

Goals



Part of the non-financial report

Legend: New goal Goal achieved In progress Goal not achieved

products

Access to health

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

Goal: Monitor and assess the progress and effectiveness of our A2H programs.

Action(s):	By:	Progress by end of 2017:	Status:
Develop quantitative and qualitative performance indicators for the 4 As: Availability, Accessibility, Affordability, and Awareness.	2018	We developed indicators for the 2014, 2016 and 2017 CR Reports for each A of the "4As of Access" framework.	

Goal: Affordability: Overcome inability to pay.

Action(s):	By:	Progress by end of 2017:	Status:
Participate in at least one partnership with a public-sector partner in an effort to share our intellectual property and expertise in infectious and neglected tropical diseases.	End of 2018	In 2017, we entered into a partnership with the University of California San Diego, United States to share compounds from our library under the WIPO Re:Search open innovation umbrella in order to identify potential cures for leishmaniasis, Chagas disease (American trypanosomiasis) and human African trypanosomiasis (HAT - sleeping sickness).	
Establish a partnership to share intellectual property with a non-commercial organization.	End of 2018	In April 2017, we entered into a partnership with the Drug for Neglected Diseases initiative (DNDi), under which we are participating in the Drug Discovery Booster project for neglected tropical diseases.	

Goal: Awareness: Empower health workers, communities and people.

Action(s):	By:	Progress by end of 2017:	Status:
Create an awareness initiative run jointly by our Healthcare and Life Science business sectors.	End of 2017	In 2017, our Water for Health public-private partnership was rolled out in Ghana. Through this initiative, we are seeking to raise awareness of water quality and expand local water analysis capacities.	
Engage in a dialogue to jointly identify the key access challenges and opportunities for our A2H strategy.	End of 2018	In 2017, we conducted an Access Dialogue on the topics of innovation and intellectual property, along with an Accessibility Platform dialogue on challenges in local supply chains.	

We aim to improve global health for underserved populations in low- and middle-income countries, with a focus on combating infectious diseases.

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

Action(s):	By:	Progress by end of 2017:	Status:
Develop a pediatric formulation of praziquantel for the treatment of schistosomiasis in children under six. Milestone: Entry into Phase III	End of 2018	In 2015, we completed both the Phase I bioavailability study (South Africa) in healthy volunteers and the swirl & split taste study (Tanzania). Since 2016, we have been conducting a Phase II study in Côte d'Ivoire aimed at assessing the efficacy and safety of two different formulations for orodispersible tablets in schistosomiasis-infected children under the age of six. We expect initial results in the second quarter of 2018.	
Develop a new antimalarial. Milestone: Entry into Phase I	2017	In March 2015, we obtained the rights to a promising investigational antimalarial compound originating from a collaboration between the Medicines for Malaria Venture (MMV) and the University of Dundee (United Kingdom). The compound potentially offers a new mechanism of action for the treatment and prevention of malaria in young children. The project completed its preclinical phase in 2016, and the Phase I study was initiated in 2017.	
Develop a new antimalarial. Milestone: Completion of Phase I	End of 2018	The Phase I study for the investigational antimalarial compound originating from a collaboration between MMV and the University of Dundee (United Kingdom) is expected to be completed by December 2018.	
Develop a new diagnostic kit to detect and characterize the type of malaria parasite. Milestone: Start of clinical trial	End of 2018	In 2017 we completed the preclinical phase having achieved promising results. We will start clinical trials in 2018.	

Goal: Accessibility: Strengthen supply chains and provide localized health solutions

Action(s):	By:	Progress by end of 2017:	Status:
Engage stakeholders in overcoming the challenges in creating an end-to-end secure supply chain and supplying goods in developing countries.	End of 2018	We have launched the Accessibility Platform as a forum for dialogue.	
Host one to two meetings under the auspices of the Accessibility Platform.	End of 2018	In 2017, one dialogue on the challenges of local supply chains was hosted under the banner of the Accessibility Platform. We also held a panel session in conjunction with the World Health Summit on "Supply Chain & Delivery Capabilities: Critical enablers to improving access to health," co-hosted with platform members Roche and Novartis.	
Form a partnership to improve health-care at the point of care in developing countries.	End of 2019	In 2017, we identified a variety of options for developing this sort of partnership.	
NTDeliver: Reach more than 1,000 schools via a school-based deworming campaign with praziquantel and Albendazole (GlaxoSmithKline)	End of 2018	In 2017, a pilot was run in Kenya and showed that the system works. The decision was taken to implement the school-based deworming program in 2018.	

