

SUSTAINABILITY REPORT

20



H&R GmbH & Co. KGaA

As part of our non-financial reporting, we have been reporting on our efforts in the area of sustainability for several years now. In keeping with this, we will take the next step this year: With the first sustainability report published by the Hansen & Rosenthal Group, we want to help to define our position for you within a process that will require future ongoing efforts and measures. This is based on the credo that business can only grow sustainably when there is a balance between environmental and financial aspects and between business and society. Its information also supplements the non-financial statement in accordance with the CSR Directive Implementation Act (CSR-RUG), which has been integrated into the sustainability report from page 24 onwards.



Our sustainability report will be published in conjunction with the H&R GmbH & Co. KGaA financial report. This year's theme is balance.

SUSTAINABILITY IN FIGURES

> 800 ▶

With the aid of cutting-edge refineries and intelligent processes, we are able to extract over 800 high-quality chemical-pharmaceutical specialty products from crude oil derivatives.

PRODUCTS



€837,000
thousand

Despite the Covid-19 pandemic, sales in the financial year 2020 amounted to almost €0.9 billion.

IN SALES



187.4 l/t

Since 2011 we have reduced our wastewater volume by almost 190 liters per ton of feedstock. Most of the wastewater can be returned to the environment.

WASTEWATER



2.68 kg/t

The approach we follow is to always reduce the amount of waste caused by our production process as much as possible. We have achieved this through a high degree of vertical integration.

WASTE



€24,700
thousand

Our capital expenditure aims to keep our refineries technologically up-to-date, thus not only maintaining our existing facilities but preparing for the future.

IN CAPITAL EXPENDITURE



7.4%

Carbon emissions lower than ten years ago.

CARBON EMISSIONS



BALANCE

More Adaptable ▶ 06 ◀ **MORE STABLE**

New structures for new conditions

More Responsive ▶ 10 ◀ **MORE SUCCESSFUL**

Smart strategies for flexible production

Safer ▶ 12 ◀ **MORE RELIABLE**

More safety for a demanding work environment

More Innovative ▶ 16 ◀ **MORE COMPETITIVE**

Innovative approaches for synthesized specialty products

Closer ▶ 20 ◀ **MORE SATISFIED**

More proximity for facing new challenges



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RESOURCE CONSERVATION



40 EMPLOYEES

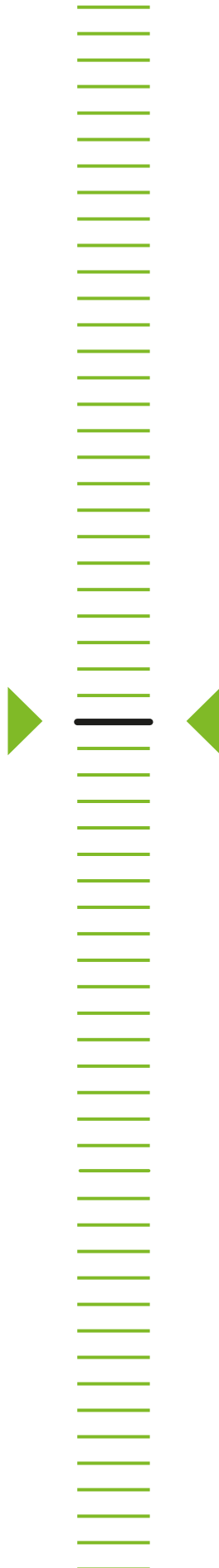


50 PRODUCT RESPONSIBILITY

53 CONTACT/IMPRINT



BALANCE



A stable organization can maintain its equilibrium even in difficult conditions. We work to confirm this statement every single day, across all divisions of our company. By focusing on our strengths – flexibility, innovative prowess, quality and sustainability – we are able to take a positive view of the future.

5 ANSWERS FROM NIELS H. HANSEN

When you look back over 2020, what are your first thoughts?

►—◄ **NIELS H. HANSEN** How something so small can have such a huge impact. I think it can safely be said that none of us have experienced anything comparable.

Which makes me even happier that at H&R we have withstood this challenging time so well – and have grown even closer as a company and as a team.

As the head of the company, what do you associate with the term “balance” – including during this pandemic?

►—◄ **NHH** For me it is uniting and managing the variety of topics and tasks that make our business so special to ensure that we stay on course. In 2020, it meant that alongside the complex topics that dominate our days, the global competitive situation and our innovation projects, we also had to deal with new, very demanding tasks. Working together digitally took a lot of effort. For example, we

had to ensure that as many employees as possible were able to work from home and events such as the Annual Shareholders’ Meeting had to be virtual. At the forefront of our minds was always guaranteeing the health and safety of our employees around the world, which we managed very well over the course of the year.

Despite the unusual circumstances, H&R reported surprisingly positive figures for 2020. Why was that?

►—◄ **NHH** I would say it was primarily due to the low infection figures and the early recovery of the Chinese market. Both developments buoyed the mood in our sales markets and – following the rather less pleasant course of events over the year – gave grounds for optimism. Many of our customers are also

strongly focused on reliability of supply, making them less price sensitive. H&R was able to benefit tremendously from this. This then allowed us to revise our forecast for the end of the year upwards and post particularly solid figures for the fourth quarter with operating income of €25.1 million.

Niels H. Hansen
has directed the fortunes of
H&R GmbH & Co. KGaA
since mid 2019 as the sole
managing director.



Sustainability is also becoming increasingly important at H&R. What potential does this topic hold for the company?

