corporate risks have been identified as having a high probability of occurrence or potentially serious consequences for our business or our business relationships. No other material risks resulting from our business activities that could potentially have serious consequences in those areas covered by the CSR-RUG were identified.

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
Composition of raw materials	possible	significant	higher
Risks from the development of substitute products/ general competitive pressure	likely	significant	higher
Changes in the tax and legal environment	possible	moderate	unchanged
Brexit – composition of European Union	likely	moderate	higher
Operating and Corporate Strategy Risks			
Technical production risks	unlikely	significant	unchanged
Investment risks	unlikely	significant	unchanged
Risks associated with contractual relationship with Hansen & Rosenthal Group	unlikely	significant	unchanged
Product liability 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

UNDERSTANDING OF SUSTAINABILITY AND MATERIAL TOPICS OF H&R

Corporate Responsibility

At H&R, as part of an owner-managed group of companies, we have always based our corporate 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.

We combine these aspects with our goal of flawlessly controlling and continuously improving production processes and associated services. This is the only way in which we can 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 high-quality and safe products that are in no way harmful to human health.

To accomplish this, we rely on an integrated management system (IMS) that encompasses all corporate processes and their associated workflows. The IMS gives equal consideration to the aspects of 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. 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. As a result, our process involves higher energy costs and greater consumption of resources.

We also consider demographic change to be a further challenge that 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.

Our customers' focus is changing, too. Today, they demand not just the same proven product quality, but also 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.

Stakeholder Dialogue

A company like H&R has to show a certain sense of responsibility toward its shareholders, i.e., toward its majority shareholders and the shareholders that have a vested interest in the company's performance. But other stakeholders influence our activities, too: Without employees, our business would be impossible. Without reliable raw material suppliers, we would hardly be able to produce anything at all. And the customers who need our products are particularly indispensable when it comes to ensuring our commercial success. Then, there are our financing partners and analysts, as well as stakeholders from the world of politics and civil society, the media and the general public.

Today, all of these stakeholders operate within the same media network, influencing each other and voicing what they expect of our company. At the same time, the exchange of information and

the speed at which we form our opinions have become much faster due to the transparency of the Internet. Our responsibility is to provide all of the relevant players with information that is tailored to the needs of the specific target group and to shape a process of active dialogue.

Our reporting system makes a key contribution to this process of communication. It provides an insight into how we design internal structures and processes, into the goals we set ourselves and the measures we take to build on our performance and systematically drive the company in its further development. We also engage in direct dialogue time and again – not only at major events such as the Annual Shareholders’ Meeting – but also in a large number of one-on-one discussions with policymakers or representatives from the authorities.

Identification of Material Non-financial Topics

In 2017, we put together a list of the relevant non-financial issues internally and

with the help of an external consultant for the first time, and coordinated them with the Executive Board. This included an examination of the value chain of the H&R Group and the topics discussed, up until 2017, in the “Non-financial Performance Indicators” section of the company’s Annual Report. The key issues arise primarily from the challenges referred to above and how we deal with them, as well as from relevant industry and macro-economic developments. In addition, the company maintains close contact with its relevant stakeholders throughout the year. This process, despite the fact that it is generally a bilateral one at departmental level, provides the Management Board with an overall picture of our position within the relevant competitive, market and, most importantly, social network across various reporting and decision-making levels. A materiality analysis involving internal and external stakeholders was not performed for this NFR.

For purposes of the CSR-RUG, the material topics we have identified from the challenges outlined above are as follows:

MATERIAL TOPICS FOR H&R GMBH & CO. KGAA

Energy consumption and carbon 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 information on the fight against corruption and the respect for human rights, please consult the Corporate Governance section (page

05), which is published on the webpage www.hur.com. For all other issues, our policies, due diligence processes, objectives and results are described below.



We endeavor to keep our impact on the climate and the environment as low as possible.

CLIMATE PROTECTION AND RESOURCE CONSERVATION

Our aim to make responsible use of natural resources and to protect the climate and our environment is an established component of our corporate policy. We are always striving to reduce energy consumption and the amount of environmental pollutants caused by the production process. We also work to help our customers to protect the environment. This is something we can achieve, for example, by offering an alternative to products containing substances that are harmful to the environment or by offering products whose use makes a contribution to protecting the environment (see “Safety and Environmental Compatibility of Products”, page 18).