Chemical product safety

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

Action(s):	By:	Progress by end of 2017:	Status:
Implement 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	By the end of 2017, we had registered 250 phase 3 substances for various subsidiaries of our company.	
Implement the Global Product Strategy: Issue product safety summaries for all hazardous substances registered under REACH.	End of 2020	Because we were heavily focused on completing phase 3 REACH registrations on time, the product safety summaries were not a priority in 2017.	
Projects for hazard communication: Update safety data sheets for non-hazardous materials.	End of 2020	By the end of 2017, we had updated 65% of the safety data sheets for non-hazardous materials within Performance Materials and 74% in Life Science. The integration of Sigma-Aldrich should be completed by the end of 2018, by which time we intend to have updated all safety data sheets.	
Harmonize safety data sheets to align with a globally uniform standard.	End of 2020	Within Performance Materials, in 2017 we began drafting all safety data sheets Group-wide using a single system. Within Life Science, safety data sheets for all new product launches have been harmonized. Existing substances will be transitioned to the globally harmonized system by 2020.	

Counterfeit products

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

Action(s):	By:	Progress by end of 2017:	Status:
Identify strategic and commercial data that require greater protection; minimize risks by modifying processes.	End of 2018	In 2017, we harmonized the processes for reporting incidents and conducting audits. For our Biopharma business, we are looking into ways to further harmonize security features.	

Goal: Step up interdisciplinary collaboration within global security network.

Action(s):	By:	Progress by end of 2017:	Status:
Expand organizational structures and certify employees who deal with product crime.	Ongoing	In 2017, we expanded our MACON network to eight key countries: the United Kingdom, Poland, Russia, Indonesia, Nigeria, South Africa, Egypt, and Tunisia. Network members hold discussions twice a month.	
Implement a Group-wide notification system for counterfeit products.	End of 2017	Our new Group-wide reporting system has been rolled out. Thanks to greater transparency and better tracking, cases can now be investigated more efficiently or prevented altogether by identifying possible ties to other incidents.	

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

Action(s):	By:	Progress by end of 2017:	Status:
Host conferences and seminars; share best practices and lessons learned through international networks.	Ongoing	In 2017, all our Product Crime Officers took part in a variety of training programs. They regularly share best practices and lessons learned.	

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

Action(s):	By:	Progress by end of 2017:	Status:
Support regional activities to counter product crime.	Ongoing	We supported around 128 investigations across approximately 30 countries. We also participated in workshops and seminars with law enforcement in the United Kingdom, Italy, Mexico, Brazil, Nigeria, China, and the United States, and furthermore 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.	Ongoing	We are constantly scouring the Internet for criminal offenses involving our products, tapping into partner networks in high-risk countries to do so. This enables us to raise the clearance rate for product crime incidents. Our countermeasures are increasingly covering the darknet and social media. Among other steps, we launched our "Evaluating product crime in the darknet" initiative.	
Support regional activities in five high-risk countries.	End of 2017	We appointed Product Crime Officers from 20 countries to the global MACON network. An additional ten countries are slated to join in 2018 and are already undergoing preparations to do so. Half of these 30 countries are high-risk markets.	
Monitor counterfeit pharmaceuticals in conventional distribution channels as well as online sales.	Ongoing	-	

Transport and warehouse safety

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

Action(s):	By:	Progress by end of 2017:	Status:
Integrate all freight forwarders into our audit process.	End of 2017	As a member of the Logistics & Distributors User Group of SQAS, a service provided by the European Chemical Industry Council, Cefic, we receive additional audit reports of our logistics providers. In 2017 we developed criteria to evaluate these findings, which we subsequently make available to all internal stakeholders.	
Harmonize transport and warehouse safety master data through Group-wide ERP systems.	End of 2022	By the end of 2017, we had straightened out 84% of all deviations in the transport and warehouse safety master data of identical products in our Life Science portfolio.	