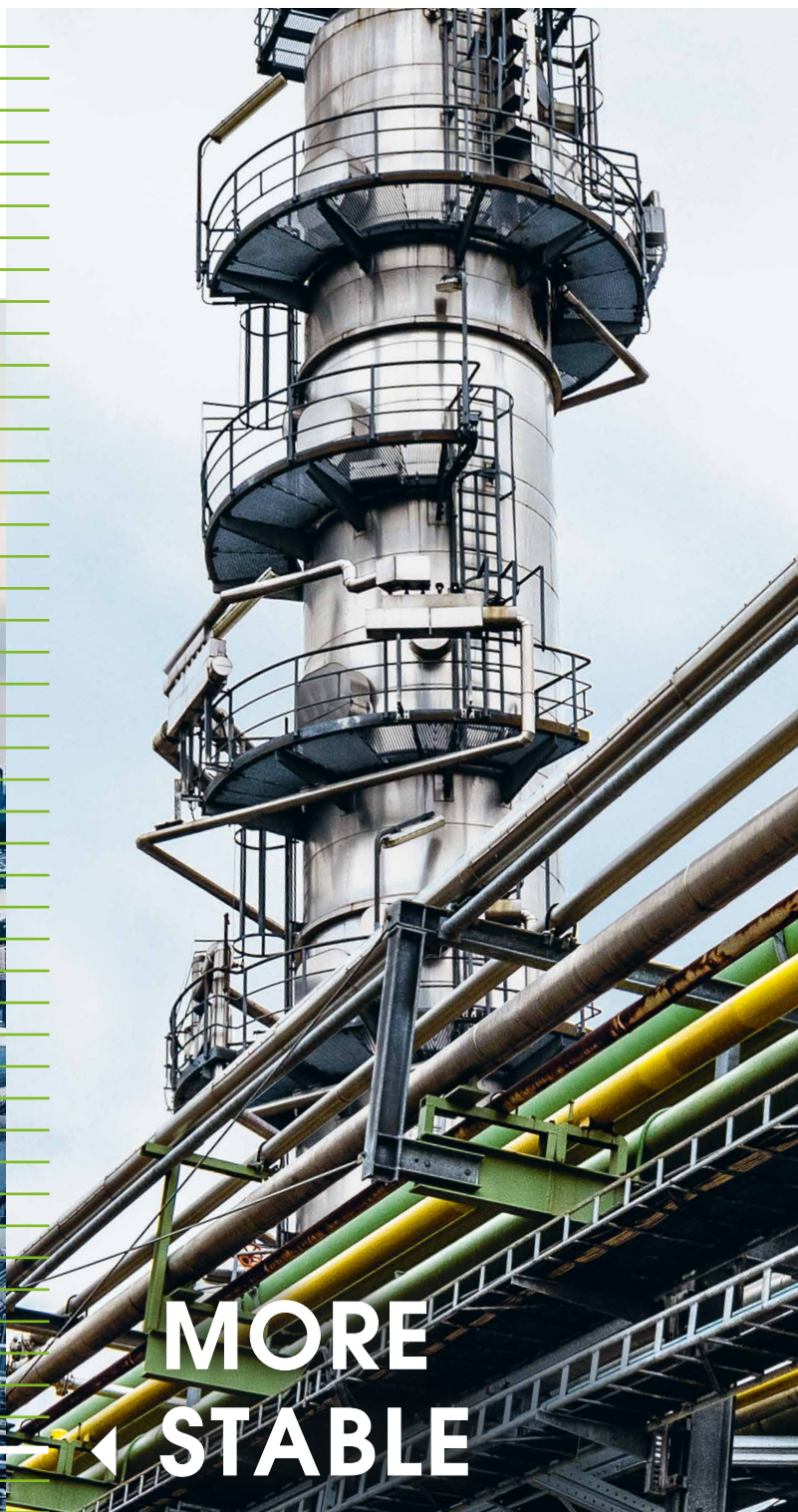
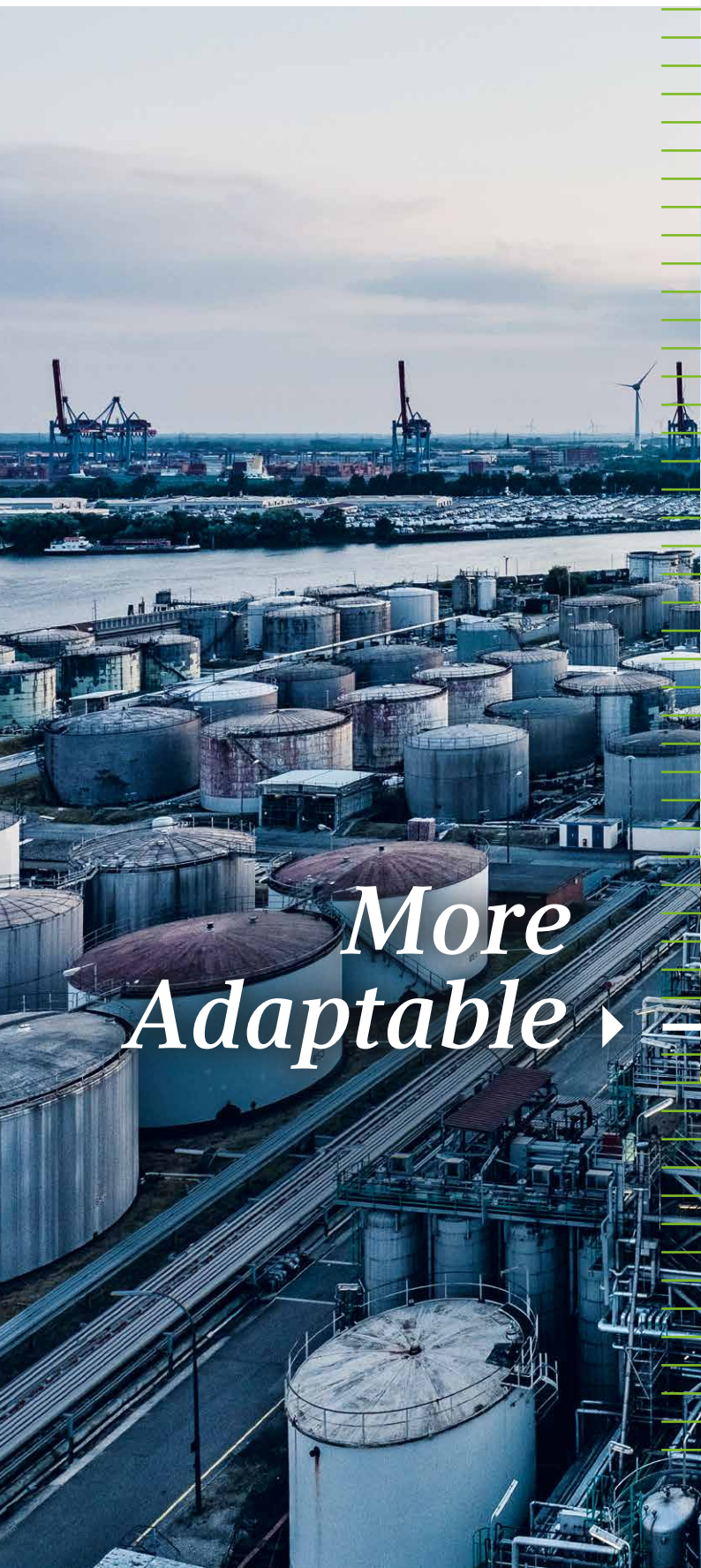
►—◀ **NHH** We are increasingly observing that our customers' awareness of this topic is rising and the market is more open to products that are not based on crude oil. The further diversification of our product portfolio will therefore become increasingly important for us. H&R has been involved in research on synthesized products manufactured using clean energy, hydrogen and CO₂ for a number

of years now. We took an important step in this direction back in 2017 with our PEM (proton exchange membrane) facility that enables us to produce hydrogen ourselves. But we also believe there is great potential in circular economy concepts that involve transforming mineral-oil-based products into raw materials for refinery processes.

Which projects will you be concentrating on in particular this year and next?

►—◀ **NHH** We had to take a step back from some important projects in 2020 due to the coronavirus pandemic. We will now turn our attention back to these. One project that is particularly important to us and that we will pursue in 2021 is the manufacture of green end products. We will be building a pilot facility for a power-to-liquid process at the Hamburg refinery that

will allow us to produce green wax and e-fuels in a climate-neutral way using internally-produced hydrogen and biogenic carbon. We will also be pushing ahead with the real-world laboratories that enable us to test new green technology in practice, for example at the Salzbergen site.



*More
Adaptable* ▶

**MORE
STABLE** ◀

Major areas of business and industry are undergoing a period of profound structural change. The coronavirus crisis is accelerating this effect, including for many of our customers' industries. H&R consistently adapts structures and processes to the latest conditions on the market.



2020 was an unusual year for H&R, too. In the first half of the year, we were faced with the challenge of safeguarding our robust profitability within an unfavorable economic environment. But we can now say that we were able to achieve this. Thanks to a strong fourth quarter, we were able to achieve an excellent result – for this year – and were even able to revise our guidance range upward by the end of the year. One key factor in our success remains our G.A.T.E. strategy, which we use to position ourselves on the market as a global, user-oriented, technologically innovative company. The E stands for Eco², or “Ecology X Economy”, a key area of action where we aim to take an important step forward in terms of sustainability. At the same time, we are aiming to further build on the operational strengths of our international business by establishing production partnerships on all continents. We also want to have a global presence through our own additional processing facilities and sales/distribution units.

In 2020, we were surrounded by an environment that was, on the one hand, strongly influenced by the coronavirus pandemic. On the other hand, we are also active in customer markets that were already undergoing major changes.

Short-term Effects of the Coronavirus Pandemic

The first six months of the year were characterized by a drop in income. One reason for this was the lack of momentum at the start of the year, which continued for a while. As a result of lower demand caused by the first lockdown, key facilities were not working

to full capacity and initially focused on building up additional inventory. At the same time, we allocated the production capacities at both refineries such that their functioning as a homogeneous refinery system could be maintained, along with our Group-wide product supply chain and product diversity.

We also then felt the effects of the coronavirus pandemic. Initially, it led to a decline in demand, which was not evenly distributed across all product groups. For example, our bitumen, which we sell as a by-product for asphalt production, for example, was in less demand because road-building activities were completely halted in many markets. For the white oil and paraffin product groups, however, sales continued practically unchanged.

This variation in demand primarily influenced joint production, which is so intrinsic to our processes, because various process steps dovetail with one another here. We were able to adapt the product portfolio to demand through close cooperation between different departments and daily meetings.

From June 2020, we took advantage of the tide turning. The strong recovery of the Asian market was a major driving force here and we benefited from it too.

Core Markets Undergoing Fundamental Change

The Covid-19 pandemic changed the image of mobility in our society massively last year. Working from home and almost completely grounded flights have significantly reduced the

need for fossil fuels. Refineries that exclusively focus on fuels or primarily on lubricants for combustion technology will once again have to rethink their business models.

H&R has already embarked on this path. Our output structure and product portfolio bear witness to our standing as a specialty refinery. And the next steps in our transformation and further diversification will become increasingly important. Electric mobility will put traditional refinery operators under extra pressure. Societal changes and the demand for more sustainability will drive our concept of operating flexible, customer-oriented and market-optimized production. At the same time, however, this development demands that we take the next steps consistently and without hesitation. This applies to everything from fossil raw materials and bio-based products to synthesized products based on clean energy, hydrogen and CO₂. Concepts that involve recycling mineral-oil-based products whose life-cycle has come to an end into raw materials for refinery processes are also part of our strategy for the future. Our main focus will continue to be on optimizing output and making the most of our raw materials. When it comes to our mineral-oil-based products, we will sharpen our focus on the market-oriented and consistent manufacture of high-quality chemical-pharmaceutical specialty products. The foundation for this is the efficient expansion of the feedstock and by-product portfolio of our Hamburg refinery.

