

*Highlights
2012*

Responsibility



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EMD - Living Innovation

Our aspiration is to make great things happen. With our research-driven specialty businesses, we help patients, customers, partners and our communities around the world to live a better life. We deliver entrepreneurial success through innovation.

Merck KGaA, Darmstadt, Germany is a leading pharmaceutical, chemical and life science company with total revenues of EUR 11.2 billion in 2012 and a history that began in 1668. Our future is shaped by around 39,000 employees in 66 countries. Merck KGaA, Darmstadt, Germany is a company in which the Merck family holds an approximately 70% interest and shareholders own the remaining approximately 30%. In the United States and Canada the subsidiaries of Merck KGaA, Darmstadt, Germany operate under the umbrella brand EMD.

We operate our businesses in four divisions: Prescription Medicines, Consumer Health, Performance Materials, and Life Science Tools.

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Prescription Medicines

Prescription Medicines is the largest division of Merck KGaA, Darmstadt, Germany. It markets innovative prescription drugs to treat cancer, multiple sclerosis, infertility, growth disorders, and selected cardiovascular and metabolic diseases. The division's products are primarily prescribed by specialists and largely manufactured using biotechnology.

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Consumer Health

Our **Consumer Health** division offers over-the-counter pharmaceuticals. We focus on eight strategic brands, covering important health concerns such as mobility, everyday health protection, women's health, cough and cold, and allergies. Our products are backed by science and in line with our consumers' needs worldwide.

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Performance Materials

Performance Materials provides high-tech performance chemicals for applications in a wide range of fields such as consumer electronics, lighting, coatings, printing, plastics, and cosmetics. With a market share of between 50% and 60%, we have been the market leader in liquid crystal mixtures for many years.

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Life Science Tools

Our **Life Science Tools** division is the world's third-largest supplier of products and services for the life science industry. These are used by customers working in research and analytical laboratories as well as in pharmaceutical manufacturing.

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Cover photo: Together with the World Health Organization (WHO), we are combating the insidious worm disease schistosomiasis in Africa.

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About this brochure → This brochure contains a selection of examples from our Corporate Responsibility Report 2012, which covers the years 2011 and 2012. The complete Corporate Responsibility Report that includes goals, actions and performance indicators is available online.

www.emdgroup.com/cr-report2012

Letter from Karl-Ludwig Kley



Karl-Ludwig Kley, Chairman of the Executive Board, and Sira Mamboya, Deputy Minister of Health of Zanzibar.

Dear Readers,

The term "responsibility" originates from the Latin word "respondere", which means "to respond". Today, companies are required more than ever to respond to certain questions: How are they contributing to society and the environment? How do they treat the people who work for and with them?

We are deeply engaged in these questions. To us, they are not just a fad - they have always been part of our entrepreneurial approach. It is therefore no coincidence that responsibility is one of our six corporate values that guide our actions each and every day. We thus support the United Nations Global Compact and its principles, which cover human rights, labor standards, the environment, and anti-corruption.

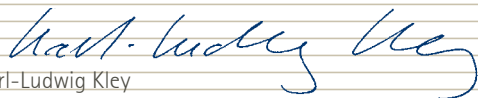
This brochure shows how we specifically take responsibility. It presents a selection of examples of our commitment to products, the environment and people.

- With our innovative pharmaceutical, chemical, and life science products, we are helping to overcome global challenges such as climate change and energy scarcity. For instance, our innovative liquid crystals enable computer screens and televisions to consume significantly less energy.
- One expression of our responsibility for the environment is our engagement in climate protection. We are aiming to reduce our direct and indirect greenhouse gas emissions by 20% by 2020, measured against the 2006 baseline.
- As an example of how we take responsibility for people, we are collaborating with the World Health Organization (WHO) in the fight against the neglected tropical disease schistosomiasis in Africa. In 2012, we decided to increase our donation of the praziquantel tablets needed to treat the disease by tenfold in the medium term.

"Taking responsibility means responding to questions."

Corporate responsibility is an integral part of our daily conduct and thus a fundamental prerequisite for our business success. Only a healthy company that operates sustainably can contribute as an employer, taxpayer and corporate citizen to a functioning society. Through our "Fit for 2018" efficiency and growth program, we are ensuring that we can continue to do so also in the future. Since its founding nearly 350 years ago, Merck KGaA, Darmstadt, Germany has always had a solid tradition of taking responsibility in the long term and supporting sustainability. We will carry this tradition on and continue to respond to questions of responsibility in the future as well.

