goals

Our corporate responsibility goals set the course to be followed for the next several years. This section presents these objectives and reports on the progress we've made towards achieving them.

Legend: New goal | Goal achieved | In progress | Goal not achieved

products

Access to health

We seek to improve access to health for underserved populations in low- and middle-income countries.

Goal: Monitor and assess the progress and efficacy of our Access to Health programs

Measure(s):	By when:	Progress by end of 2016:	Status:
Develop quantitative and qualitative performance indicators for the 4 A's: Availability, Accessibility, Affordability, and Awareness.	End of 2016	Indicators were developed for the 2014 and 2016 CR report for each A of the "4As of Access" framework.	

Goal: Availability: Address unmet needs through the research, development and refinement of health solutions

Measure(s):	By when:	Progress by end of 2016:	Status:
Develop a pediatric formulation of praziquantel to treat schistosomiasis in children under the age of six	2017 (program to enter Phase III)	In 2015, both the Phase I bioavailability trials in healthy volunteers (South Africa) as well as the swill and spit taste study with school-age children (Tanzania) were completed. In 2016, we launched a Phase II study in Ivory Coast to test the efficacy and safety of two different formulations for orodispersible tablets in schistosomiasis-infected children under the age of six. Results are expected in the course of 2017.	
Develop a new anti-malarial drug	2017 (program to enter Phase I)	In March 2015, we obtained the rights to an investigational promising antimalarial compound from Medicines for Malaria Venture (MMV). The compound potentially represents a novel mechanism of action and is intended to be developed for both treatment and prevention of malaria in young children. The project completed the preclinical phase in 2016 and is progressing to Phase I to start in 2017.	
Develop a new diagnostic kit for measuring the presence and type of malaria parasite, and potentially measure co-infection with HIV based on our Muse Auto CD4/CD4%.	2017 (for start of clinical testing)	In 2016, the feasibility of two malaria assays was validated and the detection levels are meeting the defined TPPs in terms of specificity and sensitivity for new competitive diagnostic assays.	

Goal: Affordability: Address inability to pay

Measure(s):	By when:	Progress by end of 2016:	Status:
Participate in at least one collaboration with a public partner to share our IP and knowledge of infectious and neglected diseases.	End of 2018		
Develop an IP-sharing platform with a non-commercial entity.	End of 2018		

Goal: Awareness: Empower health workers, communities and people

Measure(s):	By when:	Progress by end of 2016:	Status:
Develop an integrated initiative of our Healthcare and Life Science business sectors to raise awareness.	End of 2016	In 2016, we initiated the PPP "Water for Health" in Ghana. Our aim is to raise awareness for water quality and to improve local capacity for water testing. The project will be fully operating in 2017.	
Through dialogue identify key access challenges and opportunities for our A2H strategy.	End of 2018		

Goal: Accessibility: Strengthen supply chains and provide localized solutions

Measure(s):	By when:	Progress by end of 2016:	Status:
Engage stakeholders to address supply chain and delivery issues in developing countries.	End of 2018	We established the dialogue platform (Accessibility Platform). In 2016, two meetings took place.	
Organize one to two meetings of the Accessibility Platform.	End of 2018		
Develop a collaboration to improve point of care delivery in developing countries.	End of 2019		

Safety of chemical products

Our customers should be able to use our chemical products safely.

Goal: Use precautionary principle to establish a globally aligned hazard and risk communication system for all our relevant chemical products in the supply chain

Measure(s):	By when:	Progress by end of 2016:	Status:
Implementation of REACH: Register substances produced in quantities of 1-100 metric tons per year (phase 3 of REACH implementation) and register non-phase-in substances.	Mid-2018	In 2016, we registered 41 phase 3 substances and integrated the relevant substances from the Sigma-Aldrich portfolio into our REACH project.	
Implementation of the Global Product Strategy: Issue product safety summaries for all hazardous substances registered under REACH.	End of 2020	Another five product safety summaries were issued in 2016.	
Projects for hazard communication: Update safety data sheets for non-hazardous chemical products.	End of 2020	We have updated safety data sheets for around 30% of all non-hazardous substances (excluding the Sigma-Aldrich portfolio).	
Harmonize safety data sheets to align with a globally uniform standard.	End of 2020	In the course of integrating Sigma-Aldrich, we created a new standard and harmonized hazard communication for roughly 60% of all shared substances.	

Counterfeit products

We want to reduce the risk of product crime.

Goal: Integrate safety into relevant business processes for Healthcare and Life Science business sectors

Measure(s):	By when:	Progress by end of 2016:	Status:
Identify strategic and commercial data that require greater protection; minimize risks by modifying processes.	End of 2018	We performed risk assessments in our Biopharma business.	

