

FU TU RE!

Corporate Responsibility 2019

CREATING MORE SUSTAINABLE WAYS TO LIVE

We are Merck KGaA, Darmstadt, Germany, a vibrant science and technology company. Our work is fueled by our belief in science as a force for good. We aim to enhance the human experience and we believe that scientific exploration and responsible entrepreneurship are key to technological advances that benefit us all. We make a positive difference to millions of people's lives every day.

Around 57,000 people work for our company in 66 countries. We finished 2019 with good results: Group net sales grew by 8.9% to € 16.2 billion.

Merck KGaA, Darmstadt, Germany, holds the rights to the name and the trademark "MERCK" internationally. The only exceptions are the United States and Canada, where we operate as EMD Serono in the Biopharma business, as MilliporeSigma in the Life Science business and as EMD Performance Materials in the materials business.

Healthcare

We put patients at the center of everything we do, in line with our aim of helping to improve prolong or even create life. We offer medicines and smart delivery devices for serious diseases such as multiple sclerosis and cancer. We are also researching new therapeutic approaches.

Life Science

We empower the scientific community by providing laboratory materials, technologies and services. Our aim is to make research and biomanufacturing easier, faster and more successful.

Performance Materials

We are changing the way people access and display information. We develop specialty chemicals and materials for demanding applications – from liquid crystals and OLED materials up to high-tech materials for the electronics industry.

"We are curious minds dedicated to human progress. I firmly believe that this is a day and age in which we can find answers to many of the challenges facing the global community if we enable diverse teams to share and leverage the best ideas. As a company with curious, openminded employees, we take our responsibility very seriously and want to help shape the rapid technological change so that as many people as possible benefit from it."



TAKING ON RESPONSIBILITY

Corporate responsibility has played a key role at our company for centuries. Our company is over 350 years old. Our history has taught us that sustainable business success always goes hand in hand with responsible actions, which is why we think in generations instead of quarters.

We want to help shape the future and empower people around the world to live a better life. Our products and technologies play a key role here by creating value for our customers, for us as a company and for society as a whole while also helping to tackle tomorrow's challenges today.

Corporate responsibility reporting has a long tradition at Merck KGaA, Darmstadt, Germany. Since 1993, we have been reporting on how we live up to our responsibility as a good corporate citizen. In the meantime, we publish an extensive online Corporate Responsibility Report annually.



Find out more!

FOR 26 YEARS

we have been reporting our efforts to fulfill our duty as good corporate citizens.

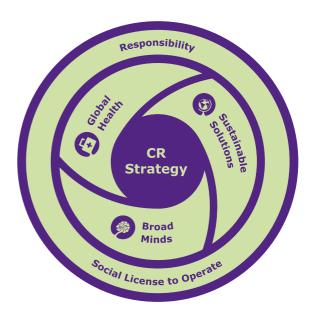
CREATING VALUE

We know that our business operations impact both the people around us and the environment, which is why we've made responsible conduct a pillar of our company culture. This approach is also the foundation of our sustained business success.

Through our products and technologies, we aspire to generate added value now and in the future for both us as a company and society as a whole. We work to minimize the environmental impacts of our

production activities, which necessitate safe manufacturing techniques, high environmental standards and strict quality management. Furthermore, we strengthen our company by recruiting and developing talented employees. We want to serve as an example for ethical conduct and actively contribute to the communities we live in.

Our Corporate Responsibility strategy sets the framework for all of these endeavors, which center on three strategic spheres of activity, namely "Global Health", "Sustainable Solutions" and "Broad Minds".











Global Health

Two billion people around the world lack adequate access to health. We are aiming to change this by providing affordable health solutions, raising awareness of diseases, researching innovative therapies and technologies, and providing real support at the point of care.



is the number of tablets we have donated to treat the tropical disease schistosomiasis since 2007.



Sustainable Solutions

Through our products, we are helping overcome global challenges such as climate change and resource scarcity while also enabling our customers to achieve their own sustainability goals.



Life Science products align with the principles of Green Chemistry.



Broad Minds

We seek to spark a passion for science in the next generation. Because music and literature inspire people, we also support a number of cultural initiatives worldwide.



is how much we spent on education projects in 2019.

GOALS FOR A BETTER WORLD

Eradicating poverty and hunger, reducing inequality, improving educational opportunities, and halting the tide of climate change collectively mean creating a better world for everyone. The United Nations set this ambitious goal when it adopted its 2030 Agenda for Sustainable Development in 2015, a plan of action

that centers around 17 Sustainable Development Goals (SDGs).

Companies are also called upon to support the implementation of the SDGs. The following pages present a selection of activities and projects that we are pursuing to help achieve this agenda.







































Curious?

We focus our CR efforts especially on those SDGs that best align with our business operations.

PRECISION IS KEY

Doctors and patients always ask themselves the same question: Is the therapy for the diagnosed disease going to work? Personalized medicine is a new, holistic approach to treating patients. It is specifically tailored to their individual requirements at a molecular level. In essence, this means selecting the right therapy with the right drug at the right dose in the right patient.

More precise diagnoses and individualized treatments will improve the success rates of therapies, exclude treatments that are less effective and ultimately could provide a better quality of life for patients. This approach decreases the likelihood of patients developing resistances to medication and reduces the financial burden for the health system caused by unsuccessful treatments.



emdgroup.com/en/cr-report/2019/magazine/personalized-medicine

Conventional drugs are only effective in:



By 2030: Promote well-being for all at all ages

The effort we put into researching and further developing personalized medicines aligns with targets of United Nations Sustainable Development Goal 3: By 2030, reduce by one-third premature mortality from noncommunicable diseases through prevention and treatment and promote mental health and well-being.