In the long term, H&R is pursuing the objective of decarbonizing its production processes, aiming to achieve the target of the “Green Refinery”, i.e., fully synthesized specialty production based on renewable energies. We are sustainably reducing the use of fossil raw materials and use sustainable energy sources to operate our refineries.

In general, our German sites are certified in line with ISO standards 9001 (quality), 14001 (environment), 18001 (occupational health and safety) and 50001 (energy), which we use to monitor and control our energy, resource and carbon management. Since 2012, we have been reporting figures for our carbon emissions, wastewater and waste as the amount of emissions per ton of

feedstock. This allows us to reflect the degree of value added and the size of our refinery sites to the greatest extent possible. As the degree of vertical integration increases and production efficiency improves, we aim to avoid exceeding the 2011 reference value and where possible to come in below that benchmark.

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. This allows us to identify opportunities for improvement and develop appropriate measures.

ENERGY EFFICIENCY AND CARBON 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 components, or components that can only be used in a combustion process.

Our feedstock is a key element in this regard, because the better its quality and the more specifically it is tailored to suit the individual production units, the greater the yield of high-quality 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.

Our good position in the energy efficiency rankings for the refinery sector was confirmed in 2019 in an updated performance analysis conducted by HSB Solomon Associates LLC®. Both specialty refineries in Hamburg and Salzbergen achieved rankings in the second quartile when benchmarked against other refineries.

With two energy-intensive production plants in Germany, with energy costs that are also significantly in excess of the international average, our company has declared the 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 carbon 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 and includes commitments to improve energy-related performance and compliance with all applicable statutory requirements relating to energy use. It also provides the framework for individual strategic and operating targets, along with measures for achieving them. All of this is incorporated into the company’s energy policy.

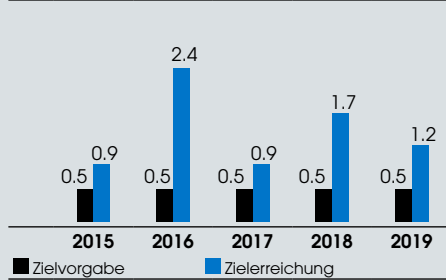
We record our energy consumption at our refinery sites on an ongoing basis and evaluate it once a week. This allows us to intervene quickly if need be and identify specific measures to save energy. These projects include, for example, projects focusing on heat integration in our facilities, measures to improve tank insulation or small-scale projects such as the move to switch our lighting over to LED technology.

The contributions to overall savings achieved as a result are anything but small, however. In the last four years alone, cumulative energy savings for

both refinery sites amounted to 292,000 MWh.

We therefore significantly exceeded our self-imposed target for annual energy savings of 0.5%.

ENERGIEEINSPARUNGEN DURCH UMGESetzte ENERGIESPARPROJEKTE IN DEN RAFFINERIEN
in %



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 met, we adjust our measures and processes accordingly. The next independent audit, which will in all likelihood confirm our ongoing compliance with all of the ISO 50001 requirements, will take place at the beginning of 2020. 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 lower energy consumption is lower emissions of carbon. The measures taken to reduce carbon emissions in our company are largely in line with those taken to reduce primary energy consumption, as outlined in our energy policy. Our flexible-control hydrogen electrolysis (PEM) system, for example, allows us to produce hydrogen

from renewable energy sources at our refinery in Hamburg-Neuhof. This means that we can avoid the carbon emissions associated with external production of hydrogen from fossil energy sources and its transportation to our refinery.

In order to arrive at the best possible overview of our emissions, we have developed an emissions calculator spanning H&R's entire value chain, from the extraction and processing of raw materials to sales/distribution. This calculator allows us to determine the direct and indirect emissions for each product. 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 carbon 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 life cycle statement for certain plants. Finally, industry standards and very specific information such as information on individual plant set-ups, processes and production methods used, and the composition of energy sources and other operating resources used, are also included when calculating our carbon emissions. In financial year 2019, our emissions per ton of feedstock totaled 382.3 kg. The figure for the past financial year was therefore 0.9% below the 2011 benchmark (385.6 kg).

