

strategy & Management

We take on responsibility every day – and have been doing so for nearly 350 years. We look closer and discover solutions as a foundation for our groundbreaking products and technologies.

We think in generations instead of quarters and have made responsibility a pillar of our operations, an approach that underpins our lasting success. We are helping build the future through products and technologies that make a key contribution to solving global challenges.

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company profile

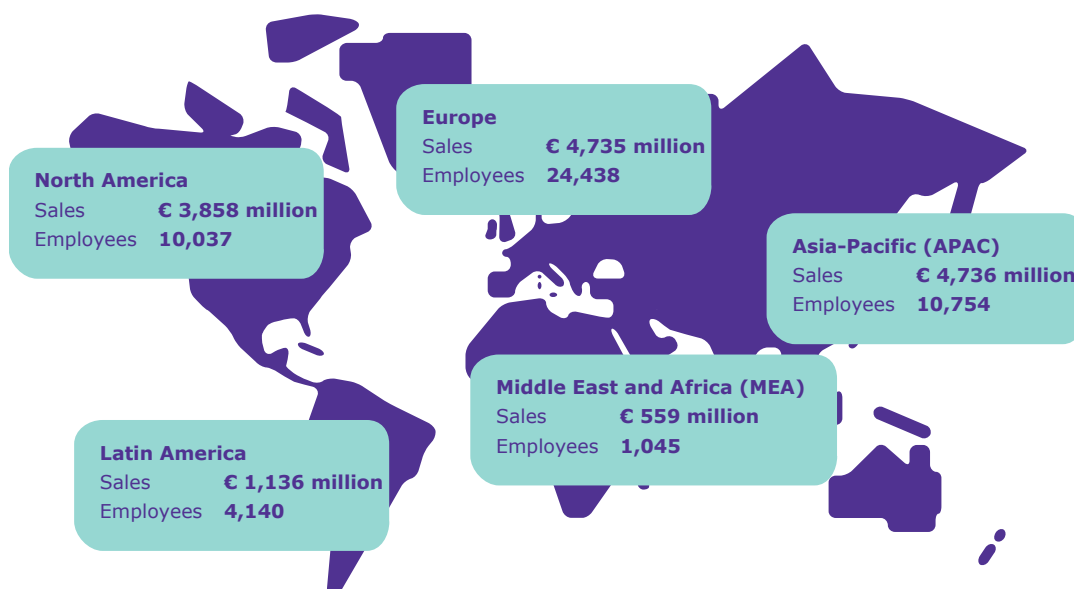
For nearly 350 years, curious people have been bringing ideas to life at Merck. A passion for research and discovery is our most valuable resource.

We are a leading science and technology company in health-care, life science and performance materials. Our 50,414 employees work to further develop technologies that enrich lives – from biopharmaceutical therapies to treat cancer and multiple sclerosis, cutting-edge systems for scientific research and production, to liquid crystals for smartphones and LCD televisions. In 2016, our 215 subsidiaries with

employees in 66 countries generated sales of € 15.0 billion. Our 91 production sites are located across 22 countries.

Founded in 1668, Merck is the world's oldest pharmaceutical and chemical company. The founding family remains the majority owner of the publicly listed corporate group. Merck KGaA, Darmstadt, Germany holds the global rights to the Merck name and brand. The only exceptions are the United States and Canada, where we operate as EMD Serono, MilliporeSigma and EMD Performance Materials.

Employees and sales by region



Group structure

In line with our strategic direction, our company comprises three business sectors: Healthcare, Life Science, and Performance Materials, which encompass the Group's six businesses.

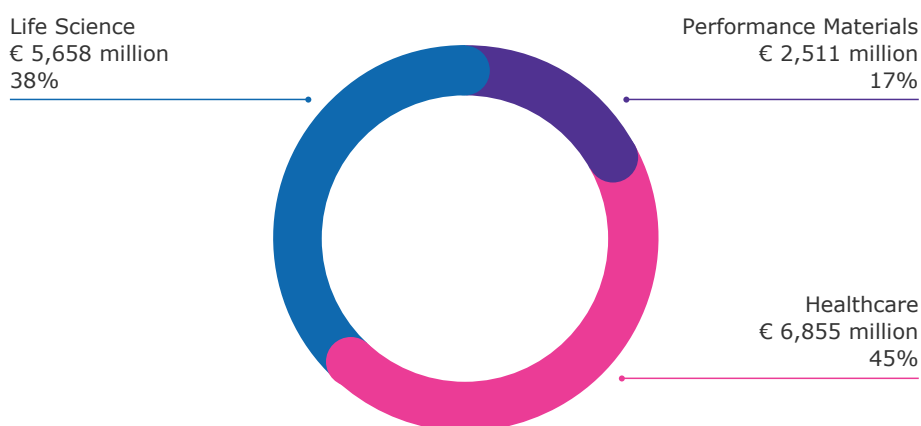
Our Healthcare business sector consists of four businesses, namely Biopharma, Consumer Health, Biosimilars, and Allergopharma. Our Biopharma business discovers, develops, manufactures, and markets innovative pharmaceutical and biological prescription drugs to treat cancer, multiple sclerosis (MS), infertility, and growth disorders, as well as certain cardiovascular and metabolic diseases. In our Consumer

Health business, we focus on consumer-centric innovation under the umbrellas of several strategic brands such as Neurobion®, Bion®, Seven Seas®, Nasivin®, Femibion®, and Dolo-Neurobion®, as well as Vivera®/Floratil®, Sangobion®, Vigantoletten®, Apaisyl®, and Kytta®. Our Biosimilars business is committed to increasing access to top-quality biologics for patients across the globe. We are in the advanced stages of negotiations to divest the Biosimilars business, with the transaction expected to close in fiscal 2017. Our allergy business Allergopharma is one of the leading companies in the field of allergy immunotherapy (AIT).

Within Life Science, we conduct research for researchers, providing scientists with laboratory materials, technologies and services to make research and biomanufacturing simpler, faster and more successful. Life Science is organized into three business areas that reflect our customer segments. Research Solutions focuses on academia and pharmaceutical research institutions; Process Solutions markets products and services for the entire pharmaceutical production value chain, and Applied Solutions serves clinical and diagnostic testing laboratories, as well as the food and environmental industries.