We are also expanding our capabilities when it comes to processing raw materials with increasingly different properties. This will allow us to diversify and combine our feedstock portfolio, which until now has mainly been petroleum-based, to ensure the highest possible security of supply for our customers.

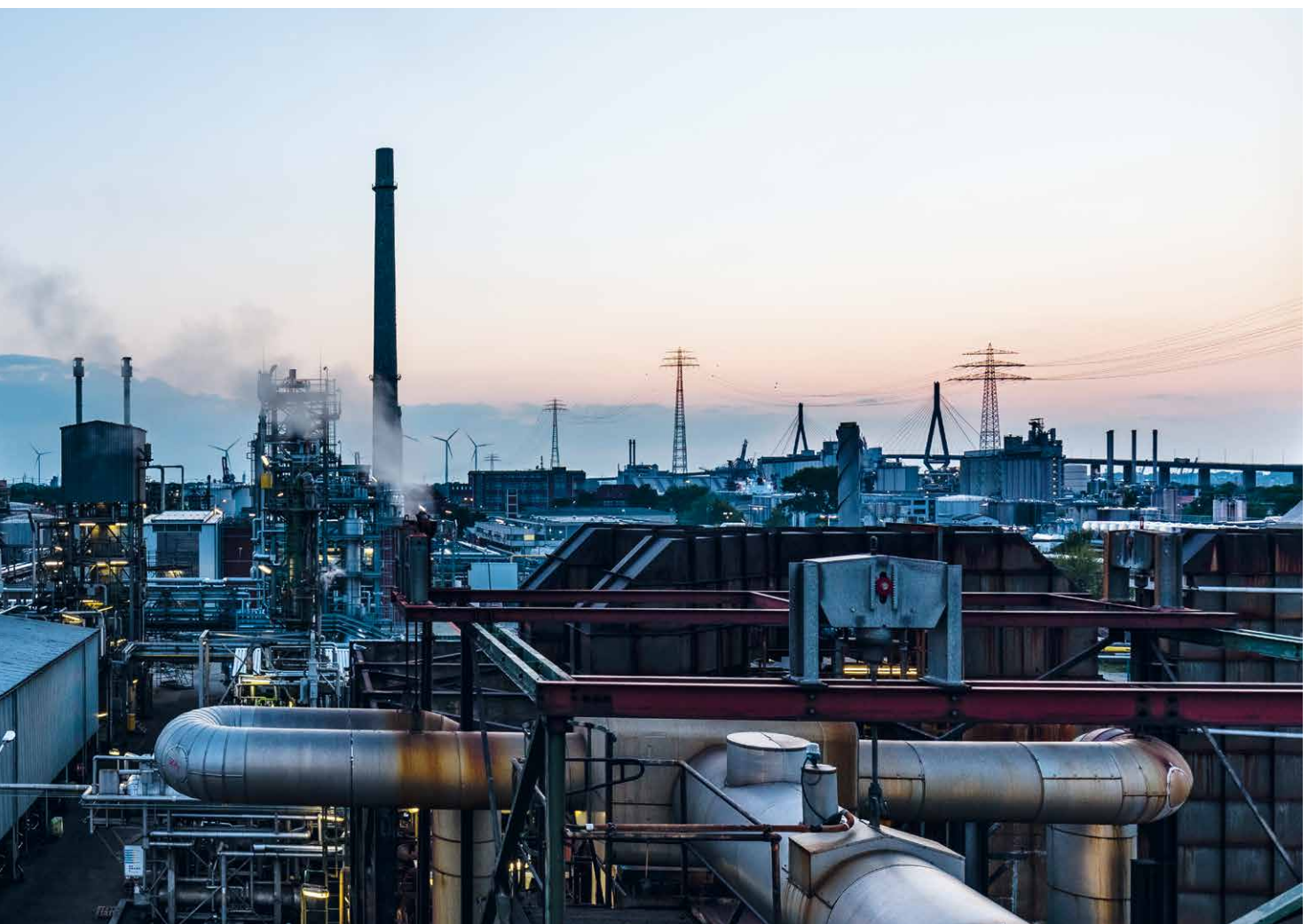
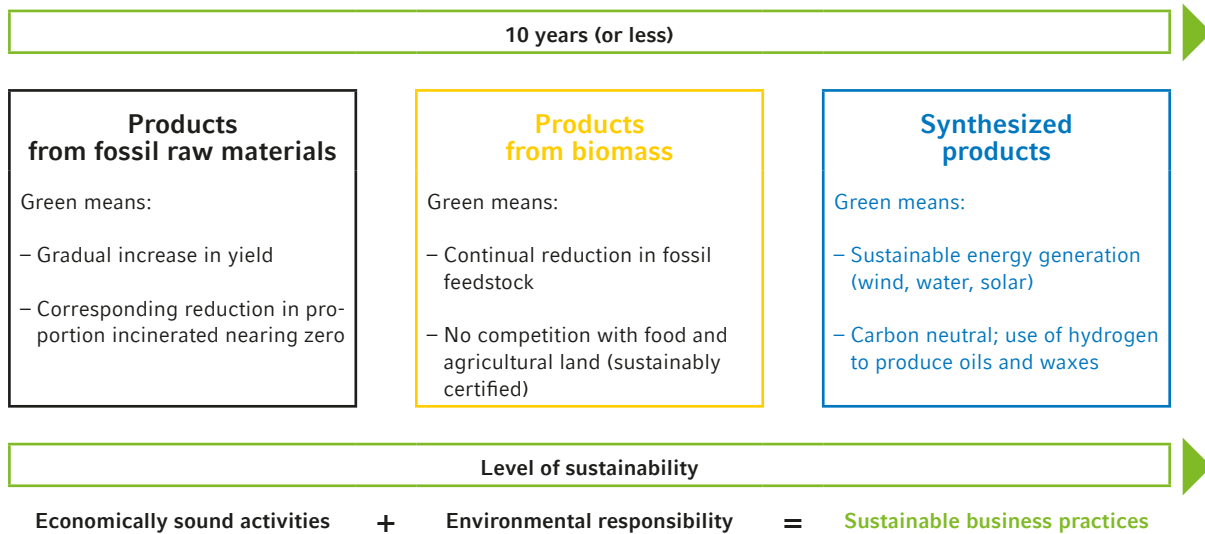
Another great opportunity is the topic of sustainability, which has become ever-more important in the chemicals industry in recent years. Societal

pressure is one of the main factors that comes to us through our customers. Currently the willingness of our customers to pay a potentially higher price for sustainable products is still very limited. But we are observing that this willingness is growing and are increasingly looking at producing synthesized products from green hydrogen, for instance.

Looking to the future: With flexible, customer-oriented and market-optimized production we are on the path to producing synthesized products.



Three-pillar Strategy





*More
Responsive ▶*

**◀ MORE
SUCCESSFUL**

If there is a temporary drop in demand or the warehouses are full, a refinery can't just be switched off. With clever strategies, H&R was able to adjust its use of raw materials to reflect demand.



We get our feedstock from a whole range of sources from around the world. Our suppliers generally process various crude oils, meaning that our feedstock always features a wide range of chemical raw material characteristics. Aspects that are particularly important to us are the viscosity, sulfur content, density and chemical structure of the raw materials. These characteristics determine which raw materials we can blend together and which product we end up processing them into in order to fulfill the requirements of our customers. These smart mixing processes allow us to compensate for the differences between the varying qualities and make sure that they are the perfect fit for our current production requirements.

Flexibility in Clear Structures

The procurement of the ideal raw material mix is the result of the close cooperation between our raw materials purchasing, operational planning and raw material product management teams. Together, they come up with a monthly plan that is based on the requirements put forward by sales as well as the raw materials available on the market.

H&R procures

1.2

**MILLION TONS
OF RAW MATERIALS
PER YEAR**

If we are planning to purchase raw materials, a sample is reviewed in depth by our lab first. During this review, we pay particularly close attention to the quality and potential degree of processing, which plays a central role in the profitability of the feedstock.

We only purchase the raw material and incorporate it into our operational planning process if this analysis delivers what we consider to be a satisfactory result. This makes the work of the production planning and product purchasing team even more complex and challenging. The employees need to maintain a clear overview of the increasing range of raw materials available and other feedstock we process. Added to this are the mounting regulatory requirements for various mineral oil-based components, while classic raw materials are scarcer than ever.

Preventive Planning During a Pandemic

Despite our relatively long-term planning strategy in raw materials purchasing, the coronavirus pandemic did not have any significantly negative impact on our procurement. We were able to obtain the raw materials we required and could respond to changes flexibly enough.