Sincerely,



Karl-Ludwig Kley
Chairman of the Executive Board

Taking on responsibility

Our approach → We see ourselves as part of society and seek to help resolve the critical challenges that face society today.



Mankind is confronted with major global issues, such as climate change, the increasing demand for affordable, renewable energy, and a growing need for access to health. We are aware that our business activities have an impact on our environment as well as society. However, we also believe that responsible corporate governance can help solve global challenges. In 2011, we therefore refined our Corporate Responsibility (CR) strategy, which comprises three spheres of activity:

Products → Our products serve the current and future needs of people worldwide; many of them also make a positive contribution to environmental protection. Safety and ethical aspects are equally important as business success.

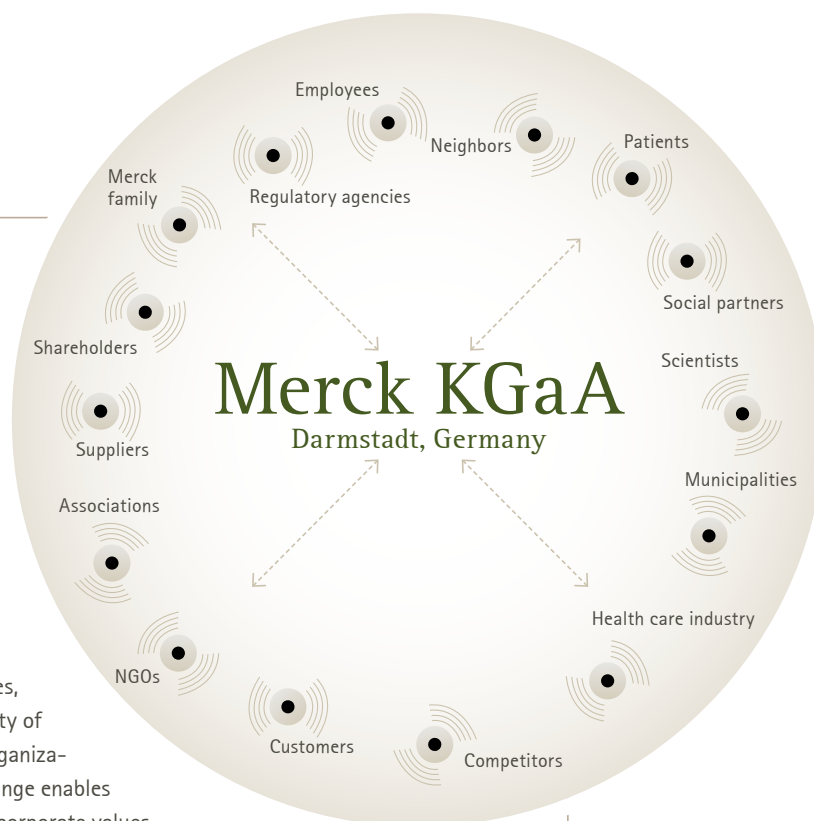
Environment → In the manufacture of our products, we seek to impact the environment as little as possible. Safety, environmental protection and quality management are absolutely essential to this goal.

People → We strengthen our company's ability to act by recruiting, developing and motivating suitable employees. Furthermore, we want to help society function better and aim to set the example for ethical conduct.

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Stakeholder dialogue →

Our business operations intersect the interests of many people. The dialogue with relevant stakeholder groups is therefore of fundamental importance to us. These stakeholders include our employees, our business partners, the Merck family, investors, regulatory agencies, associations, neighbors in the vicinity of our sites, and non-governmental organizations (NGOs). This continuous exchange enables us to demonstrate how we live our corporate values and to show the CR strategy we have chosen to pursue. This dialogue should also convey our esteem for our stakeholders. We strive to sustain and build trust and – wherever possible – harmonize divergent interests. Our primary goal is to ensure public acceptance.



The CR Committee steers the implementation and review of our CR strategy. It comprises representatives from the divisions as well as from relevant Group functions, such as Human Resources, Environment Health Safety Security Quality, and Procurement. In March 2013, Karl-Ludwig Kley, Chairman of the Executive Board, became Chairman of the CR Committee as well. The actions resolved by the CR Committee are implemented by cross-divisional project teams consisting of experts in the respective subject.