Our entire specialty chemicals business is combined in our Performance Materials business sector. The portfolio includes high-tech chemicals for applications in fields such as consumer electronics, lighting, coatings, printing technology, paints, plastics, and cosmetics. Performance Materials comprises four business units: Display Materials, Integrated Circuit Materials, Pigments & Functional Materials, and Advanced Technologies.

Net sales by business sector – 2016



Governance

Based in Darmstadt, Germany, our company operates in the legal form of a corporation with general partners (Kommanditgesellschaft auf Aktien – KGaA). The general partner E. Merck KG holds around 70% of the total capital of Merck KGaA (equity interest); the shareholders hold the remainder, which is divided into shares (share capital). Our shares have been included in the DAX® 30, the blue chip index of the Deutsche Börse, since 2007. In September 2008, our company was added to the FTSE4Good Index, a sustainability index that assesses the social, ecological and ethical conduct of companies.

Group strategy

We are a leading science and technology company. Our goal is to enrich lives and make our customers and partners more

successful. Embodied by values-based, economically sustainable corporate governance, this aspiration has been an integral pillar of our new brand promise since 2015, guiding the strategic development of the Group.

Over the past decade, we have transformed ourselves from a conventional supplier of chemicals and pharmaceuticals into a global science and technology company. The main driver was the realignment of our business portfolio, particularly through the divestment of our Generics business (2007) and the acquisitions of Serono (2007), Millipore (2010), AZ Electronic Materials (2014), and Sigma-Aldrich (2015). Furthermore, we focused our businesses on innovation-driven and highly specialized products, extensively revamped our internal structures and processes, and expanded our presence in global growth markets.

GOVERNANCE

Responsibility has been an integral part of our corporate identity for nearly 350 years. It is therefore one of our six Values, accompanied by courage, achievement, respect, integrity, and transparency. These core values guide us in our daily work and define how we interact with our customers and business partners. In all our endeavors, we aim to create added value and help people achieve a better quality of life.

Framework for responsible governance

Our Group Mission Statement and Values, as well as the external regulations and initiatives to which we are committed, give rise to requirements for responsible governance that are integrated in both our Corporate Responsibility strategy and our Group-wide guidelines.

We support the following initiatives on responsible governance:

- **The United Nations Global Compact:** Since 2005, we have been a member of the United Nations Global Compact and are committed to complying with the compact's principles regarding human rights, labor standards, environmental protection, and anti-corruption. Our annual progress report illustrates how we live our responsibility in our day-to-day actions.
- **Responsible Care® Global Charter:** As a signatory to the chemical industry's Responsible Care® initiative, we voluntarily do more than is required by law and have adopted mandatory standards for product responsibility, environmental impact mitigation, health, and safety. We were among the first companies to sign the revised version of the Responsible Care® Global Charter in 2014.
- **Together for Sustainability:** In 2014, we joined the Together for Sustainability network, an initiative dedicated to improving the supply chain with respect to environmental, compliance and social standards.
- **"Chemie³":** We are a member of the "Chemie³" initiative, a collaboration between the German Chemical Industry Association (VCI), the German Employers' Federation of the Chemical Industry (BAVC) and the German Mining, Chemical and Energy Industrial Union (IG BCE). This globally unique partnership aims to make sustainability a core part of the chemical industry's guiding principles and drive the sector's position within the German economy as a key contributor to sustainable development.

Our Group-wide guidelines

Our Group-wide guideline system comprises charters and principles valid for the entire company, as well as specific standards and procedures for individual business sectors and sites.

Our Corporate Environment, Health and Safety (EHS) Policy, for instance, forms the basis for implementing the Responsible Care® Global Charter. Our EHS Security and Quality Manual guides our product safety, environmental impact mitigation and occupational safety efforts across the Group, while our Safety Policy for chemical products defines product safety processes as well as the corresponding management structures.

Standards ensure implementation

Derived from the provisions contained in charters, principles and policies, our standards give specific guidance on how to implement our core values to those responsible for operational processes. These standards are continually updated by the relevant departments and are available on our Intranet. Our managers implement these standards in their respective areas of responsibility. We educate and train our employees on all guidelines that apply to them.

Guidelines integral to management systems

We use management systems to steer processes as well as define goals, actions and responsibilities. These systems are based on standards such as the internationally recognized quality management standard ISO 9001, good working practices (GxP) in the pharmaceutical industry, and ISO 14001 for environmental management. We regularly undergo an ISO 14001 and ISO 9001 certification process conducted by an independent auditing firm to ensure our compliance with these standards. We hold Group certificates for both.

CR strategy

Mankind is facing major global challenges such as climate change, growing resource scarcity, an aging society, and barriers to health – particularly in low- and middle-income countries. To overcome these issues, not only policy makers and civil society but also the private sector must join forces to find solutions.

Looking, listening and doing things better

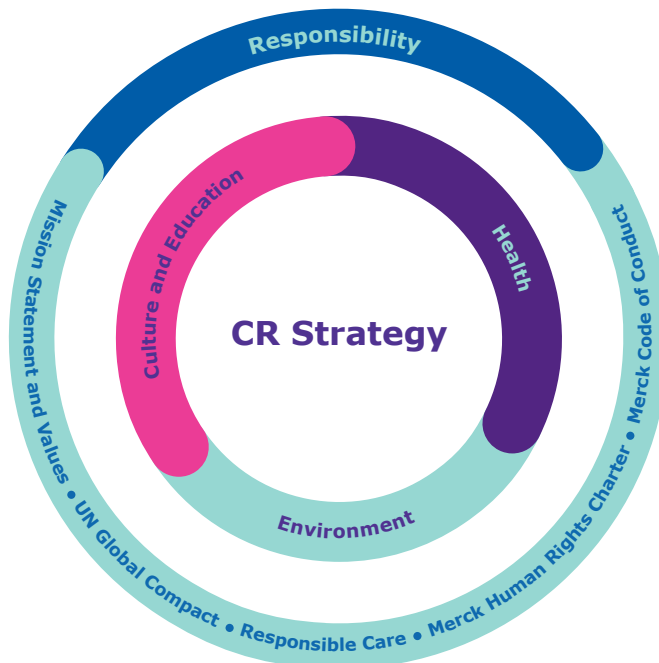
We are aware that our business operations impact our environment and the people around us, which is why we have made responsible conduct a pillar of our corporate culture. This approach is the cornerstone of our success. Through our innovative and top-quality high-tech products for the health-care, life science and performance materials sectors, we seek to help resolve global challenges.