We also kept other eventualities in mind. To prepare for all possible situations, the departments involved developed various scenarios with the relevant solutions as part of an exceptional partnership within the company. The teams addressed issues such as raw material suppliers' refinery outages or the necessity of additional warehouse capacity in order to safeguard the sufficient supply of raw materials. Additionally, interdepartmental meetings were held almost daily to address the latest developments and handling of the situation. Declining sales volumes in some product groups also made it possible for us to continue using the excess quantities ourselves as feedstock, thus ensuring the necessary throughput of our storage tanks and to ensure sufficient storage capacities at our refineries.



Safer ▶

◀ **MORE
RELIABLE**

The working environment of a refinery is demanding. The health and safety of the staff working there is our top priority. It is a key component in ensuring that production can continue reliably, and the well-being of our staff is enshrined within our corporate values.



As the operator of two refineries in Germany, the topic of health and safety is very important at H&R. Our employees operate a wide range of systems and are in contact with various chemicals, which could be harmful to health if they are not handled correctly. These are reasons why we value compliance with high workplace health and safety standards that go above and beyond the strict legal requirements in place in Germany.

In 2020, the coronavirus pandemic presented the topic of health in a completely new light and hugely increased the requirements associated with our duty of care as an employer. Thanks to a wide range of measures and the dedication of our staff, we were able to avoid nearly all downtime and maintain operations for our customers at all times. Although some projects were delayed, such as in the area of maintenance, we will catch up with them as quickly as possible in 2021. We were also able to avoid implementing short-time working hours at our refineries.

Protecting Health Through Remote Working

Wherever possible, we offered our employees the option of working remotely from home. To do this, we had to establish the necessary technical framework within a very short period of time, including the reliable setup of secure data transmission channels. Just as important as the technical aspects are the social aspects. Working permanently from home can also be a challenge, especially if you have to work while caring for children at the same time. We informed our staff early on that we

were aware of the challenges faced by families in particular and that we welcomed feedback and dialogue regarding these challenges throughout the company. A support service was also set up via the HR department, which included organizing childcare.

The situation remains a challenge for our senior executives, too. How can I manage my team remotely? How do I head a digital team? How can I support my employees during these uncertain times and ensure they continue to identify with the company? We specifically coached and encouraged our senior executives in all these topics. Formal, but also informal, team meetings, both in person and remote, were an important instrument in maintaining a positive employee culture.

Workplace Safety in the Refineries

Many of our employees spent the majority of 2020 working from home or in the office while adhering to strict hygiene regulations – always under the proviso of avoiding contact with others wherever possible. At our refineries, the task was much more complex and, above all, essential in order to safeguard our operations. In this context, we quickly set up a task force at both sites in order to organize our pandemic response. Its task was – and continues to be – to coordinate processes in the event that an employee is tested positive for Covid-19, to organize rapid tests such as at Christmas time, and to introduce preventive measures in the event of an outbreak. Working groups were also kept strictly separate and shift changes were carried



The safety of our employees in the refineries was our main priority during the pandemic.

out at a distance. To be able to make up for any shortfalls in production as a result of a shift being lost because of the coronavirus pandemic, we set up camp beds for our employees. Thanks to these stringent measures, we were able to isolate any suspected cases as quickly as possible and thus completely avoid any outbreaks. We have protected the health of all of our employees and maintained operations throughout.

We place a high value on partnerships that are defined by each party being on equal terms. Therefore, all of these measures apply to all employees, contractors and service providers within our company – and also to the suppliers of our raw materials. In Hamburg, we benefit from the great links to the port in terms of the supply of our raw materials, which means that our tanks can be filled directly from the sea-going vessel. For the onward transport to

Salzbergen, the goods are transferred onto tank wagons or barges. Thanks to our well-established security practices, we were able to avoid any hazards to our employees and business operations for the entire year. The fact that the unloading process did not require any direct contact with the crew on board was particularly beneficial and the crew were only permitted to disembark after notifying us and with our approval.





*More
Innovative ▶*



**MORE
◀ COMPETITIVE**

The move away from fossil fuels can become a reality through innovative approaches. H&R is involved in various projects developing new processes for manufacturing synthesized specialty products to market-readiness and, by doing so, is building on its innovation leadership.



Creating Guidelines Together

As an industrial company working with large, highly complex technologies and energy-intensive facilities, H&R's business practices are subject to high regulatory requirements. The primarily fossil-based raw materials we use are finite and their processing and use affects the environment and climate, which is why our industry is at the focus of the public debate on sustainability. For this reason, and because we care about sustainability, we started developing concepts for switching to more sustainable manufacturing methods and products several years ago. We have had the concepts and technologies available for some time but their implementation in practice is often difficult. In addition to a lack of specifications, existing regulations and political agendas are not always adapted to protecting the environment and climate at the industrial scale, or their development as reflected in policy is simply too slow. For this reason, we are of the opinion that, in terms of these key issues, it is essential for us to present a united front as an industry alongside our associations and to play an active role in shaping political and regulatory processes.

It is also important that we see a shift in our corporate culture. As industries, we are facing the same kinds of challenges and want to facilitate a shared, ongoing discourse with political decision-makers in order to bring about change and innovation. H&R is actively working on this with numerous associations and political bodies at a regional, national and European level. While it may seem that the coronavirus crisis could have had a negative impact on this dialogue between politics and industry, the opposite was, in fact, the case. Thanks to well-established digital structures, communication was maintained in 2020, too, enabling us to

discuss and drive forward with important topics, such as infrastructure.

Our work with associations and our long-term approach also paid off at the political level. At the end of the year, for example, the German National Hydrogen Strategy and the Renewable Energy Sources Act (EEG) were revised so that environmentally friendly technologies will now be exempt from EEG apportionment. This paves the way for sustainable transformation and innovation, which offers us and our customers, as well as partners from other industries, a positive outlook for the future.

Green Hydrogen

The most important factor from our perspective on our journey toward sustainable production is the transformation and use of green hydrogen. Hydrogen is not only an environmentally friendly fuel source, but it can also be used as a chemical component of e-fuels, for example. It is also a chemical building block in most of our products and can store any excess energy that is not urgently needed from solar and wind power via electrolysis. The German National Hydrogen Strategy recently adopted by the German Federal Ministry of Economics and Technology (BMWi) underscores our belief.

Learning From Successful Innovation Projects for the Future

We recognized the trend toward green hydrogen several years ago and launched what was then the world's largest flexible-control electrolysis system (PEM) back in 2017. This system enables us to generate the hydrogen we need to manufacture our specialty products ourselves instead of obtaining it as gray hydrogen from external suppliers, as was previously the case. Furthermore, the system helps us to contribute toward stabilizing the power grid.

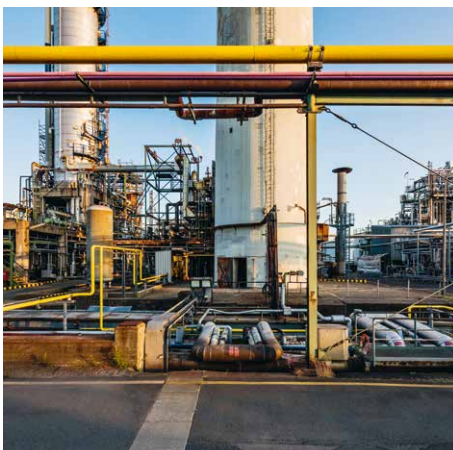
Today, nearly three years later, our Hamburg site is almost completely supplied with green hydrogen and we have gained a huge amount of expertise. This pioneering project also helped us to underline our innovation leadership. Our task now is to leverage key learning effects in order to create safety within the process chain. The creation of the PEM system was a major milestone on H&R's journey toward a sustainable transformation and is one we now need to build on by taking the next steps.

