

# Facts and figures



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In this chapter, we present the facts and figures of our report. The report profile specifies the reporting framework, shows how data was collected, and describes how the content of the report was determined. We use indicators to facilitate comparison of our ecological, economic and social performance. The figures have been subjected to a limited assurance audit. We have compiled our goals, prizes and awards into a single overview. The GRI Index documents Merck's fulfillment of the requirements of the GRI guidelines on sustainability reporting. In the Communication on Progress for the Global Compact, we describe the implementation of the Compact's ten principles.

## Report profile

This is Merck's sixth Corporate Responsibility (CR) Report. We have a long tradition of reporting on topics pertaining to our corporate responsibility. Since as early as 1993, we have been reporting on how we fulfill this obligation; initially, we published environmental reports, but then in 2003, we started publishing a full Corporate Responsibility report every two years. Our goal is to inform people about our activities, successes and challenges. At the same time, our CR Report documents the progress we've made in implementing the principles of the United Nations Global Compact ("Communication on Progress").

### Reporting framework

This CR Report covers the 2011 and 2012 fiscal years and pertains to the entire Merck Group with its 203 sites in 66 countries. Any deviations from this reporting framework are indicated in each specific case.

### Systems for collecting and consolidating data

Since 2005, we have been using the Group-wide electronic Location Information Online System (LION) to collect environmental data as well as occupational health and safety data. The data is input locally at the individual sites and approved after being reviewed. In order to ensure that the data is reliable, the Merck Group function Environment Health Safety Security Quality (EQ) furthermore checks the feasibility of the data.

We compile environmentally relevant performance indicators from all Merck Group production sites, as well as relevant warehouse and research sites. In assessing the relevance of the warehouse and research sites, we take into account the sites' environmental impact as well as the number of employees there. LION's scope of consolidation therefore covers all Merck Group sites that relevantly impact the environment.

For the indicators on occupational health and safety, we have furthermore incorporated additional warehouse sites and branch offices into our data collection process, covering more than 95% of all employees.

To improve data quality, we help the sites optimize their data collection processes as well as the associated quality control. The processes and the reported data are audited by EQ and examined in the course of internal EHS audits.

The data on employees and social engagement pertain to the entire Merck Group. Employee master data is continually updated in an SAP-based database. Other employee data, for example data pertaining to core ILO standards, and data on social engagement are queried on an annual basis.

Some employee data is only reported for the sites in Darmstadt, Gernsheim and Grafing (all in Germany), which employed 24% of Merck Group employees in 2012. We indicate accordingly when this is the case.

### Determining report content

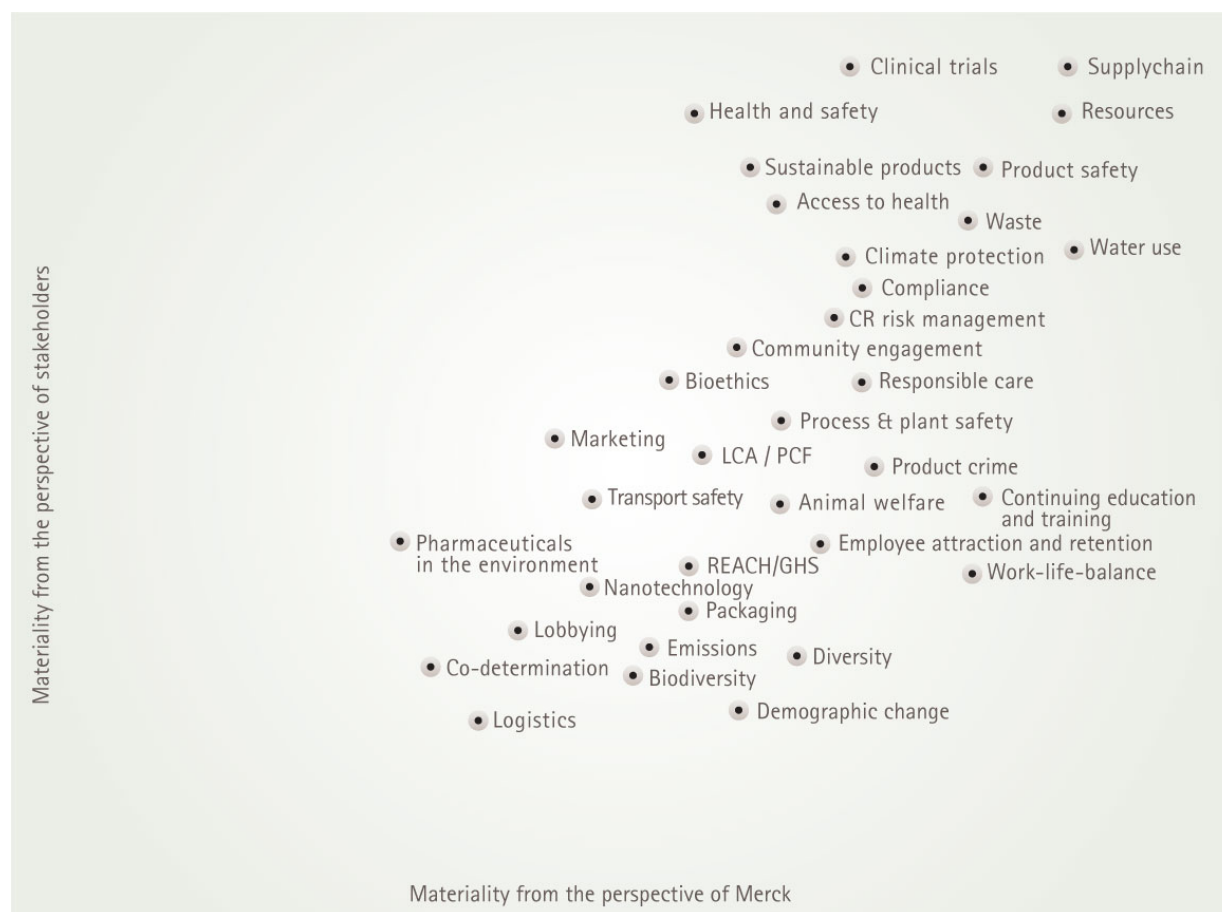
The content of our CR report is oriented to the internationally recognized G3.1 Guidelines of the Global Reporting Initiative (GRI). This report meets the criteria for an A+ application level (confirmed by GRI).