Our Group strategy is targeted to business success. However, we likewise value the interests of our employees, customers and shareholders, as well as those of the commu-

nity. Our Group strategy underpins our corporate responsibility (CR) strategy. All our CR activities fall under the heading of "responsible governance", which for us most importantly means looking, listening and doing things better.

We take responsibility for our products, the environment, and the people around us – especially for our employees and the communities in which we operate. Through our products, we seek to meet customers' current and future needs. In doing so, safety and ethics matter just as much to us as business success. In our production activities, we seek to impact the environment as little as possible, which requires safe manufacturing techniques, high environmental standards and strict quality management. Furthermore, we strengthen our company by recruiting, developing and motivating talented employees. We strive to set an example for ethical conduct and make an active contribution to the communities in which we live.

Our CR strategy



We aim to quickly identify new global trends and challenges, allowing us to minimize risk while also leveraging the business opportunities that arise. In our CR efforts, we concentrate our strengths on those areas where we can make the biggest difference, which is why we pursue three strategic spheres of activity: health, environment, and culture & education.

Health

An estimated 400 million people have no access to adequate, affordable health care. Through our Group-wide Access to Health strategy, we seek to eliminate access barriers in low- and middle-income countries in an effort to provide underserved populations and communities in these countries with better, sustainable access to high-quality health solutions. Developments such as rising life expectancy and declining birth rates are also reflected in our health solutions, such as our cancer research, for instance, or our fertility treatments. You can find more information under Access to Health (p. 34).

Environment

Many of our innovative chemical and life science products help mitigate our impact on the environment. We strive to continuously enhance the sustainability footprint of our products while also helping our customers achieve their own sustainability goals.

As the market and technology leader in the global liquid crystals industry, we are driving the creation of state-of-the-art, energy-efficient displays. Furthermore, we are developing materials for energy-saving lighting and photovoltaics, one of the ways we're tackling the issue of climate change and energy scarcity. You can find more information under Sustainable product design (p. 29).

Culture & education

Culture inspires people and opens their minds to new possibilities, which is why we promote cultural initiatives worldwide and support education projects. After all, education is key to making culture accessible. Culture nurtures characteristics that are essential to our business activities as a high-tech company, such as creativity, enthusiasm for new discoveries, and the courage to transcend boundaries. You can find more information on our cultural activities under Community (p. 100).

Taking on responsibility worldwide

Our corporate responsibility activities align with the United Nations Sustainable Development Goals (SDGs). Here, we focus particularly on the SDGs that apply most closely to our business ethos. You can find more information on our SDGs under Sustainable Development Goals (p. 146).

Minimizing the adverse effects of our operations

We work to mitigate the ethical, financial and legal risks of our business activities, thereby ensuring our social license to operate. We adhere to legal, ethical, social, and ecological standards and have put extensive structures and systems in place to shore up this approach. Our environmental management activities aim to minimize environmental impacts at our production sites.

Corporate responsibility entwined with governance

Our CR strategy is approved by our Executive Board, which also makes decisions regarding our CR goals and reporting. Our Group-wide CR Committee oversees the implementation of our CR strategy. This council consists of representatives from our business sectors as well as from relevant Group functions such as EQ, HR, Compliance, and Procurement. Since June 2016, Public Affairs and Corporate Responsibility has been reporting to Belén Garijo, Executive Board member, CEO Healthcare and chairperson of the CR Committee.

Our CR Committee reviews our CR strategy to ensure that it covers the issues relevant to our company. In doing so, we draw on input from our stakeholders (p. 16) as well as the results of a materiality assessment (p. 19). This committee also defines measures to put our CR strategy into practice. The success of these measures is regularly reviewed, and the committee also ensures that the initiatives of our business sectors, Group functions and subsidiaries align with our Group-wide CR strategy. The measures adopted by the CR Committee are implemented by our line managers as well as by interdisciplinary project teams.

The CR Committee meets three times per year. In 2015 and 2016, its meetings primarily focused on access to health, human rights, environmental and social standards along the supply chain, and animal welfare.

compliance

First and foremost, responsible entrepreneurship means legally compliant conduct. All our activities must adhere to laws and regulations worldwide. Failure to comply with these might not only involve legal prosecution, but could also seriously compromise our reputation as a business partner and employer.

Our principles

Stringent compliance requirements

Compliance is our primary consideration worldwide. Particularly as an international company with operations in developing and emerging countries, we have extremely high standards for effective compliance management. Yet for us, there is more to compliance than adhering to regulatory provisions. We consistently aspire to act in accordance with the ethical principles defined in our Values and believe that profitability should go hand in hand with the very highest ethical standards.

Mandatory guidelines

Our guidelines governing entrepreneurial conduct are mandatory for all our employees Group-wide:

- The Merck Code of Conduct provides our workforce with a tool that promotes ethical business practices. A copy is given to all employees, explaining the principles for dealing with business associates, general partners and employees, as well as the communities in which we operate.
- The Merck Human Rights Charter supplements our Code of Conduct with globally valid principles regarding human rights as well as the core labor standards of the International Labour Organization (ILO).
- Our anti-corruption guideline provides that all business activities must be conducted in accordance with applicable anti-corruption standards. All forms of bribery – whether giving or receiving – are strictly prohibited. In 2016, we revised our anti-corruption guideline to reflect the tightened provisions of the German Criminal Code.
- Our Pharma Code (for prescription medicines) and our Consumer Health Code (for over-the-counter medicines) set out important principles for interactions with our partners in the health industry.