Testing Innovation in Real-Life Conditions

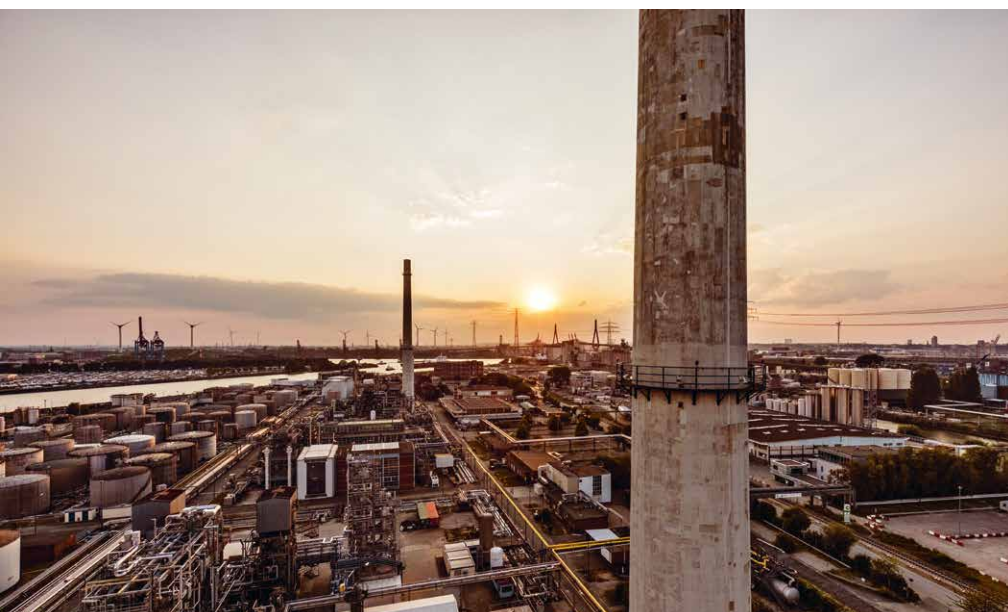
One of these steps is the successful application for funding by participating in what are known as real-world laboratories that have been set up by the German government. The aim of

the real-world laboratories is to test innovations under real-life economic conditions – and on an industrial scale. The real-world laboratory is the perfect link between industry and research in order to test new green technologies on the market that would not otherwise have been pursued as a result of not reaching commercial viability.

The real-world laboratories enable us to receive the financial support that is essential for our innovation concepts. We receive this support on the basis of our strong concepts, which reveal our in-depth expertise in the field of hydrogen, as well as our understanding of the importance of concerted action. The aim here is to integrate various actors from industry, start-ups and grid operators. The H&R real-world



The real-world laboratories are one opportunity for us to test innovations in practice and produce high-quality products in a more sustainable way.



laboratory project in Salzbergen is part of the “Emsland Hydrogen Region”, for example, where many different stakeholders work together successfully across a range of disciplines.

Achieving Market Maturity for Green Products Together

H&R also made progress on its journey toward green end products in 2020, when H&R set up a pilot facility at its Hamburg production site. The power-to-liquid process aims to generate synthetic green waxes and fuels, known as e-fuels, using climate-neutral methods by using the green hydrogen and biogenic carbon dioxide already produced there.

H&R pursues the same sustainability targets for all of its petrochemical specialty products. After all, the demand for sustainable raw materials is rocketing in the customer industries for chemical-pharmaceutical products, such as cosmetics or pharmaceuticals. Many customers want to expand their portfolios from what have until now focused predominantly on fossil fuel-based raw materials to include climate-neutral, hydrogen-based synthetic components.

A More Innovative Future, Despite Coronavirus

Despite the coronavirus crisis, our performance in 2020 was strong. Our G.A.T.E. and three-pillar strategy helped to contribute toward this. And all the hard work in previous years in the field of sustainable technologies and innovation has paid off. Let’s keep this up. We want to consistently build on our innovation leadership and will be including further pioneering projects on our agenda in 2021, too. We continue to foster a close partnership with our business partners and policy-makers.

Our aim is to create an openness to new technologies that enables the best available technology to prevail. Only by doing so, can H&R and our customers’ industries remain viable and competitive in the future, achieving true environmental and climate protection for humankind and the environment.



Closer ▶

**MORE
SATISFIED** ◀

The requirements of the market are changing. We remain in close contact with our customers and adapt our products to new requirements.



Our refineries manufacture more than 800 high-quality chemical-pharmaceutical specialty products such as plasticizers, white oil and paraffin for our customers from over 100 different industries. And each industry has its own specific features, just as the individual customers do. Listening closely enough to pick up on these differences and then integrate them into the product development process never ceases to be a challenge. For this reason, our ability to pay close attention to the requirements and wishes of our customers is one of the key attributes of our employees working in sales and production.

Our customers' requirements are changing constantly, either in terms of their own product development or as a result of changing laws and standards. But their own customers also play a role in driving this change. For example, end customers are becoming increasingly environmentally conscious and this is something that H&R and its customers have to adapt to.

During the coronavirus pandemic, our proximity to our customers took on a special relevance and enabled us to retain many customers, as well as win back once-familiar names or acquire new ones. Our company is valued on the market as a player who uses regular face-to-face customer meetings to nurture close relationships, constantly reinforcing the foundation for long-standing business partnerships based on trust. The intensive dialogue between sales departments and the internal specialist departments ensures expert responses to customer inquiries and guarantees a reliable flow of information from the customer to the specialist areas of the company. The product development team is always on the lookout for new high-quality products for H&R's customers. As part of this quest, it maintains close contact

with colleagues from the process technology team, who ensure that raw material yields are at optimum levels. Internal communication between the various H&R departments combined with direct collaboration with customers allows the product management team to implement product tracking in a responsible and competent manner. Just as the requirements that existing products have to meet are changing, so, too, are the statutory and normative requirements. In a Group with global operations, these changes have to be constantly monitored and the corresponding conclusions drawn.

Our customers can use audits to get a first-hand impression of our production operations and to see the standards that we apply to our processes and their output for themselves. In close consultation with our sales and distribution team, they can request specific analyses to be performed before goods are dispatched. We then use customer-specific techniques to perform these analyses in our own labs. This means that our customers themselves are involved in the quality control process.



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SUSTAINABLE ► — ◀ *Future-proof*



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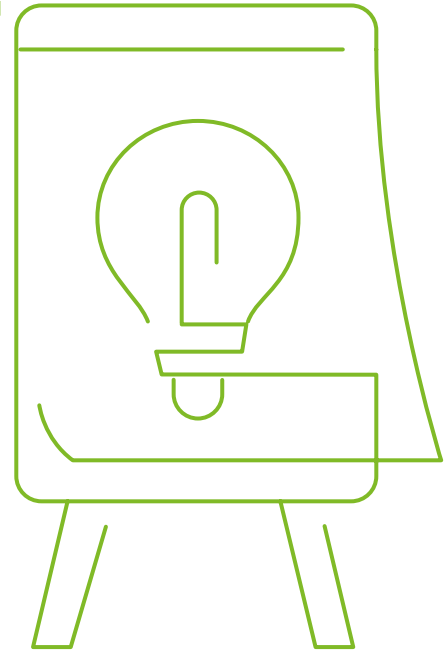
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CORPORATE GOVERNANCE

As a company that is aware of its role in society and its social responsibilities, H&R operates in an ever-growing regulatory framework yet always takes advantage of opportunities to evolve.



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, we are publishing a sustainability report as an NFR for the first time.

The sustainability report is also published at www.hur.com.

LEGAL REQUIREMENTS AND FRAME- WORK

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. For this reason, we have developed a strategy with which to further develop the operating model

of the Hamburg refinery. 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. Faced with the Covid-19 pandemic, this approach gave rise to new challenges in 2020. The raw materials and by-products with which we intended to make our processes more flexible were not available in the market or were only available in insufficient quantities because the suppliers we had identified were likewise operating under lockdown conditions or were having to respond to changes in buyer behavior.

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. We intend to produce these by using long-chain hydrocarbon compounds methanated from hydrogen and CO₂ in our refinery processes. We produce the hydrogen by means of water electrolysis with the aid of wind power, while the CO₂ is washed out of the fumes from our thermal waste recovery. Due to the high degree of waste sorting, the waste used as a raw material here is highly biogenic, meaning the captured CO₂ can likewise be considered "green".

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. Here, too, our focus or that of our customers is the use of materials.

In the area of precision plastics, we plan to establish the H&R subsidiary GAUDLITZ GmbH as a producer of durable plastic in response to the growing trend toward e-mobility. 2021 is likely to be a key year for the automotive

industry. Going forward, not only is the market for plug-in hybrids likely to grow, for which experts consider double-digit percentage growth in Europe to be entirely realistic – so too will the market for fully electric vehicles. This is possibly not good news for all industry players as this new drive technology may represent a major challenge in particular for the traditional suppliers, some of which generate much of their sales with internal combustion engine components. GAUDLITZ plastic parts are already being used in a variety of ways, however, and their use is not limited to traditional IC engine drives. As such, whether these vehicles are run purely on electricity or on hydrogen may be inconsequential to GAUDLITZ.

We refer to this overarching strategic approach as **G.A.T.E.**, as in a "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. We also remain "technovative" by ensuring that our sites are always on the cutting edge of technological development and by keeping a close eye on innovative process and product solutions. We successfully combine economy and ecology, acting in an economically prudent way, with full awareness of the resources we are using. **Eco²**, i.e., "ecology x economy", increases the potential in both areas exponentially while representing a key step toward sustainability.

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 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.

There were no breaches of our Code by any of the suppliers last year.



BREACHES

There were no breaches of our Code by any of the suppliers last year.