Compliance: Mandatory rules of conduct

All our activities worldwide must comply with laws and regulations. Violations can result in more than criminal prosecution – they can also do significant damage to our reputation as a company. Compliance with laws and regulations is therefore our number one priority. For us, compliance also means conduct that reflects

our six corporate values, which are courage, achievement, responsibility, respect, integrity, and transparency.

Furthermore, we support external initiatives for responsible corporate governance, such as the United Nations Global Compact, the Responsible Care® program of the chemical industry, and the Code of Responsible Conduct for Business (an initiative launched by companies in Germany). In 2012, we furthermore contributed to the policy paper of the German Chemical Industry Association (VCI), the German Federal Employers' Association of the Chemical Industry (BAVC), and the German Mining, Chemical and Energy Industrial Union (IGBCE). The paper is entitled "The understanding of sustainability within the German chemical industry" ("Das Nachhaltigkeitsverständnis der deutschen Chemiebranche").

Developing sustainable products

Energy-efficient displays → Our liquid crystals help to conserve energy. They are used in televisions, monitors, tablet computers, notebooks, mobile telephones and digital cameras.



Displays use

20%

less energy* thanks to innovative liquid crystals from Merck KGaA, Darmstadt, Germany for PS-VA technology (*in comparison to VA technology).

Our success is based on innovative products that help people to lead better lives. Product safety – for our customers, our patients and the environment – is at the core of our corporate responsibility. Our guidelines are shaped by international laws and voluntary commitments, such as the Responsible Care program of the chemical industry. In addition, through our products, we are helping to overcome global challenges such as climate change and energy scarcity.

Our specialty chemicals help our customers conserve energy. Our liquid crystals for PS-VA technology (polymer-stabilized vertical alignment) provide, among other things, television screens with high picture quality while also consuming little energy. In addition, they are highly translucent and help significantly reduce the amount of background lighting needed, which is the largest power consumer in a display. A new potential application for liquid crystals is intelligent windows, which enable better control of a building's energy efficiency. Furthermore, we manufacture materials for organic light-emitting diodes (OLEDs), which make it possible to produce energy-efficient displays with brilliant colors and sharp picture quality. In October 2012, we strengthened our partnership with Epson, a Japanese company. Our common goal is the mass production of large-surface OLED displays. In addition to this, our printable structuring materials enable the photovoltaics industry to manufacture solar cells in a more environmentally sound way while improving their efficiency.

Reducing environmental impact

Even in the development phase, we work to minimize the potential environmental impact of our products during their manufacture, use, and disposal. We launched the Green³ program in 2010. We offer our customers innovative, environmentally sound materials for energy-efficient LC and OLED displays and help them make their production processes environmentally preferable. We also support them in adhering to safety requirements, such as the EU chemicals regulation REACH, as well as the self-imposed restrictions of some industries, such as the halogen-free policy. In 2011, we expanded the Green³ concept to our products for the cosmetics industry. Together with our customers, we develop new cosmetic formulations that meet strict sustainability criteria and go along with the current trend of greater naturalness in cosmetics.

By conducting product life cycle assessments, we determine the environmental impact of our products. Our Performance Materials division has determined the product carbon footprint (sum of greenhouse gas emissions) for pearl-luster pigments and in addition the product water footprint (total water use) for liquid crystal mixtures. Here, we apply the "cradle to gate" method, which assesses the impacts from resource extraction to the factory gate. In the 2011-2012 period, our division for life science tools conducted life cycle assessments of five key products in accordance with the international standards ISO 14040 and ISO 14044. In addition, the division determined the product carbon footprint for more than 20 different products. The division uses these assessments within the Design for Sustainability program to further reduce those impacts.



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Safe handling of chemicals →

In Germany and some other countries, Merck KGaA, Darmstadt, Germany established a system named Retrologistik® for disposing of packaging and chemicals in a safe and environmentally responsible manner. At the beginning of 2010, we entered into a strategic alliance with the German Association for International Cooperation (GIZ). Our joint goal is to set up the retrologistics system in Indonesia, the Philippines, and Thailand. We are thus raising environmental awareness locally and changing the manner in which chemicals are handled. In total, we and the GIZ have thus far trained more than 1,000 employees of universities and regulatory agencies. We are furthermore helping governmental laboratories and waste industry companies to implement safe recycling systems.



Promoting access to health

A holistic approach → Through a wide range of activities, we contribute to providing health solutions to underserved populations and to strengthening health systems in developing countries.