We will no longer use 2011 as our reference year for future figures. In recent years we have significantly boosted added value at our refinery sites and

EMISSIONS OF H&R REFINERIES
(kg/t feedstock)

2019 **382.3**



2011 385.6 (BENCHMARK)

We have boosted our added value significantly since 2011, generating more high-quality products. At the same time, we have decreased our absolute emissions despite the increase in our facilities' energy intensity.

increased our output of specialty products by favoring higher product quality. This involved increasing our facilities and their energy intensity. We also addressed the increased energy consumption and resulting additional emissions that this would entail by launching extensive energy-saving initiatives.

Emissions of 104,000 t CO₂ were therefore also avoided as a logical additional effect of the energy savings detailed on page 26.

* Due to a change in energy supply at the Salzbergen site in 2018/2019, the calculation basis for data collection had to be adjusted retroactively to ensure comparability for the past years.

WASTE

Because of the wide variety of types of waste, the quantity, the potential risk posed by certain types of 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 60 different types of waste in differing quantities and frequencies.

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 core products to by-products and through a high degree of vertical integration. Waste that we cannot currently avoid 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

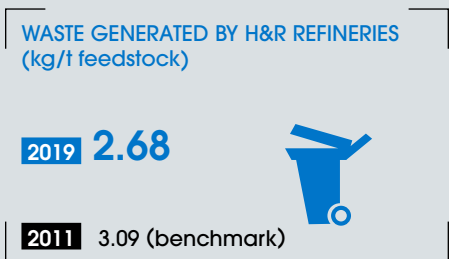
to achieve environmental targets. It is based on the central elements of planning, implementation, control, and improvement.

Compliance with the requirements is verified and certified by an independent outside body. The most recent certification was carried out in 2018 and is valid until mid-2021. 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 2019 we managed to reduce the amount of waste we produce by a good 13.0% compared to the benchmark year of 2011 (3.09 kg/ton of feedstock). In financial year 2019, we generated 2.68 kg of waste per ton of feedstock.

We will no longer use 2011 as a reference year for the reasons detailed in the section on emissions above. Instead, we will use our current performance as a benchmark for all values, including for waste generation and wastewater volume.

The plant site at the Hamburg-Neuhof refinery produces around 60 different types of waste in differing quantities and frequencies.



WATER AND WASTEWATER

The prudent and conscious use of water resources is an issue that the H&R Group also classifies as material. 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 also contains hazardous components that pose a 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 in some cases. We are also working to create new ways to use service water in order to further increase the recycling rate.

Ideally, we use sophisticated, complex procedures to purify contaminated process wastewater right at the point of contamination so that it can be returned safely to the environment as wastewater. After deducting the amount of rain falling on sealed surfaces, we drained off a total of 610.7 liters of domestic or process wastewater per ton of feedstock in 2019. This amounted to around 29.0%, well below the 2011 benchmark (861.2 liters).

WASTEWATER GENERATED BY H&R
REFINERIES(l/t feedstock)

2019 **610.7**



2011 861.2 (benchmark)

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.

EMPLOYEES



We use a wide range of measures in our quest to keep qualified employees at the company long-term.

Our company's success is heavily dependent on the skills, performance capabilities and commitment of our employees. Although it would appear that the situation on the market for skilled workers is starting to ease in general, finding staff in the specializations that H&R requires remains a challenge. Our human resources management is therefore especially important, because the success of the actions it takes contributes decisively to the future viability of our company.

H&R'S HUMAN RESOURCES STRATEGY

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. We train our own junior staff and offer attractive pay and personal training opportunities in order to retain skilled employees within the H&R Group over the long term. The particular conditions in local and regional labor markets pose a special challenge to the human resources management of the H&R Group, as they sometimes differ greatly, for example, in terms of demographics and educational level.

In addition, the H&R Group places the highest priority on safety and ensuring that employees remain able to work, something that we ensure by applying stringent occupational safety requirements and offering health promotion measures.

In our human resources work, we are guided not only by the local legislation, but also by our globally binding guidelines, such as the code of conduct, the corporate policy and our compliance manual.