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. This involves our also incorporating sustainability criteria into our risk analysis and above all our opportunities analysis. For example, we see the move away from the internal combustion engine and the promotion of e-mobility as sustainability aspects, but see these more as an opportunity than a risk.

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

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, 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, for example with an EBITDA permanently below €50.0 million.

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

▶ Low risk ▶▶ Medium risk ▶▶▶ High risk



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 are 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 class	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	likely	significant	▶▶▶	unchanged
Risks from the development of substitute products/general competitive pressure	likely	significant	▶▶▶	unchanged
Changes in the tax and legal environment	possible	moderate	▶▶	unchanged
Brexit – composition of European Union	likely	moderate	▶▶	unchanged
Operating and corporate strategy risks				
Technical production risks	possible	moderate	▶▶	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	▶▶	unchanged
Currency risks	possible	moderate	▶▶	unchanged
Interest rate risks	possible	moderate	▶▶	unchanged
Risks from defaulting customers and banks	unlikely	moderate	▶	unchanged

▶ Low risk ▶▶ Medium risk ▶▶▶ High risk



UNDERSTANDING OF SUSTAINABILITY AND MATERIAL TOPICS AT 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, OHSAS 18001, ISO 13485, ISO 50001, ISO/TS 16949 and IATF 16949). 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.

The Covid-19 pandemic was without a doubt a particular challenge last year, and one which presented itself on a number of levels. In particular, the endeavors to contain the spread of infections resulted in massive direct burdens on economies and social structures around the world. Especially in the first half of the year, the resultant closure of key industries and the slowed development of the global growth markets indirectly had a material impact on the underlying economic and market developments. At the same time, our primary focus in this period of pronounced economic volatility was, of course, protecting the health of our employees, which we did by means of extensive logistical and administrative protective measures (see page 46).



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. In 2020, we could only engage in direct dialogue, something which we value greatly, to a limited degree. By focusing more on digital means of communication, we nevertheless succeeded in making or staying in contact with our stakeholders, be it at major events such as the Annual Shareholders' Meeting, at conferences or in 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 for the first time with the help of an external consultant 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 macroeconomic 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 Executive 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 above are:

Identification of the Material Topics as per CSR-RUG

Page in report

Environmental concerns

Energy consumption and carbon emissions	35
Waste	38
Water and wastewater	39

Employee concerns

Employment	40
Training and continuing education	44
Occupational and process safety	46

Social concerns

Product safety	50
Social commitment	32

Respect for human rights

Human rights	32
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Fight against corruption

Anti-corruption	33
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For issues that have been identified as material, our policies, due diligence processes, objectives and results are described below.

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). In 2020, such events had to be postponed as a result of the Covid-19 pandemic, of course.

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, socio-political 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. This hands-on approach includes the following example: In the early part of the year, the management in Hamburg asked their colleagues in China to organize the procurement of masks that were widely available there in order to pro-

tect against the Sars-CoV-2 virus because there were insufficient masks available at that time in Germany. When our supply of medical masks was also secured without any issues and we were able to provide our employees at the refineries with masks, we donated the high-quality FFP2/3 masks that we had received from China to the City of Hamburg for distribution to medical staff in the city.

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.

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.

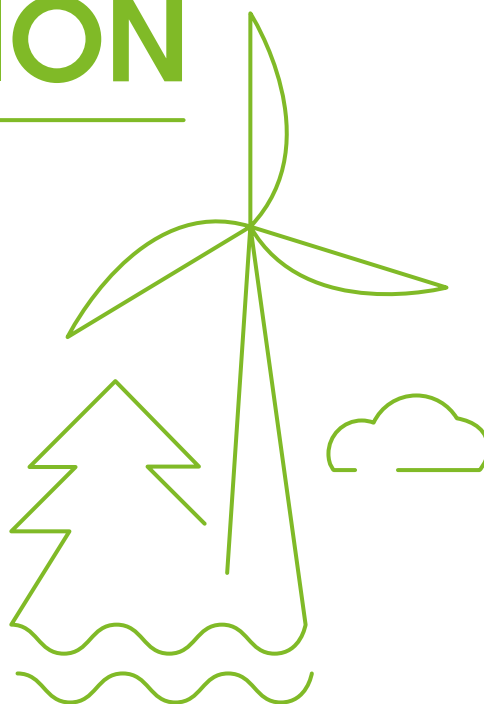
Combating corruption and bribery is therefore one of the central pillars of our Compliance Management System. Our Code of Conduct clearly states that award decisions are based exclusively on a performance evaluation. Accordingly, our success is based on the quality of our performance and we will not 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 during the reporting year.



CLIMATE PROTECTION AND RESOURCE CONSERVATION

Oil is far too valuable to burn. As a result we also view the raw materials we produce, such as hydrogen, as more than just a source of fuel and therefore use it as a material process component – with added value.



MANAGEMENT APPROACH

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 “Environmental Compatibility and Safety of Products”, page 50).

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 CO₂ 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 most recently 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.

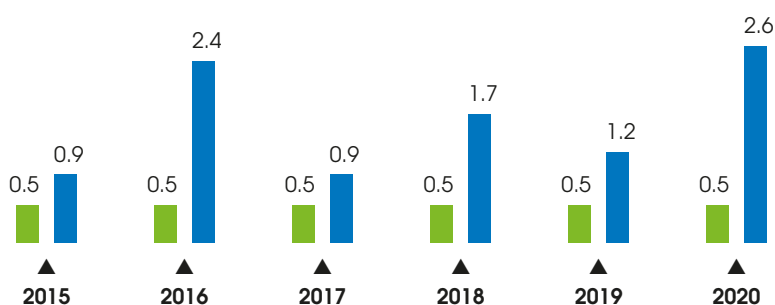
We record our energy consumption at our refinery sites on an ongoing basis and evaluate it once a week. This allows us to intervene quickly if need be and identify specific measures to save energy. These projects include, for example, projects focusing on heat integration in our facilities, measures 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% again in 2020.

Energy Savings Resulting from Energy-Saving Projects Implemented in our Refineries

in %



▲ Target

▲ Target achieved

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 last independent audit, which confirmed our ongoing compliance with all of the ISO 50001 requirements, took 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 CO₂. 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 (Treibhausgasemissionshandelsgesetz/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 2020, our emissions per ton of feedstock totaled 391.2 kg. The figure for the past financial year was therefore 8.8% higher than the 2011 benchmark (359.6 kg).

What may look like an increase at first glance can be explained when put in context – carbon emissions have fallen in absolute terms since 2011. Viewed over the past ten years, both H&R refineries show a 7.4% drop in emissions based on the 2011 benchmark.

At the same time, we also express our emissions as a proportion of the raw materials we use. Rather like a high-performance engine, our processing facilities are most efficient when they are operated at peak performance with the highest possible throughput volumes. By contrast, a low-revving engine leads to higher fuel consumption, higher emissions, etc.

We experienced a similar situation at our sites last year. In the few weeks where Germany had to implement hard lockdown measures and many of our customer industries could only buy very few products from us, our facilities were running with lower raw materials input and, as a result, were not able to attain their usual high efficiency levels.

As a result, we are correspondingly confident that H&R will not only be able to reduce its emissions in absolute terms in 2021, but will also fare better in relative terms.



Viewed over the past ten years,
both H&R refineries show a

7.4%

drop in emissions based on the
2011 benchmark.



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, on the other hand, through a high degree of vertical integration. At the same time, we will also include in our calculations waste that does not originate from our production processes. This may include, for example, excavated soil during construction work, which will be recognized as "Waste per ton of feedstock", just as process waste is. 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.

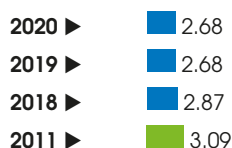


Compliance with the requirements is verified and certified by an independent outside body. The next certification will take place in mid-2021. In addition, we ensure compliance with laws, provisions, audit obligations, and regulations and verify the performance of our environmental management system 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 2020 we once again managed to reduce the amount of waste we

Waste Generated by H&R Refineries

kilogram per ton of feedstock



▲ Benchmark



produce by a good 13.0% compared to the benchmark year of 2011 (3.09 kg/ton of feedstock). In the past financial year, as in the previous year, we generated 2.68 kg of waste per ton of feedstock.

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 re-

quired 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.

As a rule, 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 673.8 liters of domestic or process wastewater per ton of feedstock in 2019. As a result, we were significantly down on the 2011 benchmark (861.2 liters) by around 21.8%, but significantly up on the previous year's figure for the reasons relating to efficiency outlined above.