Goal: Step up interdisciplinary collaboration within global security networks

Measure(s):	By when:	Progress by end of 2016:	Status:
Develop Group-wide guidelines that describe duties and processes.	End of 2016	The following guidelines were adopted in 2016: ■ Product Crime Investigation Standard ■ Product Security Standard (risk-based approach to authenticating the supply chain, identifying risks, and ensuring supply chain integrity and security) ■ Product crime officers were appointed for all business sectors and subsidiaries.	

Expand organizational structures; train and certify employees who deal with product-related crime.	Ongoing	We developed and implemented a training program for our product crime officers. Our MACON network was expanded.	
Implement a Group-wide notification system for counterfeit products.	End of 2017	We rolled out a new reporting system for cases of product crime.	

Goal: Educate employees and other target groups on the strategic relevance of counterfeit medicines

Measure(s):	By when:	Progress by end of 2016:	Status:
Host conferences and seminars; best practice sharing and lessons learned through international networks.	End of 2016	We conducted five seminars at sites outside Germany and reported on product crime at internal conferences such as the Global Quality Conference or the Global Drug Safety Academy. Our product crime officers met at a conference in Darmstadt. We established anti-counterfeiting networks in high-risk countries, consisting of internal and external partners.	

Goal: Develop and implement security technology and solutions for supply chain authentication, identification, integrity, and security

Measure(s):	By when:	Progress by end of 2016:	Status:
Pilot a project to improve product safety in high-risk regions of Africa using software-based solutions.	End of 2016		
Support regional activities to counter product crime.	End of 2016	We supported 68 investigations across 24 countries in 2016. We participated in workshops and seminars with law enforcement in the United States, Mexico and Singapore and engaged German federal authorities in dialogue.	
Monitor the number of unreported cases of counterfeit medicines in select countries and step up internet searches to track down trademark infringement and counterfeit products.	End of 2016	We collaborated with internal and external partners in high-risk countries to step up efforts of networks to monitor the Internet for incidents of counterfeiting involving Merck products. We succeeded in significantly raising the detection rate for product crime incidents. Launch "Evaluating product crime in the darknet" project.	
Support regional activities in five high-risk countries.	End of 2017		
Monitor counterfeit pharmaceuticals in conventional distribution channels as well as online sales.	Ongoing		

Transport & storage safety

In the transport and storage of our products, we seek to prevent risks to people and the environment.

Goal: Ensure warehouse and transport safety for our company and our suppliers

Measure(s):	By when:	Progress by end of 2016:	Status:
Integrate all service providers into our audit process.	End of 2016	All service-provider warehouses have been integrated into our audit process. In 2016, we audited six third-party warehouses (2015: 4).	
Integrate all freight forwarders into our audit process.	End of 2017	In 2016, we developed a concept for integrating freight forwarders into our audit process and plan to implement the concept in 2017.	
Roll out improvement programs in countries and regions that handle products with special risks where our audits identified need for improvement.	End of 2016	After a running a pilot program in India in 2015, we successfully made improvements to warehouse and transport safety. In 2016, we also audited suppliers and third-party warehouses to identify improvement opportunities and defined corrective actions.	
Analyze safety-related customer complaints to identify necessary improvements for transport and warehouse safety.	End of 2016	In 2015, we enhanced our packaging concept for certain chemicals. In 2016, we started taking steps to optimize our shipping packaging for customer orders in Asia and South America.	
Harmonize transport and warehouse safety master data through global ERP systems.	End of 2022		

Animal welfare

We work to safeguard the welfare of animals used by our company, contract research organizations, suppliers, and other partners.

Goal: Ensure consistently high quality across our animal facilities

Measure(s):	By when:	Progress by end of 2016:	Status:
Inspect Life Science animal facilities in preparation for potential accreditation: Conduct a feasibility study and make a decision about accreditation.	End of 2018		
Re-accredit relevant animal facilities.	Ongoing	Three animal facilities were re-accredited in 2015 and 2016.	

Goal: Promote the 3Rs

Measure(s):	By when:	Progress by end of 2016:	Status:
Develop a Group-wide 3R program.	End of 2019		

Goal: Ensure animal welfare in our supply chain

Measure(s):	By when:	Progress by end of 2016:	Status:
Identify animal welfare risks in our supply chain and develop a strategy for certifying suppliers.	End of 2017		

Employees

Our employees are key to our success, which makes it imperative for us to attract, develop and retain the right talent.

Diversity

Goal: In 2011, we set the strategic goal of raising the percentage of leadership roles held by women to 25%-30%.

Status: We achieved this objective in 2016. Group-wide, women currently make up 28.8% of management positions.

Goal: By 2021, we aim to have stabilized the percentage of female managers at 30%, and we are continuing our efforts to raise the percentage of women in leadership roles and business units in which they are still underrepresented.