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 man-

agement 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 2019, the number of people employed by the H&R Group had decreased by 39 to 1,625 (December 31,

2018: 1,664). The following table shows a breakdown by division:

T. 05 EMPLOYEES BY DIVISION

	2019	2018	2017
Employees	1,625	1,664	1,692
of which ChemPharm	1,150	1,149	1,088
of which Plastics	447	488	575
Other	28	28	29
Personnel expenses in € million	88.5	87.1	86.0

Most of our employees work at the German refineries in Hamburg and Salzbergen (709 people (December 31, 2018: 716)) and at the GAUDLITZ GmbH site in Coburg (232 people (December 31, 2018: 284)). At the end of the reporting period, these locations had a workforce of exactly 941 (December 31, 2018: 1,000). The proportion of female employees increased from 20.25% to 21.6% (203 employees), which, according to our own estimates, was quite high for a production company with full-time shift operations. At our foreign sites belonging to the Chemical-Pharmaceutical Raw Materials division, we employed

a total of 299 people during the same period, 129 of whom were female. This corresponds to a rate of more than 43.1%.

In the Plastics segment, we employed a total of 215 people abroad, 48.4% of whom were female.

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 as apprentices training 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. Furthermore, 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 35).

Our employees are very committed to the H&R Group. This is demonstrated, in particular, by the high average length of service and the overall low staff turnover ratio at the sites in Germany. We calculate the turnover rate exclusively on the basis of voluntary resignations by employees. Employees entering retirement are not counted, as new employees are generally hired to replace them. In 2019, our turnover rate at the two German refinery sites was almost unchanged at around 5%, which was far below the two-digit turnover rate customary for employees covered by the German social security system. For the Coburg site, the fluctuation rate – not least due to the personnel restructuring – was around 15%.

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 our 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 stations and the daily operation of our facilities, we deploy only experienced employees, who are ready and willing to regularly expand their knowledge base. In turn, they pass

this knowledge and experience on to their young colleagues as part of their day-to-day work. In the course of their training and in the years that follow, our young colleagues learn about the special features and operation of each facility in detail. This allows us to ensure the smooth operation of our facilities – and keep important knowledge within the company.

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 training programs and briefings planned for them, 23,304 training courses will be provided over the course of a financial year. In 2019, around 1,020 of our employees took part in continuing education courses, most of which are available online, reaching 94.4% of this target. In addition to covering the traditional jobs at our sites, the training also covers more general topics such as environmental protection, health-care 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. 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.

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) at both refinery sites by deploying specialists in occupational safety. In organizational terms, they report directly to the refinery management and are supported in their work by safety officers. 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.

Occupational healthcare and safety specialists provide support by taking suitable measures to prevent accidents and illnesses. Our occupational health and safety regulations also promote 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 web-based safety instruction system on a regular basis. Both before starting to work and at regular intervals thereafter, employees are required to attend briefings and training courses at which they are informed about 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. Every H&R Group employee is required to diligently follow all safety rules in their own work area.

Contractors, suppliers and transport companies working in our factories are also included in the safety strategy. For example, anyone who has to drive on the refinery sites or move around the premises for the first time, or as a one-off, without being accompanied by an H&R employee undergoes video-based induction training in the languages most commonly used by contractors as soon as they enter the site. Completion of the induction training is recorded in a database.

In case of a relevant event, for example, involving bodily injury or physical loss or damage, or an event that is relevant to business operations, the direct managers and safety managers must immediately notify the company departments that are responsible for health, safety, and environmental protection.

Since the beginning of 2019, our accident statistics have no longer been based on the international CONCAWE standard (CONservation of Clean Air and Water in Europe), but rather have used the more stringent standards of the German Society for Petroleum and Coal Science and Technology (DGMK) as a point of reference. We report the indicators LWIF (lost workday injury frequency – number of work accidents with at least one day lost for every one million working hours) and LWIS (lost workday injury severity – 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 proved to be much more effective than in the past. The LWIF value for our refineries was 2.0 in 2019 (previous year: 7.2), at a satisfactory level for us again for the first time. By contrast, there was an increase in the severity of accidents

based on the LWIS definition during the same period.

We are expanding our system of more extensive training measures, regular briefings and daily refinery rounds conducted by the individuals responsible for

the site. 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.