- In 2016, our principles regarding antitrust and competition law, which were already integral to our Code of Conduct as well as to various business-specific guidelines, were consolidated Group-wide. This new antitrust and competition law guideline stipulates that all business activities across the entire Group are to be carried out in compliance with applicable competition regulations at all times. We acknowledge the importance of fair competition and expect the same of contractual partners acting on our behalf.

Realigned Compliance organization

Our Group Compliance Officer and other specialists within our Group Compliance function are responsible for defining our compliance program, which is continuously updated to reflect new requirements, such as those resulting from changes in legislation.

In 2016, we restructured Group Compliance to align it more closely with the specific compliance needs of our businesses. For each of our business sectors (Healthcare, Life Science and Performance Materials), we appointed a Compliance Officer who in turn oversees regional teams. Compliance Officers have also been appointed for our Group functions and are responsible for implementing the measures set out in our compliance program in their respective areas.

Furthermore, in 2016 we also improved our internal processes. Guidelines are now sent to relevant managers, Group Compliance and Legal via an online confirmation process. Recipients then confirm not only receipt of the relevant guidelines, but also that they are being adhered to and implemented appropriately at the relevant sites.

Data Privacy as part of compliance management

During the restructuring of our Compliance organization, we integrated our Data Privacy unit into Group Compliance. As required by law, this unit will continue to act independently and will report directly to the Executive Board as well as the Supervisory Board. The Data Privacy team comprises four employees in Darmstadt and is supported by around 80 data privacy officers at our various sites.

Regular reporting

Our 85 Compliance Officers worldwide report to the Group Compliance Officer, who informs the Executive Board at least twice a year on the status of our compliance activities, possible risks and serious compliance violations. In turn, the Executive Board updates our supervisory bodies at least twice a year on key compliance issues.

Compliance audits

Our Internal Auditing Group function regularly reviews matters relating to compliance at our sites. Its audits determine which compliance guidelines, processes and structures are in place and how effective they are. In addition, Internal Auditing also checks for violations of our Code of Conduct and reviews the workplace requirements set out in our Human Rights Charter. The topic of corruption is also part of our standard audit program. Beyond internal audits, we also undergo external audits, such as the external assessment conducted by an auditing firm in early 2015. This led to the conclusion that the design of the compliance management system meets the key baseline requirements of the IDW PS 980 standard, in part even going above and beyond its requirements.

Compliance training

We regularly provide compliance training in the form of classroom and online courses, which focus on topics related to our Code of Conduct such as corruption, handling conflicts of interest and competition law. These courses are attended by employees of all levels as well as independent contractors and supervised workers (such as temps). We regularly review our training plan, adapting it to new developments.

Central SpeakUp Line

All Group employees are called upon to report compliance violations to their supervisor, Legal, HR, or other relevant departments. They can also use the SpeakUp Line, a central reporting system, to report violations by telephone or via a web-based application, doing so in their respective national language, free of charge and, if desired, anonymously. Business partners can also use our SpeakUp Line to report improper behavior.

SpeakUp Line reports are reviewed by Group Compliance before being submitted to the Group Compliance Case Committee, which consists of senior representatives from Internal Auditing, Compliance, Group Security, Data Privacy, and Human Resources. The committee coordinates the processing of reported violations and initiates corrective measures if necessary. Disciplinary actions are also taken, where needed, against employees who have committed a compliance violation. These actions may range from a simple warning to dismissal of the employee, depending on the severity of the violation.

In addition to the SpeakUp Line, there is also a central hotline to the Group Compliance Office, which employees can call for advice on ethical and compliant conduct.

Requirements for suppliers and business partners

If it is to be effective, compliance management needs to go beyond our own company – all our business partners worldwide must also follow our compliance principles. While our

supplier management (p. 90) processes focus on vendor compliance with our standards, our Global Business Partner Risk Management Guideline governs relations with sales partners such as distributors and wholesalers. We only collaborate with partners who comply with all applicable laws, reject all forms of bribery, adhere to environmental, health and safety guidelines, and refuse to tolerate discrimination. Furthermore, we require our business partners to demonstrate a commitment to internationally recognized human rights and labor standards, as well as to our own compliance requirements. We monitor adherence to these standards even for existing business relationships – usually when a contract is being considered for renewal.

Risk analysis of business partners

We apply a risk-based approach to selecting sales-related business partners. The greater we estimate the risk to be regarding a certain country, region or type of service, the closer and more carefully we examine the company before entering into a business relationship with them. For these risk assessments, we use the Corruption Perceptions Index (CPI) maintained by Transparency International; we also tap into background information from various databases and information reported by the business partners themselves on aspects such as their own compliance programs.

If we encounter compliance violations, we decide whether to reject the potential business partner or terminate the existing relationship. However, our partners are generally willing to adapt their structures and processes in line with our strict compliance requirements. Since launching this process in 2013, we have assessed nearly 2,000 business partners.

EFPIA Transparency initiative

Since 2016, companies in the EU have been required to publish all contributions to medical professionals and organizations in the healthcare industry that are not related to research activities, along with the names of the individual recipients. This practice is stipulated by the Transparency initiative of the European Federation of Pharmaceutical Industries and Associations (EFPIA). The EFPIA published a revised version of these guidelines in 2016. Moreover, in the same year several countries introduced legislation requiring varying degrees of transparency in the pharmaceutical industry. We will include these amended requirements in our EFPIA report for 2016.

Alliance for Integrity

In October 2015, we joined the Alliance for Integrity. Established by the German Society for International Cooperation (GIZ), the German Global Compact Network (DGCN) and the Federation of German Industries (BDI), this initiative aims to achieve a corruption-free business world in developing and emerging countries. Its activities are concentrated in Ghana, India, Indonesia, Brazil, and Argentina.

We are a member of the Alliance for Integrity's Steering Committee, which leads the decision-making process for developing measures in its target countries. Advisory groups arrange implementation at the country level. Our local Compliance organizations collaborate with these groups and participate in training that is offered to small and medium-sized companies. We also help to organize conferences on fighting corruption, such as the World Conference held by the German Chamber of Commerce in May 2016 in Berlin.