Measure(s):	By when:	Progress by end of 2016:	Status:
Deploy teams at departmental level to develop goals and measures to move women into positions in various units and at various levels.	End of 2021		

Attractive Employer

Goal: Consistently fill at least two-thirds of positions ranked Global Grade 16 and up with internal candidates

Measure(s):	By when:	Progress by end of 2016:	Status:
Use the Talent Management Process to identify suitable employees with management potential and optimize the process to systematically advance them.	Ongoing	In 2016, 81% of our vacant management positions were filled internally.	
Build a talent pool that reflects our demographic structure.	Ongoing	The structure of our talent pool is a reflection of the diversity within our company.	

Goal: Position Merck as an attractive employer for university graduates

Measure(s):	By when:	Progress by end of 2016:	Status:
Participate in university fairs and organize in-house events for graduates; position Merck via employer branding channels.	Ongoing	Thanks to our efforts at fairs and internal events, we succeeded in attracting ten graduates to participate in our Functional Graduate Program by March 31, 2017.	

Good leadership

Goal: We value good leadership, an approach that enables our employees to unlock their full potential and advance in their careers.

Measure(s):	By when:	Progress by end of 2016:	Status:
Have at least 50% of managers rated Global Grade 14+ take part in a management program.	End of 2018	Nearly 50% of our top 400 have taken part in our Global Leadership Program, our latest initiative for top leaders. Similar figures apply to our other management programs (AMP, MFP).	
Implement a regularly occurring process to measure employee engagement in an effort to establish a baseline for engagement and define a target.	Ongoing	At the beginning of 2016, we revised our approach to employee surveys and conducted a company-wide survey. In doing so, we have defined the baseline against which to measure future improvements.	

Health & safety

Goal: Reduce the lost time injury rate Group-wide (to 1.5 or less).

Status: By 2016, we'd reached this objective with an LTIR of 1.3

Measure(s):	By when:	Progress by end of 2016:	Status:
Implement the OSHAS 18001 occupational health and safety management system for all Performance Materials production sites.	End of 2016	By the end of 2016, all Performance Materials production sites had been certified to the international standard OHSAS 18001. Furthermore, our Life Science sites in Buchs (Switzerland), Bangalore (India) and Irvine (UK) have been included in our Group certificate, as have our pharmaceutical operations at our sites in Goa (India), Atsugi (Japan) and Mollet (France).	
Reinforce our safety culture to prevent behavior-related accidents/Roll out our BeSafe! program at all newly acquired sites and monitor ongoing implementation via appropriate performance indicators.	End of 2020		

environment

Environmental stewardship

We want to minimize our environmental footprint and mitigate our impact on the climate as far as possible, which is why we are working to continuously improve energy and resource efficiency while also reducing our greenhouse gas emissions.

Goal: Integrate all production sites in the Group ISO 14001 certificate for environmental management systems

Measure(s):	By when:	Progress by end of 2016:	Status:
At newly acquired production sites, introduce environmental management systems in line with the Merck Group ISO 14001 certificate and certify them accordingly.	Ongoing	Seven Sigma-Aldrich production sites had an ISO 14001-certified environmental management system and were transferred to the Merck Group certificate. Due to the size of the Sigma-Aldrich group and the integration process, the transfer of all sites to the new system must be done gradually. In 2016, the sites started a gap analysis that is still ongoing.	

Climate impact mitigation

Goal: 20% reduction in our direct and indirect greenhouse gas emissions (Scope 1 and 2) by 2020 (2006 baseline).

Status: By the end of 2016, we had lowered our greenhouse gas emissions by around 10% relative to the 2006 baseline, despite growth in our operating business.

Measure(s):	By when:	Progress by end of 2016:	Status:
Systematically examine the energy consumption at our individual production sites.	End of 2020	We continued to systematically examine possible energy savings at our production sites. In line with the EU Directive on energy efficiency, energy audits were conducted at our sites in Eppelheim and Berlin (Germany), as well as in Calais, Meyzieu and Semoy (France). In addition, we also performed energy checks at our sites in Rio de Janeiro (Brazil), Naucalpan (Mexico) and Kankakee, IL (United States).	
Identify potential energy savings and implement appropriate measures.	End of 2020	In 2016, we completed 42 Edison projects (p. 79). Around 60% of the Edison projects planned Group-wide have already been or are being rolled out. In 2017, we intend to launch 81 new projects with the potential to cut CO_2 emissions by around 34,000 metric tons.	
Reduce process-related emissions.	End of 2020	Our Life Science business sector is making a significant contribution to reducing process-related emissions. In 2014, process optimizations resulted in a two-thirds reduction in our process-related emissions per production unit at our facility in Jaffrey, NH (USA). In 2015, we initiated a project to further cut emissions that is scheduled to end in 2017. Other projects are in planning.	