Wastewater Generated by H&R Refineries

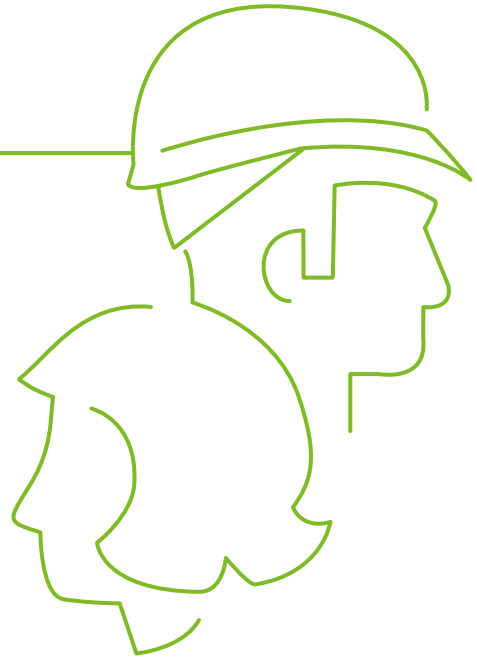
litre per ton of feedstock



▲ Benchmark

EMPLOYEES

The last year forced us to keep our distance yet also brought us together. The year 2020 made us into a closer team.



MANAGEMENT APPROACH

Our company's success is heavily dependent on the skills, performance capabilities and commitment of our employees. Preserving these success factors in the long term is therefore incredibly important. Last year, however, both we and global economies were faced with rising to the challenge posed for society as a whole by a problem with a minute cause, but with enormous impacts. The Covid-19 pandemic meant that one of the greatest challenges in 2020 was that of connecting as many employees as possible electronically as quickly as possible. The norm until then of person-to-person interaction was replaced with mobile working and modern conference technology. Meetings in the meeting room became virtual get-togethers at every level, be it departmental meetings or the regular meetings of the Supervisory Board. Even the Annual Shareholders' Meeting of H&R GmbH & Co. KGaA as a listed company was held as a virtual event in 2020.

Forgoing person-to-person dealings constituted a huge feat for everyone, but was an adjustment which we achieved with remarkable success. Right up to the end of the year, we never lost sight of the top priority of these efforts, namely to protect the health of the staff at our refinery sites, thereby enabling the heart of our Group to continue beating. We adapted our measures to the changing requirements, reassessed them at regular intervals and promoted them at all levels of the organization on the basis of meetings and dedicated contacts for specific issues. A spirited approach and clear definition of the procedures in advance meant we were able to address the handful of indirect and direct suspected cases of infection swiftly and fully.

In spite of the enormous challenges, this rewarded us with virtually coronavirus-free business operations and a healthy workforce at the vast majority of our sites.

What's more, new employees with the specialist skills needed by H&R found their way to us once again in 2020, thereby making a key contribution to the company's future viability.

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, such as in terms of demographics and level of education.

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 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 2020, the number of people employed by the H&R Group had decreased by 40 to 1,585 (December 31, 2019: 1,625). The following table shows a breakdown by division:

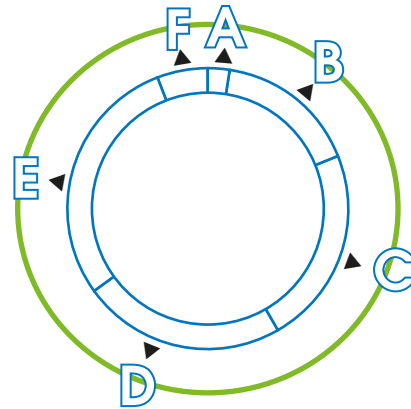
Employees by Division

	2020	2019	2018
Employees	1,585	1,625	1,664
of which ChemPharm	1,153	1,150	1,149
of which Plastics	382	447	488
Other	50	28	28
Personnel expenses in € million	83.0	88.5	87.1

Most of our employees work at the German refineries in Hamburg and Salzbergen (699 people (December 31, 2019: 709)) and at the GAUDLITZ GmbH site in Coburg (147 people (December 31, 2019: 232)). At the end of the reporting period, these locations had a workforce of exactly 846 (December 31, 2019: 941). The proportion of female employees increased from 21.6% to 18.8% (203 employees), 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 51-to-60 age group was the largest. The age distribution of our employees is thus typical of industrial companies in Germany.

Employees by Division



Age group	Proportion
A Up to 20 years old	2.7%
B 21 – 30 years old	16.4%
C 31 – 40 years old	22.8%
D 41 – 50 years old	23.3%
E 51 – 60 years old	29.2%
F Over 60 years old	5.6%

We count on the skills and commitment of each and every employee. We see the diversity of the people we employ as an asset. Employees with disabilities and health conditions enjoy particular protection, where we work closely with the relevant agencies to find solutions that enable them to keep their jobs or move to a suitable position. This means we can retain skilled workers and keep long-standing, valuable knowledge within H&R. In 2020, our German sites had 17 employees with disabilities, accounting for 2.0% of the workforce.

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. In 2020, for example, around 4.8% of our employees

exercised their entitlement to parental leave. 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 44). Our employees had to rise to special challenges as a result of the Covid-19 pandemic as the lockdown measures and school and kindergarten closures meant their private lives were also placed under pressure, in addition to the work-related restrictions already outlined. To mitigate these burdens, management, the employee representatives and the employees acted in unison and, above all, flexibly and supported one another.



Our employees are very committed to the H&R Group. This is demonstrated, in particular, by the high average length of service and the generally low staff turnover rate 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. Our rate at the two German refinery sites dropped significantly again in 2020 to 1.73% (2019: approximately 5.0%), putting it far below the usual double-digit turnover rates for the working population in Germany. The turnover rate at the Coburg site was approximately 14%, not least due to the personnel restructuring measures there.

1.73%

STAFF TURNOVER RATE
putting it far below the usual
double-digit turnover rates for
the working population in Ger-
many.

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.

As we have been using a predominantly electronic training system for years, the Covid-19 pandemic had next to no impact on our training measures in financial year 2020. 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



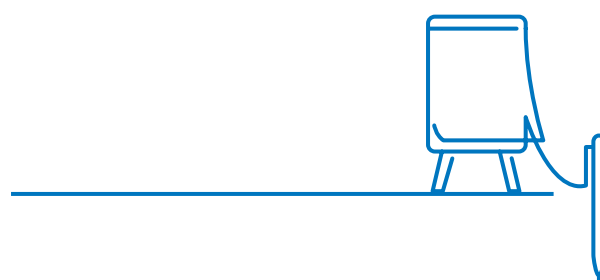
completed the training courses and instruction planned for them, around 23,760 training courses would be provided in the course of a financial year (previous year: 23,304 training courses). In 2020, around 893 of our employees took part in continuing education courses (previous year: 1,020 employees), most of which are available online, reaching over 93.2% of this target (previous year: 94.4%). In total, training amounted to approximately 4,122 hours of training, or just under 4 hours and 40 minutes per employee. 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. The extent of training as presented here cannot, however, provide a full picture of our training activities. For example, our electronic training system does not include instruction in the area of haz-

ardous substances, as is prescribed by law. In accordance with the Hazardous Substances Ordinance (GefStoffV), such instruction is to be given orally. Other special instruction, such as facility operation, is also given, and this is recorded away from the electronic training system.

4:40 hrs

OF TRAINING

completed per employee. 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.



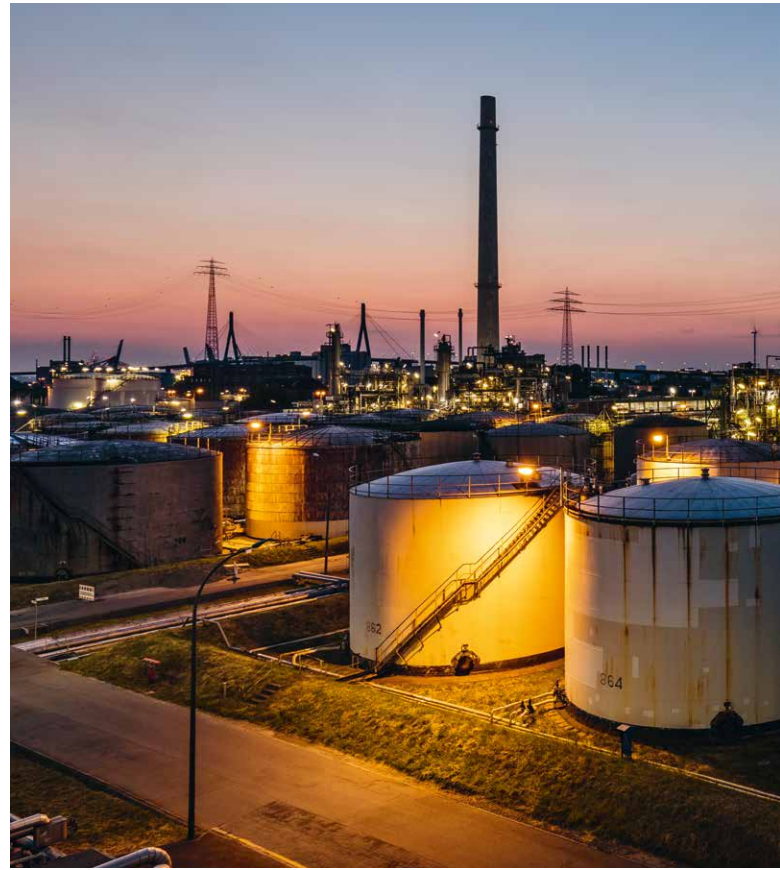
OCCUPATIONAL HEALTH AND SAFETY

HEALTH PROTECTION IN A PANDEMIC

As explained above, the year presented us with particular demands in terms of our duty of care toward our employees and the protection of their health. We embraced this responsibility early on and kept our employees informed about the latest developments and recommendations. Throughout the Group, the management levels in particular were responsible for implementing their nationally applicable rules and for ensuring the greatest possible safety of their employees.