Uniform data protection management system

We operate a data protection management system that has been harmonized across the Group. Our Policy for Data Protection and Personal Data Privacy defines the standards according to which we process, save, use, and transmit data. This approach allows us to achieve a high level of protection for the data belonging to our employees, contract partners, customers, and suppliers, as well as patients and participants in clinical studies.

The Group-wide level of data protection is based on European and German legislation. At the same time, we also adapt our data security policies to local circumstances, as not all sites are covered by the European standards. We fundamentally respect the rights of those affected.

Data security measures

To protect our data against information theft and manipulation, we undertake technical and organizational measures based on ISO 27001, the standard for information security management. Technical measures include precautions for hardware and software, such as the creation of separate user accounts. Organizational measures cover formal review and release rules for all data we process, as well as clear access rules at our sites and visitor registration and tracking. Implementation of and compliance with our data security policy is also reviewed by Group Internal Auditing.

External auditing

Our data privacy management system is reviewed during an annual audit. In a benchmark survey carried out by Ernst & Young in 2015, our Group was rated as above average. In particular, the maturity of our data privacy culture and Data Privacy organization scored very well.

Progress

Internal audits

In 2015, 49 internal audits were conducted regarding corruption, with 55 having been conducted in 2016.

In 2015, 41 of these audits, which focused on the workplace requirements of our Human Rights Charter, were conducted

in 31 countries. In 2016, 47 such audits were performed in 19 countries, including 22 audits at our global headquarters. No violations were observed.

The annual audit planning process is risk-based and includes factors such as sales, employee headcount and corruption risk, the latter of which is derived from the Corruption Perceptions Index published by Transparency International.

The sites of the company AZ Electronic Materials, which we acquired in 2014, have been fully covered by our Internal Audit process since January 2015. Since 2016, this has also applied to the subsidiaries of the U.S.-based life science company Sigma-Aldrich, which we acquired in 2015.

Training on Code of Conduct and anti-corruption guidelines

In 2015, we used our e-learning system to train 8,673 people on the Code of Conduct and increase awareness of the consequences of compliance violations. In 2016, 18,697 people received such training, which also focused on how to prevent compliance violations.

We also regularly inform our employees of new compliance requirements. In 2015, a total of 20,404 people received anti-corruption training, with 29,764 employees having been trained in 2016. In 2015, we had an online course on our anti-corruption guideline translated into 15 languages, thus allowing roughly 96% of employees to do the training in their native language. In 2015, we furthermore created an online course for the pharmaceutical business, which explains the specific regulations relevant to this area. To support the introduction of our new antitrust and competition law guideline, we also provided an online training course in 2016, which is to be available in 13 languages in 2017.

Some seminars on special topics are specifically developed for managers in certain roles. These include, for example, training courses on competition law, which were updated in 2016 due to the introduction of our new Group-wide guideline. To complement the online courses we offer, numerous classroom courses on compliance are also held for employees Group-wide with a particular focus on local issues.

Reports via the SpeakUp Line

Both the number of reports of suspected compliance violations and the number of actual compliance cases has remained largely stable in recent years. In 2015, 33 compliance-related reports that led to investigations were received via the SpeakUp Line and other channels, with 36 in 2016. In 2015, there were eight confirmed cases of violations to the Code of Conduct, with 12 in 2016. The majority of these violations constituted minor, isolated incidents resulting from the misconduct of individual persons; appropriate disciplinary action was taken.

In the 2015-2016 period, there were two cases of improper business practices involving managers. These incidents were related to improper incentives for our sales force to increase sales and similar practices in associated parties (distributors). Both cases have been addressed with comprehensive action plans and independent review by Compliance and Internal Auditing. There was one case of sexual harassment, which led to the dismissal of the employee.

First EFPIA Transparency Report published

In 2015, our work focused on making our partners in the health industry understand just how important the EFPIA's Transparency initiative is to us. We furthermore took measures to ensure data quality and security. Based on

these efforts, in mid-2016 we published our first EFPIA report for all affected subsidiaries on a central website.

Compliance training for business partners

In 2015, we introduced compliance training for the employees of our business partners. This training is mandatory for all personnel who come into contact with our company or our products. It is available in eight languages and focuses on general compliance, preventing corruption and competition law. By the end of 2016, 3,875 employees from our partner companies had received this training, with 3,026 having been trained in 2015.

HUMAN rights

First and foremost, states have a duty to establish a regulatory framework to protect human rights. Particularly for enterprises with global operations, it is important for this framework to be implemented across all countries so as to create uniform competitive conditions. As a company, we in turn also have a duty to uphold human rights, taking steps to ensure that they are not compromised by our business activities.

Our principles

Commitment to preserving human rights

We are committed to upholding human rights within our sphere of influence and welcome the Guiding Principles for Business and Human Rights (UNGPs) adopted by the UN Human Rights Council in 2011. The UNGPs codify the duty of states to protect human rights as well as the responsibility of companies to respect human rights, providing a framework for how states and businesses should do so.

At the end of 2016, the German federal government adopted a national action plan for implementing these principles. Through our current efforts and initiatives, we are on the right track to fulfilling these requirements.

In the United Kingdom, we are required by the UK Modern Slavery Act to report on the steps we are taking to counter forced labor and human trafficking. Our company intends to issue our first such report in 2017.

Our Human Rights Charter

The UN Guiding Principles for Business and Human Rights encourage companies to continuously assess the actual and potential impact they have on human rights, acting with

the necessary due diligence, which includes identifying and managing risks.

We took the first step towards implementing the UNGPs in 2012, when we conducted an extensive, Group-wide human rights risk assessment aimed at identifying the human rights risks arising from our activities. Based on the results of this assessment, we adopted a Group-wide Human Rights Charter in 2013 that affirms our commitment to respecting and protecting human rights while also defining the requirements for our company. This charter unites and complements existing policies and guidelines on human rights, such as our Code of Conduct, our Corporate Environment, Health and Safety Policy and our Charter on Access to Health in Developing Countries.