Waste & recycling

Goal: By the end of 2017, set a reduction target for the quantity of waste we generate

Measure(s):	By when:	Progress by end of 2016:	Status:
Implement a waste scoring model to quantify our waste reduction efforts and set a baseline.	End of 2017	We implemented the Waste Scoring Model and expect to have a baseline established by the first quarter of 2017, from which a quantitative target will be set.	

Water management

Goal: Introduce a sustainable water management system at seven appropriate sites in water-stressed areas and reduce their water consumption by 10% by the end of 2020 (2014 baseline).

Status: By the end of 2016, we had reduced our water consumption at relevant sites by around 12% compared with 2014. Going forward, we want to ensure a 10% sustainable reduction in water consumption.

Measure(s):	By when:	Progress by end of 2016:	Status:
To achieve this goal, we need a variety of primarily local measures tailored to our individual sites. One inter-site measure is the creation of a water balance to provide a baseline.	April 2017	To help our sites in their efforts, we provided the necessary expertise in the form of documentation and an Intranet site.	

Goal: Introduce a sustainable water management system at 23 production sites with high water consumption by 2020

Status: Our sites are implementing the water management system in three stages using the CEFIC flagship self-assessment tool. We expect to complete Stage 1 (basic) by April 2017, Stage 2 (progressed) by May 2018 and Stage 3 (advanced) by May 2020.

Measure(s):	By when:	Progress by end of 2016:	Status:
Meet the basic requirements set out in the CEFIC flagship self-assessment tool (Stage 1). These include water quantity and quality evaluations at the sites, as well as an environment analysis.	April 2017	The sites will be asked to provide an initial report on their progress in April 2017.	

suppliers

Goal: Ensure our suppliers adhere to ethical, social, environmental, and compliance standards.

Measure(s):	By when:	Progress by end of 2016:	Status:
Perform a qualitative analysis of the available assessment and audit results and define potential courses of action.	End of 2017		
Create a holistic approach to managing sustainability in global supply chains.	End of 2017		

community

Health

Hand in hand with our partners, we aim to eliminate the tropical worm disease schistosomiasis worldwide.

Goal: Eliminate schistosomiasis in African school children: Since the start of our donation program, 100 million patients have been treated, primarily school-aged children.

Measure(s):	By when:	Progress by end of 2016:	Status:
Incrementally increase annual tablet donation by a factor of ten, from 25 million in 2012 to up to 250 million in 2016.	End of 2016	In 2016, we boosted our production capacity so as to produce 250 million tablets. In collaboration with WHO, we donated more than 200 million of these for distribution in 33 African countries.	
Donate up to 250 million praziquantel tablets annually to WHO for African school children.	Ongoing		
Optimize the praziquantel formulation.	End of 2019	In 2016, the study design for the bioequivalence study was approved. The study will be conducted in 2017.	
Develop a pediatric formulation of praziquantel for children under the age of six.	End of 2019	In 2016, we launched a Phase II study in Ivory Coast to test the efficacy and safety of two different formulations for orodispersible tablets in schistosomiasis-infected children under six. At the same time, we completed preparation of the Phase III study.	
Initiate new partnerships to promote behavioral change in African school children.	Ongoing		
Maintain the educational program and provide WHO with educational booklets to teach children about the disease and ways to prevent it.	Ongoing	In 2016, we expanded the educational program and donated 340,000 educational booklets to WHO for distribution in 10 African countries.	
Position the Global Schistosomiasis Alliance as the key partnering platform for advocacy, implementation, research, communications, and strategy development.	Ongoing		

Minilab

Through the GPHF Minilab™, we seek to fight counterfeit medicines in developing countries and emerging economies.

Goal: Provide and further develop the portable compact GPHF Minilab™

Measure(s):	By when:	Progress by end of 2016:	Status:
Develop new test methods for five active ingredients and expand manuals to describe the new testing methods.	End of 2016	In 2016, the GPHF developed test methods for five new active ingredients, meaning that a total of 85 test protocols are now available. The manuals have been updated accordingly.	
Conduct two training seminars on the use of the GPHF Minilab™; sell at least 40 Minilabs.	End of 2016	In 2015 and 2016, the GPHF conducted six Minilab training seminars in Tanzania, Angola, Kenya, Zambia, Rwanda, and Mozambique with well over 100 participants. The GPHF sold a total of 109 Minilabs.	
Develop new test methods for five active ingredients and expand manuals to describe the new testing methods.	End of 2017		
Conduct three training seminars on the use of the GPHF Minilab™; sell at least 35 Minilabs.	End of 2017		