OCCUPATIONAL SAFETY AT H&R'S REFINERIES

	2019	DGMK benchmark	2018	2017	2016
Number of occupational accidents with at least one day lost per million working hours (lost workday injury frequency; LWIF)	2.0	1.4	7.2	5.3	0.7
Number of occupational accidents with at least one day lost	4	--	11	16	4.0
Number of days lost due to accidents	244	--	177	263	73.0
Number of working days lost per occupational accident (lost workday injury severity; LWIS)	61.3	44.0	19.4	21.1	13.4
Number of fatal occupational accidents per million working hours	0.0	--	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 Process Safety Event (PSE) metric to measure our performance in the area of process safety; we calculate

this by tracking incidents relating to the safety of our processes per one million working hours. We also ensure that our results are meaningful by comparing them with the DGMK benchmark, which came to 0.17 in 2019.

We achieved an average annual PSE of 0.10 at both refinery sites. Therefore, since beginning to record the PSE, we have always performed better than the CONCAWE (until 2018) and DGMK (as of 2019) benchmark standards.



H&R products come into direct contact with human skin through the end product in which they are processed, e.g., in cosmetic products.

PRODUCT RESPONSIBILITY AND SOCIAL COMMITMENT

SAFETY AND ENVIRONMENTAL COMPATIBILITY OF PRODUCTS

The business area in which H&R operates, the production of crude-oil-based specialty products, is a very particular one. We manufacture fossil fuel-based products that are used in a wide range of industries. This makes it all the more important for us to live up to our responsibility toward the environment and our neighbors, as well as our business partners and employees, and to manufacture products that are safe to use and are also as environmentally friendly as possible. The conservation of natural resources and the use of environmentally friendly and safe production processes that save energy are an absolute must. This is why, throughout the H&R Group, it is the joint responsibility of all employees to constantly search for opportunities to reduce the environmental impact of our processes, products and services, as well

as the environmental impact within their own working environment. 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 a vast range of industries and in almost all areas of day-to-day life, 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. Medical white oils are used in cosmetic products such as creams and ointments.

Scientific findings have shown that crude-oil-based raw materials have less allergenic potential than other natural products. What is more, our cosmetic products only use highly refined mineral oils and microcrystalline waxes that meet the purity requirements that apply to medication. As a result, and based on the scientific knowledge currently available, the German Federal Institute for Risk Assessment (BfR) is of the view that mineral-oil-based cosmetic products do not pose any health-related risks to consumers.

Since 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 health over their entire life cycle. 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. If a product does not comply with the technical or statutory requirements, or is not consistent with

the customer's specifications, it is not approved. Products are only delivered to the customer once every single requirement has been met.

In recent years, we have also concentrated on developing products that meet the highest quality standards and, once incorporated into the end product, help to protect the environment. These 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. Products made of domestic timber varieties are weatherproofed using our paraffins. Their use renders intensive deforestation unnecessary. In the automotive industry, our innovative plastic products are increasingly being used to substitute metal parts. 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.

“It is the task of all employees to work continuously on reducing the environmental impact of our processes.”

ENVIRONMENTAL MANAGER AT H&R



Paraffins are used to protect food, such as cheese, from drying out.

Nevertheless, the production process at our production sites in Salzbergen and Hamburg generates residues. By using our propane deasphalting facilities, as part of a cost-effective and environmentally beneficial process we can convert these residues into crude-oil-based specialty products, such as paraffins 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. This approach reflects our efforts to use our R&D work to reduce the percentage of by-products and/or products that are ultimately incinerated to the greatest extent possible.

We apply the standards set forth in the European Union's Regulation on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH). At a local level, we also joined the REACH Hamburg skills and support

network back in 2014. The network supports regional economic players in complying with their duties and obligations under REACH and, at the same time, serves to establish structures that strengthen the REACH-related skills of all parties involved, promoting the efficient implementation of the regulation in the process.

For 2019, 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. Suggestions and complaints from the public are investigated accordingly; the remedy is usually direct and unbureaucratic. In addition, H&R holds regular events at its sites such as “Open House” or, specifically in Hamburg, an event as part of the “Lange Nacht der Industrie” (long night of industry).

To date, H&R does not have an overriding, Group-wide policy regarding its social commitment. However, we take our social responsibility seriously. Our sites are responsible for their own social activities, which are adapted to the circumstances of the countries in question.

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 and neighborhood activities near our sites. Above all, they are making a difference in areas where what is needed is helping hands, not financial resources.

*“Quality and clarity
are our top priority.”*

LABORATORY EMPLOYEE