To give the German sites as an example, regular newsletters were used to update the employees on implementation of the recommendations of the federal government and the Robert Koch Institute, and clear rules were defined for internal workflows. From fall, a "coronavirus guide" laid down unambiguous requirements regarding working together at the sites. In the event of queries, its actual implementation was specified by a task force consisting of management and HR heads with the backing of in-house medical staff.

This was accompanied by a comprehensive hygiene concept covering everything from the early procurement and in-house production of disinfectants to the later procurement of rapid tests and the implementation of a corresponding testing concept. We offered the employees at the production sites additional protection with a comprehensive mobile working concept, on the basis of which our IT department achieved maximum efficiency even away from the employees' usual places of work in next to no time. Regular video conferences replaced not only in-person meetings, but also social interaction among coworkers. The "meetings by the coffee machine" continued, but were now held virtually.



More information on our measures during the coronavirus pandemic can also be found on page 12 of this report.

OCCUPATIONAL HEALTH AND SAFETY AT THE REFINERIES AND PRODUCTION PLANTS

As an operator of refineries and production plants, the H&R Group places a high priority on occupational health and safety, even when operations are limited by Covid-19. 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.

At both refinery sites, we comply with the German statutory requirements stipulated in



Section 2 of German Social Accident Insurance Regulation 2 (DGUV V2) and Section 5 of the Occupational Safety Act (ASiG) 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 relat-

ed 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. As such, occupational health and safety focuses not only on prevention, but also and in particular on the following up of events, addressing these with a catalog of measures. In this way, we are strengthening the role of the safety officer, who systematically works through events and their causes together with those affected and management. The employee representatives are likewise involved in these analyses. The findings are incorporated into training measures – also by including the individuals affected – and are thereby handled proactively.

STRINGENT STANDARDS FOR RECORDING ACCIDENT STATISTICS

Since the beginning of 2019, our accident statistics have no longer been based on the international CONCAWE standard (CONSer-vation of Clean Air and Water in Europe), but have rather 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. In 2020 the LWIF figure for our refineries was 5.7 (previous year: 2.0), putting it back on the level seen in previous years. By contrast, there was a significant drop in the severity of accidents based on the LWIF definition during the same period.

We are expanding our system of more extensive training measures, regular instruction 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 – as soon as personal interaction is possible once again without major precautionary measures.

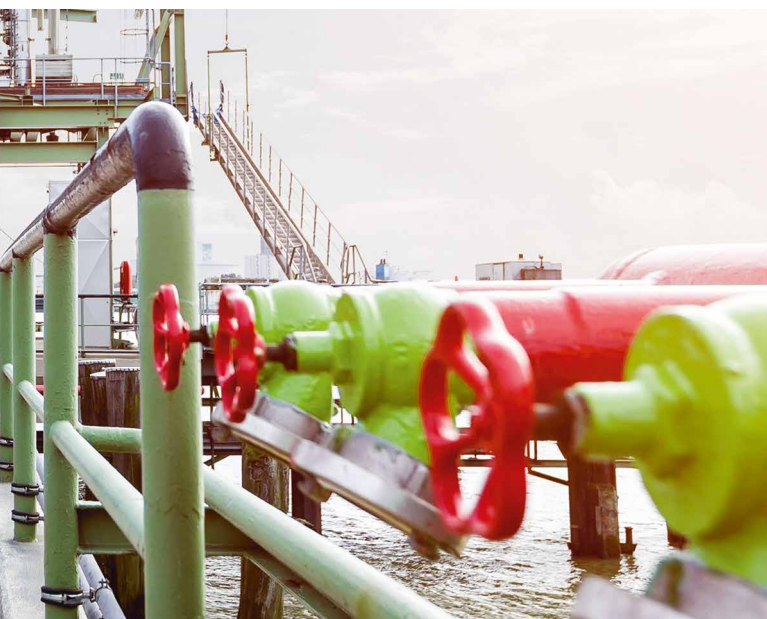


OCCUPATIONAL SAFETY AT H&R'S REFINERIES

	2020	DGMK bench- mark	2019	2018	2017
Number of occupational accidents with at least one day lost per million working hours (lost workday injury frequency; LWIF)	5.7	0.9	2.0	7.2	5.3
Number of occupational accidents with at least one day lost	4	–	4	11	16
Number of days lost due to accidents	26	–	244	177	463
Number of working days lost per occupational accident (lost workday injury severity; LWIS)	6.5	30.0	61.3	19.4	21.1
Number of fatal occupational accidents per million working hours	0	–	0	0	0

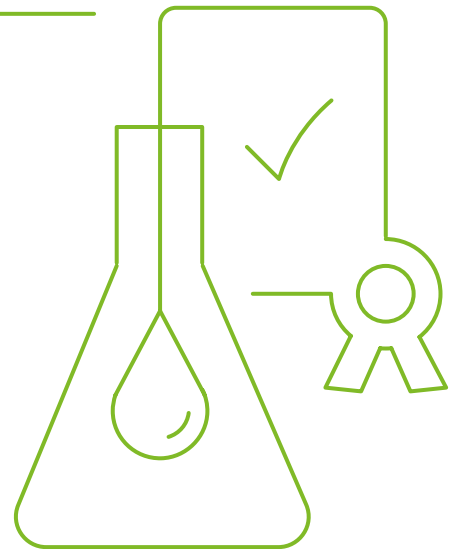
In addition to evaluating occupational safety, we also rate the production processes and workflows implemented at H&R, meaning that we systematically analyze all relevant production processes, up to and including an analysis of damages once any events have occurred. In other words, we investigate how error-prone our processes are and the extent to which they can be reliably 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 again came to 0.17 in 2020.

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.



PRODUCT RESPONSIBILITY

We want our products to be safe over their full life cycle and while being used as intended – from research, production, marketing and use by customers to disposal.



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 currently 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.

LONG-TERM PLAN TO RESTRUCTURE THE PRODUCT PORTFOLIO

With our three-pillar strategy, we have taken the first step toward moving from primarily fossil-based raw materials toward more sustainable solutions. The first projects implemented, such as our hydrogen electrolysis system in Hamburg, are set to be followed by further innovation projects. By creating hydrocarbon compounds on the basis of green CO₂ and green hydrogen, we are aiming for no less than the transformation of the chemicals industry and the conversion of our product portfolio to bio-based or synthetic products. Project names such as CO₂NVERSION and NextGate describe our innovative character and, as winning projects in the 2019 “Living Labs for the Energy Transition” ideas competition, they have a real chance of receiving significant funding.

LIMS

SAFE PROCESSES ENSURE THE SAFETY OF PRODUCTS IN CONTACT WITH HUMANS

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. Since our products also come into direct 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. 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. Having said this, our efforts to create bio-based and synthetic products pay tribute to the fact that our customer industries increasingly require these products of us, while expecting the same characteristics as they are used to from traditional petroleum-based products.

On the one hand, we guarantee the safety of our products 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.

We guarantee the safety of our products by modeling all product development and testing processes in our laboratory data information management system (LIMS).

Products are only delivered to the customer once every single requirement has been met. One example of viewing a product throughout its entire life cycle can be seen in the automotive sector, for example. The use of label-free plasticizers, such as in car interiors, requires low-fogging products that are characterized by the fact that they emit neither odors nor other fumes containing residues.

PROTECTING THE ENVIRONMENT WITH THE HIGHEST QUALITY SPECIFICATIONS

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.

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. These are sold through our NordBit joint venture with the Hamburg-based company Mabanaft. In 2020, the residues from our refineries were increasingly being reused by other refinery operators as raw material known as cracker feed. 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 2020, 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.

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