1/3 of the world's population

does not have regular access to medicines, according to the World Health Organization (WHO).

"We are proud that our company is helping facilitate access to health. We are committed to pursuing and further developing our Access to Health activities in the future to achieve sustainable health solutions for all."



Stefan Oschmann, Member of the Executive Board and responsible for the Prescription Medicines and Consumer Health divisions

We are committed to improving access to health in developing countries. Here we can contribute the competencies we have acquired from working at the interface of medicines, chemicals and diagnostics. In 2011, we launched a Group-wide initiative and assessed how we can better meet the needs of underserved populations. In the same year, we adopted a binding charter covering research, pricing and patent policy, counterfeit medicines and product donations. Stefan Oschmann, Member of the Executive Board and responsible for the Prescription Medicines and Consumer Health divisions, bears overall responsibility in this area.

8th
We ranked
in the Access to Medicine Index 2012
(2010: 17th out of a total of 20 companies).



In emerging economies and developing countries we support training on the topic of counterfeit medicines.

Healthcare for underserved populations

We are convinced that partnerships are the most effective method for developing new approaches to combating neglected tropical diseases. Together with the World Health Organization (WHO) we are fighting the worm disease schistosomiasis in Africa (more information starting on page 16). Within the scope of this lighthouse project we are also working within a public-private partnership on developing a praziquantel formulation suitable for pre-school children. In addition, we are cooperating with the Tropical Disease Research Program of WHO and exploring new treatments for malaria.

We review our prices on a regular basis to ensure that our products are competitive and accessible. We produce several of our therapies for chronic



Primarily children suffer from schistosomiasis in Africa. In 2012, we donated more than 27 million praziquantel tablets to combat this worm disease.

diseases in India, Pakistan and Indonesia and thus enable local access to technology and knowledge. To protect patients from counterfeit medicines, Merck KGaA, Darmstadt, Germany supports, for example, measures of the International Federation of Pharmaceutical Manufacturers & Associations (IFPMA) and has launched its own Group-wide anti-counterfeit network. Through the lighthouse project Global Pharma Health Fund, we also participate in the fight against counterfeits (more information starting on page 16). In Nigeria, we employ an SMS identification system for our diabetes medicine Glucophage®. In addition, our company supports the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) of the World Trade Organization (WTO) and refrains from filing any patent applications relating to pharmaceuticals in least developed countries (LDCs).

Investing in climate protection

Systematically conserving energy → Within the scope of our EDISON climate protection program, we are systematically identifying ways to conserve energy and are investing in measures to boost energy efficiency as well as reduce greenhouse gas emissions.



Climate protection is one of the greatest challenges of the present and the future. Climate change and its consequences are already impacting life on this planet. Being a responsible company, we have an obligation to help. Our Group-wide activities for environmental protection, health and safety therefore focus on climate protection. In 2009, we set ourselves the goal of reducing total direct and indirect greenhouse gas emissions by 20% by 2020, measured against the 2006 baseline. Our commitment to the climate is also of financial benefit since improved energy efficiency means that we save on energy costs. Furthermore, we are developing and marketing products that help our customers conserve energy (more information starting on page 8).

We aim to cut our greenhouse gas emissions by

20%

by 2020 (measured against the 2006 baseline).

200 projects for a cleaner environment

We regularly gauge and assess any processes that impact the climate. In 2012, we emitted around 516,000 metric tons of greenhouse gases worldwide (2011: 521,000 metric tons). Our energy requirements for 2012 totaled 1,438 megawatt hours (2011: 1,447 megawatt hours). As the bulk of our greenhouse gas emissions and energy requirements stem from production, we wish to increase our energy efficiency and reduce process-related emissions particularly in this area. In 2009, we launched a comprehensive climate protection program called EDISON that consolidates all climate protection and energy efficiency activities of our company. Within the scope of the EDISON program, we have earmarked an additional EUR 10 million each for 2012 and 2013, for measures to conserve energy and reduce greenhouse gas emissions. With approximately 200 individual projects, we are aiming to reduce emissions by around 64,000 metric tons of CO₂ per year in the medium term. Around one-third of these globally planned measures have already been implemented or are in progress. One example is our site in Goa, India, where a power plant is currently being constructed that will utilize climate-neutral biomass as fuel. Another is our site in Gernsheim, Germany, where a gas-fired combined heat and power plant (CHP) will go into operation in mid-2013. This power plant will cover around half of the power needed at the site. This highly efficient principle of cogeneration means that the heat from generating power is used for production. This will enable us to save around 6,000 metric tons of CO₂ per year.