DANGER IN THE WATER

Did you know that there is a disease that affects almost 240 million people in sub-Saharan Africa, most of them children, yet many have never heard of it? Called schistosomiasis, this infection lurks in freshwater sources such as lakes and claims approximately 200,000 lives each year.

We follow a comprehensive approach and work with partners around the world to fight and eliminate this disease, which poses a public health problem. Beyond various other actions, we provide tablets to treat schistosomiasis free of charge, with the World Health Organization (WHO) distributing the medicine to patients in sub-Saharan countries.

African countries have been supplied since 2007 with tablets we've donated to fight schistosomiasis.

emdgroup.com/en/cr-report/2019/ magazine/schistosomiasis





By 2030: Help end epidemics

Through our actions, we are helping end epidemics while also supporting the discovery and development of medicines for diseases that primarily affect low- and middle-income countries. We seek to achieve health coverage, access to quality healthcare services and access to essential medicines for all. Moreover, we maintain strong partnerships all over the world to advance the cause of health for all as well as to enhance regional and international cooperation on and access to science, technology and innovation.

MAKING CONNECTIVITY WORK

Satellite technology is the only way to track containers traveling on ships or in remote areas. This also holds true for connecting and monitoring power lines, pipelines and other critical infrastructure located in remote areas. All these applications require robust and reliable satellite and antenna technology. Our goal is to make affordable satellite communication

a reality. We are developing a liquid crystal technology that enables the creation of a new type of flat smart antenna needed to communicate with low earth orbit satellite constellations. This technology-driven approach can make communication more versatile and affordable, enabling more people in remote communities to benefit from better connectivity.

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emdgroup.com/en/cr-report/2019/magazine/smart-antennas



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By 2030: Helping the world communicate

We want to make wireless communication even more reliable, faster and widely accessible. Our liquid crystal technology used in smart antennas supports this objective. It aims to facilitate sustainable and resilient infrastructure development in low- and middle-income countries through enhanced technological capabilities. We also work with partners across the globe to mobilize and share knowledge, expertise, technology and financial resources in order to make the technology available to those who need it.



NEW ERA OF PACKAGING

Product packaging and shipping have a significant impact on our products' environmental footprint. We work to find new ways of making our products and packaging more environmentally sustainable, while still getting them to our customers in a safe and timely manner.

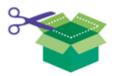
In 2019, we launched our "SMASH Packaging" sustainable packaging strategy for Life Science products. The strategy is built on three pillars: optimizing resources, using more sustainable materials and designing for a circular economy.

emdgroup.com/en/cr-report/2019/ magazine/smash-packaging

> 300,000

is the number of Life Science products that we supply to our customers – ranging from biochemicals and lab chemicals to filtration systems and laboratory instruments.

We have set four goals that support these pillars:



SHRINK: reduce amount of packaging



SECURE: achieve zero deforestation



SWITCH: improve plastic sustainability



SAVE: maximize recycling





By 2030: Decrease our environmental footprint

With our SMASH Packaging strategy, we substantially reduce waste generation through prevention, reduction, recycling and reuse. Making our products and packaging more environmentally sustainable also improves their energy efficiency.



CULTIVATING TALENTED MUSICIANS

Many aspiring young musicians dream of a professional career, which requires not only talent, but also opportunities to demonstrate this talent and gain hands-on experience in a professional orchestra. In Darmstadt (Germany), this is exactly what we offer young people with musical promise. They can work with professional musicians

to prepare complex concert pieces, inspiring and motivating one another in the process. This workshop is offered annually by the Deutsche Philharmonie sponsored by Merck KGaA, Darmstadt, Germany, a professional symphony orchestra that is an integral part of the cultural landscape in Darmstadt, the local region and abroad.

emdgroup.com/en/cr-report/2019/community/broad-minds



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By 2030: Promoting education and learning

Through our orchestra workshop, we promote musical education and intercultural exchange among young, talented musicians from across the globe, thus advancing the objective of SDG 4: to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.

CREATING IMPETUS

We want to spark the interest of young people, from nursery school children to high school students, in science, technology, engineering and mathematics (STEM). We support teachers in designing their lesson plans while developing advanced training courses for teachers as well as teaching concepts. Within the scope of school partnerships, we're cooperating with around 50 schools in the Darmstadt region. We also run junior laboratories for biology and chemistry, host and organize competitions such as "Jugend forscht" and subsidize STEM projects. As part of our global volunteer program SPARK, employees from our Life Science business sector support students by helping them to learn in practiceoriented ways. In Kenya, elementary school students can discover the world of science together with Fred, the explorer ant. These imaginative and playful stories are specifically targeted to children.

emdgroup.com/en/cr-report/2019/ community/broad-minds

> 20,000

young researchers have already experimented in the "Junior Chemistry Laboratory" in Darmstadt.





By 2030: Make quality education possible

Through our school partnerships and global education programs, we are contributing to the achievement of Sustainable Development Goal 4 on the United Nation 2030 Agenda for Sustainable Development: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.

IS THAT EVERYTHING?

Of course not!

Our Corporate Responsibility Report (CR Report) provides extensive information on our efforts to drive sustainability, detailing all our projects and activities in 2019.

Our 2019 CR Report is available online at

emdgroup.com/en/cr-report/2019



Find out more!

Publishing information

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