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

Action(s):	By:	Progress by end of 2017:	Status:
Inspect Life Science animal facilities in preparation for potential accreditation: Conduct a feasibility study and make a decision about accreditation.	End of 2018	The feasibility study was conducted. Accreditation of additional Life Science facilities is not currently planned.	✓
Re-accredit relevant animal facilities.	Ongoing	Re-accreditations are conducted every three years. In 2017, one of our animal facilities was successfully re-accredited.	✓

Goal: Promote the 3Rs (Reduce, Refine, Replace)

Action(s):	By:	Progress by end of 2017:	Status:
Develop a Group-wide 3R program.	End of 2019	Our award program was approved by the Group Animal Welfare Council in November 2017; the prize will be presented for the first time in 2018.	🔄

Goal: Ensure animal welfare in our supply chain

Action(s):	By:	Progress by end of 2017:	Status:
Identify animal welfare risks in our supply chain and develop a strategy for certifying suppliers.	End of 2017	We developed a strategy and processes to account for potential risks in our supply chain and certify suppliers. The certification process is supported by Interpharma's cross-company audit concept. We also drafted a Standard on Vendor Qualification, which describes our criteria for evaluating the quality of our suppliers' and partners' animal welfare practices. This standard took effect in March 2018.	✓
Develop and implement an audit plan for suppliers.	Ongoing		▶

compliance

Goal: Bring Compliance closer to the business

Status: We're working on a more integrated compliance approach, building on enhanced business accountability and ownership that are supported by a risk-based and business sector-oriented compliance framework.

Action(s):	By:	Progress by end of 2017:	Status:
Quantum LEAP: Develop and introduce an automated, lean process and tool landscape to support transparency reporting requirements and the streamlined processing of interactions with our partners in the Healthcare sector. Build on adapted compliance controls and enhanced business ownership and accountability.	September 2018	We have redesigned the overall system landscape and developed processes which are now being implemented in pilot countries.	🔄

Business Partner Risk Management Process update: Design an updated and more automated tool with integrated risk assessment and controls.	June 2018	We developed a new tool architecture based on key user input and launched the technical implementation.	
New Merck Code of Conduct: The Code has a strong relation to the Merck values, built on core principles to adhere to. Supported by a business specific roll-out and e-learning.	March 2018	A new Code of Conduct was rolled out in December 2017. The corresponding e-learning script will be developed and implemented by the end of March 2018.	
Self-monitoring as part of the Compliance Risk Assessment process: Integrate self-assessment of compliance program implementation status in existing Compliance Risk Assessment.	September 2018	In 2017, we designed new functionalities and launched the technical implementation. Self-assessment will be driven by business, and supported by Compliance.	

Employees

Attractive employer

Goal: Consistently fill at least two-thirds of leadership positions (Role 6+) with internal candidates

Action(s):	By:	Progress by end of 2017:	Status:
Use the Talent Management Process to identify suitable employees with leadership potential and optimize the process to systematically advance them.	Ongoing	In 2017, 84% of our vacant leadership positions (Role 6+) were filled internally.	
Build a high-potential pool that reflects our demographic structure.	Ongoing	We are continuously developing our high-potential pool, which is a reflection of the diversity within our company.	

Goal: Position our Group as an attractive employer for university graduates

Action(s):	By:	Progress by end of 2017:	Status:
Participate in university fairs and organize in-house events for graduates; position our company via employer branding channels.	Ongoing	We are continuously positioning ourselves as an attractive employer for university graduates via editorial articles on careerloft, through event information on e-fellows.net and through trainee and employee films on YouTube. By the end of 2017, all 49 planned trainee slots and direct hires were filled through our employer branding and talent sourcing efforts.	

Goal: Increase the share of employees (Group-wide) with development plans to 70% by 2020

Action(s):	By:	Progress by end of 2017:	Status:
Conduct extensive internal communications and people development campaigns, and optimize existing tools.	2020	The percentage of employees with development plans increased from 26% (2016) to 61% (2017).	

Diversity

Goal: Our target for 2021 is to maintain a 30% representation of women in leadership roles (Role 4+)

Action(s):	By:	Progress by end of 2017:	Status:
Deploy teams at departmental level to develop goals and measures to move women into positions in various units and hierarchies.	End of 2021	All business sectors have performed analyses and identified focus areas for actions.	