Continuous energy management is another component in our program to boost energy efficiency and enhance climate protection. In 2012, our production sites in Darmstadt and Gernsheim, responsible for around 40% of our global energy consumption, were certified to ISO standard 50001 "Energy management systems".



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Our site in Goa, India → A biomass power plant is currently being constructed here. As fuel, we are recycling the shells of cashews and coconuts, two crops that are farmed in the region. Starting in 2015, this will enable us to annually save around 11,000 metric tons of CO₂ at this site, which will be carbon-neutral as well as independent of the public power grid.



Benefiting from diversity

The right combination → Through our diversity strategy, we leverage the opportunities of a diverse workforce, ensuring that all employees can optimally contribute their skills and expertise.



61%

of our executive positions are held by persons of non-German nationality. Altogether 57 different nationalities are represented in such positions.

We are convinced that workforce diversity promotes innovation and better team performance. A good balance between different cultures, nationalities and age groups, and between male and female employees contributes to business success. Since 2011, responsibility for our Group-wide diversity strategy has been vested in our Chief Diversity Officer (CDO), who reports to Kai Beckmann, Member of the Executive Board and Chief Administration Officer. Increasing the percentage of women in management positions is an important priority to us. In 2011, we set ourselves the goal of increasing this to between 25% and 30% by 2016. Also in 2011, together with all other DAX® 30-listed companies, Merck KGaA, Darmstadt, Germany signed a voluntary commitment concerning the proportion of women in management positions. Further focal points of our diversity measures are internationality and demographic change.

Providing targeted support for female employees

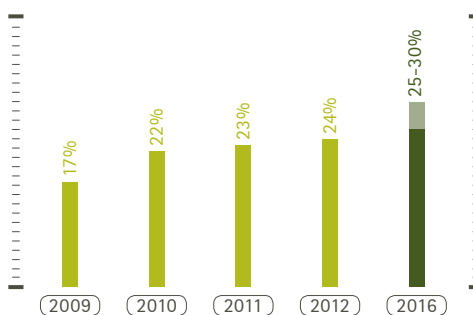
Women currently make up 42% of our workforce. The ratio of female to male employees varies among individual business sectors, functions and regions. In

Pharmaceuticals, for example, 46% of all employees are female, in production 34%. In addition to increasing the proportion of women in management positions, the company has set itself the goal of increasing the percentage of female employees wherever they are underrepresented. Global training courses for executive staff and for our recruiters address this issue. In addition, we support women with special programs. In the 2011-2012 period, 15 mentors and 15 mentees participated, for example, in our Women in Mentoring program. We also support the international Healthcare Businesswomen's Association and several internal networks within the company. To ensure better work-life balance opportunities, Merck KGaA, Darmstadt, Germany offers more than 20 different flexible working hour models as well as childcare options in Germany. In 2013, a Diversity Council composed of executives from all divisions and Group functions was set up to further enhance our diversity strategy.

Internationality and demographic change

As a global company, we operate in 66 countries. 72% of our employees work outside Germany; 26% are of German nationality. The internationality of our executive staff also reflects the global scope of our business operations: 61% are of non-German nationality. Moreover, we help our employees to

→ **Heading in the right direction** → Our goal is to increase the percentage of women in management positions to between 25% and 30% by 2016.



acquire intercultural skills, for example through cross-regional teamwork or through assignments in other countries.

In Germany, some other EU countries, and the United States, we must adapt to demographic change. In Europe, we have therefore launched various programs. We adapt workplaces to the needs of older employees, for example, while the goal of our Health Management is to help maintain older employees' performance capacity. The current average age of our employees is approximately 40 worldwide.

"We must fully leverage our teams' innovative strength in order to secure our success. Diverse competencies, ideas and backgrounds expand our base of knowledge and thus contribute to business success. This is why we promote diversity, viewing it as a strength to be utilized to the fullest."

Kai Beckmann, Member of the Executive Board
and Chief Administration Officer

Showing social engagement

Long-term commitment → Together with WHO, we are combating schistosomiasis in Africa – until the insidious worm disease is eliminated there. People become infected by the worm larvae in ponds, rivers and lakes.