Stakeholder dialogue on our Human Rights Charter

Our Human Rights Charter was developed after diligent consideration of input from external stakeholders regarding our human rights stance. Among these stakeholders were business and human rights experts from various countries, trade unions, and business federations, as well as experts on specific aspects covered in the planned charter.

Human rights due diligence

We seek to better understand the potential impact of our business activities and relationships on human rights and are examining our processes to identify the measures already in place at our sites that fulfill the function of human rights due diligence. This knowledge will help us adapt our Group-wide human rights due diligence efforts to better meet local needs and to develop approaches to overcome particular challenges. At the same time, we view the positive impacts of our operations as an opportunity.

Within the German Global Compact Network (DGCN), we are a member of the Business & Human Rights Peer Learning Group, a working group in which we engage with other companies to share lessons learned as well as successes in implementing human rights due diligence.

Progress

Training employees on our Human Rights Charter

In the 2015-2016 period, we used a variety of channels to educate our employees on our Human Rights Charter, including specific Intranet sites on human rights and videos featuring employees explaining how their work affects human rights.

Human rights impact assessment in India

A human rights impact assessment (HRIA) evaluates the actual consequences of a company's operations in an effort to promptly identify any problem areas. At the end of 2014, we conducted our first HRIA in India, which showed that we already have good internal systems and capacities in place for managing human rights risks. However, we intend to expand these structures in order to set a positive example

for industry there. As a result of this HRIA, we joined the Alliance for Integrity, a multi-stakeholder initiative seeking to offer practical solutions for countering corruption (p. 12) in emerging economies.

Subsidiary self-assessments

In line with our Human Rights Charter as well as the UN Guiding Principles on Business and Human Rights, we started the process of conducting human rights self-assessments for our subsidiaries in 2016. This aims to help us better understand how our subsidiaries perceive human rights risks and manage them locally, while also raising human rights awareness and creating a foundation for systematic support.

Our subsidiaries took part in an online survey we developed ourselves, providing us with detailed information. We will continue to evaluate this data in the course of 2017, working with the respective departments to identify opportunities to improve Group-wide processes and their local implementation. Taking into account the requirements of the UK Modern Slavery Act, our efforts will focus on issues such as forced labor and human trafficking, as well as labor rights in local supply chains.

stakeholder dialogue

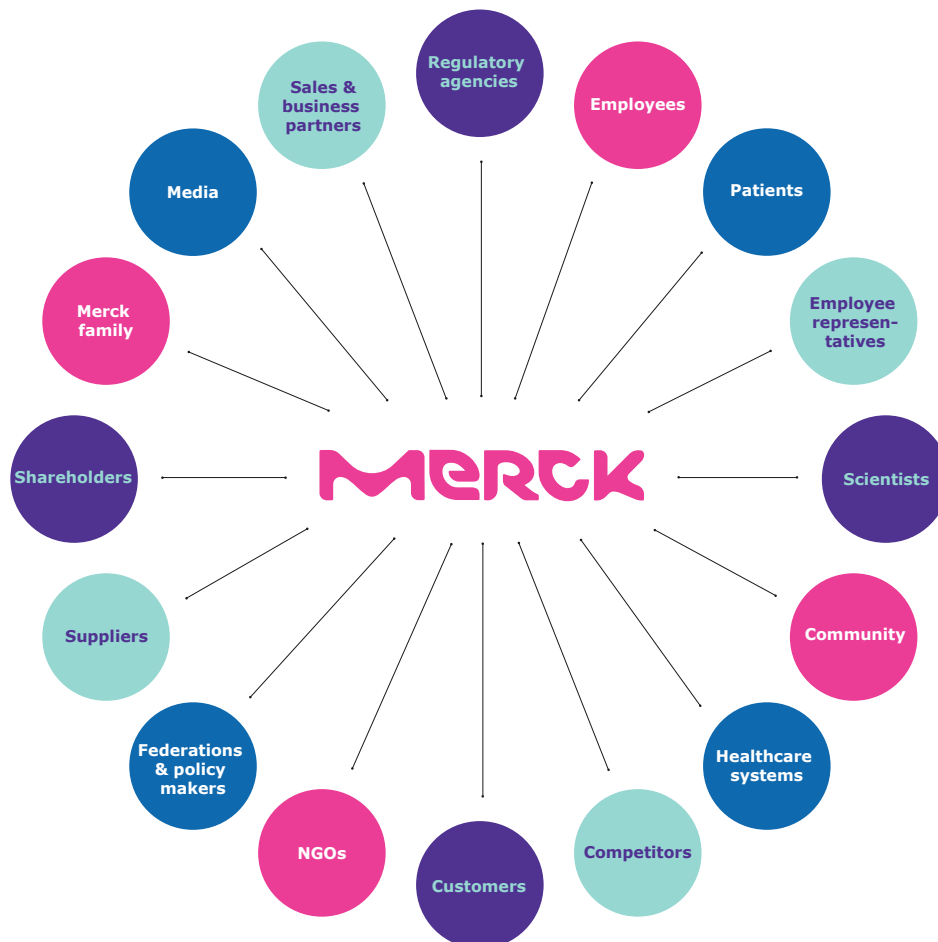
Our business activities converge with the interests of many people, which is why engaging with our stakeholders is particularly important to us. We aim to unite divergent interests as far as possible, as well as build and sustain trust. Through this dialogue, we communicate our decisions and actions transparently in an effort to ensure social license to operate.

Our principles

Dialogue at various levels

Our most important stakeholders include our employees, customers and business partners, patients, the Merck family, and our suppliers. We maintain continuous contact with them through a variety of channels, including stakeholder questionnaires, issue-specific dialogues, round table discussions, and information forums. We also engage stakeholders through our advocacy work and industry coalitions.

Our stakeholders



Regular stakeholder surveys

We regularly conduct surveys among our employees, customers and business partners, as well as other relevant stakeholder groups. We want to know which issues they consider to be of importance to Merck now and in the future, and how they rate our performance in addressing these issues. We also want to understand their expectations of us as a responsible company. Our CR Report reflects the results of these surveys and the actions we've taken in response.