Health and safety

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

Action(s):	By:	Progress by end of 2017:	Status:
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	In 2017, we achieved a Group-wide LTIR of 1.5. Through manager training, safety tours and train-the-trainer programs, we continued to sustain a high level of safety awareness in 2017 as well. We took these steps at numerous sites – including ten newly acquired ones.	

Employee engagement

Goal: Measure and improve employee engagement

Action(s):	By:	Progress by end of 2017:	Status:
Implement a regularly occurring process to measure employee engagement and take actions to improve it.	Ongoing	Action plans were implemented throughout the organization based on 2016 results. Repeat survey conducted in November 2017 to check progress.	

Good leadership

Goal: Ensure that people managers are enabled to motivate and develop their employees

Action(s):	By:	Progress by end of 2017:	Status:
Have at least 50% of people managers rated Role 3+ take part in a management program.	End of 2018	As planned, all 400 of our top executives have taken part in our Global Leadership Program. Regarding our other management programs, 765 employees completed our Advanced Management program and 2,901 our Managerial Foundation program.	

Environment

Environmental stewardship

Goal: Incorporate all production sites into our Group ISO 14001 certificate for environmental management systems.

Action(s):	By:	Progress by end of 2017:	Status:
At newly acquired production sites, introduce environmental management systems in line with our Group ISO 14001 certificate and certify them accordingly.	Ongoing	In 2017, 15 sites transferred their environmental management system to our Group certificate. All sites pertinent to the Group certificate have thus been transitioned to the new version of ISO 14001:2015.	

Climate protection

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

Status: By the end of 2017, we had lowered our greenhouse gas emissions by roughly 8% relative to 2006 – despite operational growth.

Action(s):	By:	Progress by end of 2017:	Status:
Systematically examine the energy consumption at our individual production sites	End of 2020	We continued to systematically examine potential energy savings at our production facilities. In 2017, these analyses became part of our routine processes.	
Identify potential energy savings and implement appropriate measures	End of 2020	In 2017, we implemented 36 Edison projects with a view to cutting CO ₂ emissions by 3,500 metric tons in the medium term. We thus failed to achieve our goal of saving up to 34,000 metric tons of CO ₂ . Multiple projects had to be postponed until 2018. In 2018, we intend to initiate 30 new projects with potential savings of 4,600 metric tons of CO ₂ .	
Reduce process-related emissions	End of 2020	We have successfully completed an emissions reduction project for process-related emissions (launched in 2015). Through this project, we hope to cut greenhouse gas emissions by up to 28,000 metric tons per year. In 2017, the project saved approximately 10,000 metric tons of CO ₂ . Technical issues have forced us to postpone another project (offering savings of roughly 23,000 metric tons of CO ₂) until 2018. We intend to roll out two further projects in 2018 that aim to reduce CO ₂ emissions by 24,000 metric tons.	

Waste and recycling

Goal: Set a reduction target by the end of 2017 for the volume of waste generated by our company

Status: goal achieved

Action(s):	By:	Progress by end of 2017:	Status:
Implement a waste scoring model (Merck Waste Score) to quantify our waste reduction efforts and set a baseline.	End of 2017	Using the Merck Waste Score, we established a Group-wide baseline for 2016 from which has been used to set a new reduction target.	✓

Goal: Reduce the environmental impact of our waste disposal (Merck Waste Score) by 5% by 2025 (baseline 2016)

Status: The goal was adopted by the Executive Board, under the guidance of the CR Committee, in November 2017. We are now developing a course of action to achieve it.

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 2017, we had reduced our water use at relevant sites by around 9% relative to 2014. Going forward, we want to ensure a sustainable 10% reduction in water use.

Action(s):	By:	Progress by end of 2017:	Status:
Create a water balance to make water use transparent.	April 2017	In 2017, the relevant sites developed their own water balances, thus creating transparency regarding their water use. To help in their efforts, water meters were installed at individual sites and consumption was measured at various points within the facilities.	✓

Goal: Introduce a sustainable water management system at 24 production sites with high water use by 2020.

Status: Using the CEFIC Water Matters flagship initiative self-assessment tool, our sites are implementing a water management system in three stages. While stage 1 (basic) has already been achieved, we expect to achieve stage 2 (progressed) by May 2018 and stage 3 (advanced) by May 2020. Based on water use in 2016, a further site (Sheboygan, WI, USA) was included in the target group in 2017.