28 *million children*

have been treated to date within the scope of our Praziquantel Donation Program to combat schistosomiasis.

In 2012, we invested a total of
EUR

11.8

million in corporate social engagement activities.

Taking responsibility towards society is an integral part of our entrepreneurial approach. We are convinced that we can make an important contribution to society with our knowledge, our skills and our products. We therefore support several projects worldwide. The strategic focus of our corporate social engagement activities is on those areas in which we have specific expertise stemming from our businesses: health, environment and education in natural sciences. By investing in cultural and sporting activities, we enhance the attractiveness of the local areas around our sites. We also provide disaster relief in emergency situations, especially in those regions in which we operate. In 2012, we invested EUR 11.8 million in corporate social engagement activities.

To increase the effectiveness of our global commitment, we have consolidated our resources into three centrally coordinated lighthouse projects: our Praziquantel Donation Program, the Global Pharma Health Fund (GPHF), and our Philharmonic Orchestra. In addition, our subsidiaries carry out local projects. We regularly assess the regional distribution of our social engagement activities, examine their focuses and goals, and gauge the results achieved. In doing so, we orient ourselves to the model established by the London Benchmarking Group and to the guidelines of the Bertelsmann Foundation for corporate social engagement.



Our subsidiary in Brazil is engaged in programs for disadvantaged children and youth.



In the vicinity of our headquarters in Darmstadt, we support more than 150 sports clubs.

Lighthouse projects

1. —> Over 200 million people in Africa suffer from schistosomiasis, above all children. We support the efforts of WHO to eliminate this insidious worm disease. Since 2007, Merck KGaA, Darmstadt, Germany has donated over 100 million Cesol®600 tablets with the active ingredient praziquantel. To date, more than 28 million African children have been treated. We intend to increase the number of tablets donated in the medium term, raising the total to 250 million annually. This planned donation will have a value of around USD 23 million per year. In addition, we support an education program and are working on further improving the praziquantel formulation (more information starting on page 10).

2. —> Interpol estimates that up to 30% of all medicines in emerging economies and developing countries are counterfeit. The Global Pharma Health Fund (GPHF), a non-profit initiative funded by Merck KGaA, Darmstadt, Germany, has developed a compact mobile laboratory. With the Minilab, counterfeit medicines can be detected quickly, easily and cheaply. To date, the GPHF has supplied more than 570 Minilabs at cost to over 80 countries.

3. —> Our philharmonic orchestra is our cultural ambassador. More than 20,000 people attend our orchestra's concerts each year. Moreover, the ensemble organizes events for children and youth. In autumn 2011, the professional orchestra performed in seven cities in India as part of "Germany and India 2011–2012". Close to 10,000 people attended the concerts.

Local projects

In 2012, our subsidiaries participated in more than 120 projects. Altogether they invested EUR 8.7 million – whether in the form of monetary and supply donations, or voluntary work. The subsidiaries in Asia invested over EUR 5 million, followed by Europe, and North and South America. The regions primarily sponsored projects in the areas of health, culture and sports in the vicinity of our sites.

In partnership with China's Ministry of Health, for example, our affiliate in China is sponsoring the largest health education program in the field of thyroid disease in China to date. During the International Thyroid Awareness Week in 2012, more than 100,000 patients were able to consult a specialist free of charge. EMD Millipore supports its employees' social commitment within the scope of its Giving Program through matching gift, voluntary service and ambassador grant programs. In Brazil, our affiliate has been supporting a music project for school children in a slum near the Rio de Janeiro head office since 2011.

20,000

people per year attend the concerts of our philharmonic orchestra in and around Darmstadt.

Reporting

In this brochure, we present examples that highlight our corporate responsibility activities in 2011 and 2012. Our full Corporate Responsibility Report for 2011 and 2012 is available online and delves into numerous other topics pertaining to our corporate responsibility. In the full report, we explain our strategies and provide information on our goals, activities and responsibilities. Our goal is to inform our stakeholders in a transparent manner as well as to present our activities, successes and challenges.

In 2012, we conducted a materiality analysis to determine the topics of relevance to the report. We surveyed 85 stakeholders and then held internal workshops to discuss and prioritize the results. Our report addresses all of these topics to the degree indicated by the analysis results. The matrix below shows the outcome of this process; it also shows the topics our stakeholders consider to be relevant, as well as the topics that are material to our business activities.



www.emdgroup.com/cr-report2012

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Materiality analysis



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