In November 2016, we conducted a Group-wide employee survey in 23 languages. Around 42,500 employees took part, representing an 83% response rate.

Issue-specific dialogues

Our business operations in the areas of healthcare, life science and performance materials intersect the interests of various social groups, whom we engage via questionnaires, workshops and seminars, or even round tables held at major conferences. Our departments organize such forms of exchange – at the local, national or international level, depending on the topic and degree of importance. Beyond this, we are also involved in industry networks and participate in symposia. In the 2015-2016 period, we intensified our efforts in the following areas:

Access to health: As part of our aim to improve access to health in low- and middle-income countries, we engage various stakeholders in a continuous dialogue. With our Access Dialogue Series, we have created a platform from which public and private sector stakeholders can exchange important information and share best practices. Key issues in the 2015-2016 period were managing intellectual property and challenges in local supply chains. Furthermore, we deepened our exchange with important stakeholders and experts on schistosomiasis and malaria. Further information on these stakeholder dialogues can be found under Access to Health (p. 34).

Mica sourcing: In February 2016, we attended the Mica Summit in Delhi, India, hosted by the Natural Resources Stewardship Circle (NRSC). The main topics discussed at the summit were transparency in the mica supply chain and improving the living conditions of the communities in the mining regions. As a follow-up to this dialogue, we are now involved in the NRSC's Responsible Mica program. You can find more information under Suppliers (p. 93).

New technologies: We seek to engage with pioneers who look far into the future and bring cutting-edge technologies to market. To this end, we established the annual Displaying Futures symposium, which was held for the sixth time in 2015 and the seventh time in 2016. At the 2015 symposium, experts of various disciplines from all corners of the world met in San Francisco, CA (USA) to discuss how innovative high-tech materials could be integrated into groundbreaking

future technologies. In 2016, specialists from a range of industries convened at our global headquarters in Darmstadt to discuss the future of mobility. You can find more information under Sustainable product design (p. 29).

Round tables and information forums

We have set up round table discussions and forums for local residents at our major sites. In Darmstadt, we have been holding an annual public planning forum since 1994 at which we discuss the development of our site with members of the city council, local authorities and the community. In the 2015-2016 period, the main focus of the forum was on the changes resulting from our ONE Global Headquarters initiative (p. 72), particularly the new sewer system being laid by the City of Darmstadt and the future design of Frankfurter Strasse.

In expanding our biotech production facilities in Corsier-sur-Vevey, Switzerland, we initiated a dialogue with NGOs and local authorities to maximize the project's transparency. These annual meetings will continue to be held even after completion of the construction work. In 2016, key topics of discussion were the mobility plan and our wastewater treatment system, which was first tested in the same year.

Advocacy groups and industry coalitions

We actively participate in the political process and advocate our views by engaging policy makers in a direct dialogue as well as through our work with industry coalitions. Below are several examples of major national and international industry associations in which we are members and also hold positions:

- German Chemical Industry Association e.V. (VCI)
- European Chemical Industry Council (CEFIC)
- German Association of Research-based Pharmaceutical Manufacturers e.V. (vfa)
- European Federation of Pharmaceutical Industries and Associations (EFPIA)
- International Federation of Pharmaceutical Manufacturers & Associations (IFPMA)

Examples of positions held by members of our Executive Board include:

Stefan Oschmann, Chairman of the Executive Board and CEO:

- European Federation of Pharmaceutical Industries and Associations (EFPIA), Vice President
- German Chemical Industry Association e.V. (VCI), Board of Directors
- Deutsche Welle, Business Advisory Board

Udit Batra, member of the Executive Board and CEO Life Science:

- Greater Boston Chamber of Commerce, board member
- Massachusetts High Technology Council (MHTC), board member
- University of Delaware College of Engineering, Advisory Council member

Kai Beckmann, member of the Executive Board and Chief Administration Officer:

- Federal Employers' Association for the German Chemical Industry e.V. (BAVC), Vice Chairman
- Employers' Association for the Chemical and Related Industries in the State of Hesse e.V. (HessenChemie), board member
- Darmstadt Rhein Main Neckar Chamber of Industry and Commerce (IHK), Vice President
- Fraunhofer Institute for Computer Graphics Research (IGD), Chairman of the Advisory Board

Walter Galinat, member of the Executive Board and CEO Performance Materials:

- German Chemical Industry Association e.V. (VCI), Chairman of the Hessian Chapter
- Trade Policy Committee of the German Chemical Industry Association e.V. (VCI), member
- Board of Trustees of the Chemical Industry Fund (FCI) within the German Chemical Industry Association e.V. (VCI), board member

Belén Garijo, member of the Executive Board and CEO Healthcare:

- Pharmaceutical Research and Manufacturers of America (PhRMA), board member

Involvement in initiatives

We collaborate with numerous civically engaged organizations, such as the Goethe-Institut, the Remembrance, Responsibility and Future Foundation and the World Environment Center (WEC). Furthermore, we are also involved in initiatives and projects (p. 8) that share our interpretation of responsible entrepreneurial conduct. That is why we support, for instance, the Code of Responsible Conduct for Business and are members of the Chemie³ and Responsible Care[®] initiatives.

Political donations

We do not make financial contributions to holders of or candidates for political office, political parties or related organizations. This is stipulated in our Code of Conduct. In the United States, Political Action Committees (PACs) have been set up through which our employees can donate money to support political candidates and organizations. These donations are not made by the company, but by the employees. The contributions donated are reported to the U.S. Federal Election Commission and published.

Materiality assessment

Which issues – in terms of our corporate responsibility – are of particular significance to our long-term business success? And what expectations do stakeholders have of our company? In an effort to answer these questions, we regularly conduct materiality assessments that aim to rate sustainability topics according to their importance to our company and external stakeholders. This method allows us to align our business activities with the requirements of our stakeholders. In applying this approach, we fulfill the requirements of the Global Reporting Initiative (GRI) G4 guidelines. In 2016, we refined our materiality analysis to further enhance the quality of the results.