Action(s):	By:	Progress by end of 2017:	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. One of the measures to be taken during stage 1, for instance, is the creation of water balances to make water use transparent.	April 2017	Stage 1 of the self-assessment was largely concluded in 2017.	✓

Meet the “progressed” requirements set out in the CEFIC flagship self-assessment tool (stage 2). This involves creating transparency regarding the situation in the vicinity of the respective sites and beginning the evaluation of the sites’ influence on their environment.	May 2018	During stage 2 of the self-assessment, we will essentially create transparency regarding the water situation in the vicinity of our individual sites. We will also start work on evaluating the influence our sites have on their surroundings.	
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suppliers

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

Action(s):	By:	Progress by end of 2017:	Status:
Perform a qualitative analysis of the available assessment and audit findings, and define potential courses of action.		After analyzing 670 audit and assessment results, it became clear that 45 suppliers fell short of the score we specified for a working relationship and for procurement activities, and/or returned more than five critical defects.	
		Joint meetings were held to discuss risk minimization options based on the evaluation results from Procurement and Quality Assurance. Following implementation of the corrective actions, suppliers are either re-assessed or re-audited.	
Create a holistic approach to managing sustainability within global supply chains.	2017	During the first half of 2017, Group Procurement conducted a management workshop and drafted a position statement on sustainability. As a result, four focus areas were defined and were further elaborated by the individuals responsible for sourcing within each business sector.	

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

Status: Since the start of our donation program, more than 150 million patients have been treated, primarily school-aged children.

Action(s):	By:	Progress by end of 2017:	Status:
Donate up to 250 million praziquantel tablets annually to WHO for African school children.	Ongoing	We keep production capacities at a level sufficient for manufacturing 250 million praziquantel tablets a year. In response to the needs of WHO, in 2017 we donated approximately 150 million tablets for distribution in 26 African countries.	
Optimize the praziquantel formulation.	End of 2019	In 2017, we coordinated with WHO to draft the design for the bio-equivalence study. It is currently under consideration by the Mexican Food and Drug Administration. The study is to be carried out in 2018.	

Develop a pediatric formulation of praziquantel for children under the age of six.	End of 2019	Since 2016, we've been conducting a Phase II study in Côte d'Ivoire to test the efficacy and safety of two different formulations for orally dispersible tablets in schistosomiasis-infected children under six. We expect to have initial results by the second quarter of 2018. At the same time, we are preparing the Phase III study.	
Initiate new partnerships to promote behavioral change in African school children.	Ongoing	Since 2017, we have been partnering with the NALA Foundation to raise awareness. Together, we are supporting a national health project sponsored by the Ethiopian Federal Ministry of Health.	
Provide WHO with educational booklets to teach children about schistosomiasis and ways to prevent it.	Ongoing	In 2017, we donated 200,000 educational booklets to WHO for distribution across 12 African countries.	
Position the Global Schistosomiasis Alliance (GSA) as a partner platform for advocacy, implementation, research, communication, and strategy development.	Ongoing	In 2017, the GSA expanded its global collaboration with schistosomiasis stakeholders. Furthermore, several NGOs became members of the organization. The GSA hosted multiple schistosomiasis research conferences with experts from across the globe and continued to work towards the elimination of the disease in Ethiopia, Cameroon, Uganda, and Egypt.	

Minilab

Goal: Provide and further develop the GPHF Minilab®

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

Develop new test methods for five active ingredients and expand manuals to describe the new testing methods.	End of 2017	In 2017, the GPHF developed test methods for five new active ingredients, meaning that a total of 90 test protocols are now available. The manuals have been updated accordingly.	
Conduct at least three training seminars using the GPHF Minilab®, sell at least 35 Minilabs.	End of 2017	In 2017, the GPHF conducted three Minilab training seminars with a total of around 50 participants. Seven additional seminars with well over 100 participants were conducted by GPHF partner organizations. The GPHF sold a total of 41 Minilabs at cost and supplied 49 additional material deliveries for Minilabs currently in use.	
Conduct at least two Minilab training seminars, sell at least 30 Minilabs and maintain rising demand for additional materials.	End of 2018		
Develop new test methods for ten active ingredients and revise ten existing methods.	End of 2018		
Update the Minilab manuals and consolidate all test methods into one single volume.	End of 2020		