Selecting topics

We first determined whether the CR issues of relevance to us had changed at all, basing our assessment on a comprehensive document analysis that included inquiries from investors, (sustainability) ratings, social media, and press releases. From the results, we identified 43 issues, 38 of which were covered by the materiality assessment in 2014. New topics included issues such as health awareness (p. 41) and digitalization (p. 26).

Ranking and weighting the issues

These 43 topics were evaluated by our most important stakeholders. This involved a total of 300 employees, scientists, customers, sales associates, and business partners ranking

the relevance of these issues through an online survey. In addition, we conducted five interviews with select experts whose responses were key in determining the final ranking of our main CR topics.

We weighted the results of the materiality assessment according to the importance of the stakeholder groups to our company and their influence on the five value drivers of sales, reputation, employee satisfaction, cost reduction, and innovation.

Results: Product responsibility most important

The process and results of the materiality assessment were reviewed by internal specialists as well as our CR Committee. Our stakeholders continue to rate issues regarding product responsibility as most important, above all product quality, the safety of chemical products, innovation, and research & development. Topics rated as material form the focus of this CR Report. Since our stakeholders also expect information and transparency from us regarding less significant issues, we also report on these, albeit in less detail.

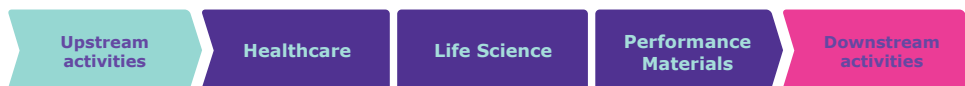
Material topics



☒ Very high importance
 ☒ High importance
 ☒ Medium importance

Material issues in our value chain

The following table shows where our main issues fall within the value chain: upstream in our supply chain, in the course of our own activities, or downstream with customers and patients. Moreover, we have listed the issues to show the breakdown of materiality by Merck business sector and stakeholder group. These topics are linked to the respective chapters in this report.



Product safety and quality

Chemical product safety

Material for: Customers, Merck family Shareholders, Government agencies, NGOs, Commercial and business associates

Drug safety

Material for: Merck family, Shareholders, Government agencies, NGOs, Health systems, Patients

Counterfeit products

Material for: Customers, Merck family, Shareholders, Federations and policy makers, Government agencies, NGOs, Commercial and business associates, Health systems, Patients

Transport and warehouse safety

Material for: Customers, Government agencies, Suppliers, Commercial and business associates, Communities

Labeling of chemicals and other products

Material for: Customers, Federations and policy makers, Government agencies, NGOs, Media, Suppliers, Scientists, Commercial and business associates, Health systems, Communities, Competitors

Pharmaceutical and chemical residues in the environment

Material for: Federations and policy makers, Government agencies, NGOs, Communities

Ethical conduct

Bioethics

Material for: Customers, Federations and policy makers, Government agencies, NGOs, Scientists

Clinical trials

Material for: Merck family, Shareholders, Federations and policy makers, Government agencies, NGOs, Media, Suppliers, Scientists, Patients

Animal welfare

Material for: Government agencies, NGOs, Media, Suppliers, Scientists

Good business practice

Compliance



Material for:

Employees, Merck family, Shareholders, Government agencies, NGOs, Suppliers, Commercial and business associates, Health systems, Competitors

Responsible marketing



Material for:

Customers, Federations and policy makers, Media, Commercial and business associates, Health systems, Patients

Community involvement



Material for:

Merck family, NGOs, Media, Communities

Interactions with health systems



Material for:

Federations and policy makers, Government agencies, NGOs, Health systems, Patients

Governance



Material for:

Employees, Employee representatives, Merck family, Shareholders, Government agencies

Health for everyone

Access to health



Material for:

NGOs, Media, Suppliers, Commercial and business associates, Health systems, Patients

Prices of medicines



Material for:

Merck family, Shareholders, Government agencies, NGOs, Media, Commercial and business associates, Health systems, Patients

Medicines to combat rare and neglected diseases



Material for:

NGOs, Scientists, Health systems, Patients

Health awareness



Material for:

NGOs, Media, Scientists, Commercial and business associates, Health systems, Patients, Communities, Competitors

Supply chain standards

Supply chain standards



Material for:

Customers, Merck family, Shareholders, Federations and policy makers, NGOs, Media, Suppliers, Competitors

Human rights

Human rights

Material for:

✓	✓	✓	✓	✓
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Customers, Federations and policy makers, NGOs, Media, Suppliers, Communities

Sustainable products

Sustainable product design

Material for:

		✓	✓	✓
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Customers, Scientists

Re-use and recycling of our customers' waste

Material for:

		✓		✓
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Customers

Attractive employer

Diversity and equal opportunity

Material for:

	✓	✓	✓	
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Employees, Employee representatives, Merck family, Media

Attracting, recruiting and retaining employees

Material for:

	✓	✓	✓	
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Employees, Employee representatives, Shareholders, Competitors

Employee development

Material for:

	✓	✓	✓	
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Employees, Employee representatives

Good leadership

Material for:

	✓	✓	✓	
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Employees, Employee representatives

Employee engagement

Material for:

	✓	✓	✓	
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Employees, Employee representatives

Health and safety

Material for:

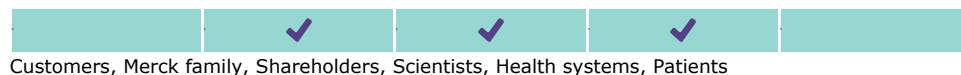
	✓	✓	✓	
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Employees, Employee representatives, Government agencies

Technology

Innovation and R&D

Material for:



Customers, Merck family, Shareholders, Scientists, Health systems, Patients

Resource efficiency

Waste and recycling

Material for:



Government agencies, NGOs, Communities

Water management

Material for:



Government agencies, NGOs, Communities

Climate change

Energy efficiency and renewable energy

Material for:



Federations and policy makers, NGOs

Greenhouse gas emissions

Material for:



Customers, Federations and policy makers, Government agencies, NGOs, Media, Suppliers