#### ► Download GRI-Statement (PDF)

We have furthermore taken into consideration the requirements of the capital market for assessing companies' contributions to sustainability. In summer 2012, we conducted a materiality analysis to determine the CR topics of relevance to Merck. Both online and via telephone, we surveyed 85 stakeholders, including customers, non-governmental organizations, Merck employees, and scientists. Internal workshops were then held to assess the results in terms of their materiality for the company. The results of the materiality analysis are presented in the materiality matrix. The higher and farther to the right a topic is in the matrix, the more important it is for our stakeholders as well as for our business activities.

We have derived the content of this CR Report from the results of the materiality analysis. The report addresses all topics identified as material.

## Materiality analysis



## External audit

KPMG AG Wirtschaftsprüfungsgesellschaft has audited the annual financial statements and management report of the Merck Group and issued an unqualified opinion. Furthermore, after undergoing a limited assurance audit, Merck has obtained an independent audit certificate for the non-financial key performance indicators.

## Point of contact:

We are happy to receive your feedback and answer your questions.

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Merck's next CR report is scheduled for publication in April 2015.

## Indicators

The figures presented below pertain to the entire Merck Group, unless otherwise indicated.

You can find further information on our reporting framework and data collection systems in our [report profile](#).

The following indicators have undergone a limited assurance audit by KPMG AG Wirtschaftsprüfungsgesellschaft.



### Indicators in this chapter:

- › Indicators: Economics
- › Indicators: Compliance
- › Indicators: Employees
- › Indicators: Environment
- › Indicators: Society

## Indicators: Economics

Total revenues, sales, operating result (EBIT), and R&D costs broken down by division (€ million)

|                                | Merck Serono | Consumer Health | Performance Materials | Merck Millipore | Group**  |
|--------------------------------|--------------|-----------------|-----------------------|-----------------|----------|
| 2011*                          |              |                 |                       |                 |          |
| Total revenues                 | 5,920.0      | 496.2           | 1,467.4               | 2,392.8         | 10,276.4 |
| Sales                          | 5,564.4      | 494.2           | 1,464.7               | 2,382.6         | 9,905.9  |
| Total operating result (EBIT)  | 342.2        | 46.9            | 691.0                 | 235.4           | 1,132.1  |
| Research and development costs | 1,224.5      | 22.8            | 132.8                 | 133.4           | 1,514.0  |
| 2012                           |              |                 |                       |                 |          |
| Total revenues                 | 6,405.2      | 475.2           | 1,675.6               | 2,619.9         | 11,172.9 |
| Sales                          | 5,995.8      | 472.6           | 1,674.2               | 2,598.2         | 10,740.8 |
| Total operating result (EBIT)  | 508.3        | 4.3             | 598.5                 | 233.2           | 963.6    |
| Research and development costs | 1,187.3      | 19.4            | 137.4                 | 166.1           | 1,511.3  |

\* The previous year's figures have been adjusted (see Annual Report 2012, Accounting Policies [↗](#)).

\*\* As a non-operating segment, Corporate and Other is not shown here (see Annual Report 2012, Segment Reporting [↗](#)).

2012 was a highly successful year for Merck, shaped by significant changes. Total Merck Group sales rose by 8.7% to € 11,173 million due to organic growth of 4.8%, growth from currency effects of 3.6% and a 0.3% increase resulting from acquisition effects (see Annual Report 2012, Financial Position and Results of Operations [↗](#)).

In 2012, the Merck Group reported a 14.9% decline in the operating result (EBIT [↗](#)) to € 964 million, while the operating result excluding depreciation and amortization (EBITDA [↗](#)) was down 13.6% to € 2,360 million, primarily due to the one-time restructuring costs (see Annual Report 2012, Financial Position and Results of Operations [↗](#)).

At € 1,511 million, R&D spending remained roughly at the 2011 level (see Annual Report 2012, Financial Position and Results of Operations [↗](#)).

## Indicators: Compliance

### Internal audits on corruption and Social Charter

|                                             | 2008 | 2009 | 2010 | 2011 | 2012 |
|---------------------------------------------|------|------|------|------|------|
| Number of audits relating to corruption     | 36   | 32   | 34   | 28   | 40   |
| Number of audits relating to Social Charter | –    | –    | 26   | 26   | 40   |

### Compliance violations reported via the SpeakUp Line

|                                         | 2008         | 2009 | 2010 | 2011 | 2012 |
|-----------------------------------------|--------------|------|------|------|------|
| Number of reported compliance incidents | Not recorded | 14   | 21   | 29   | 20   |
| Number of confirmed cases               | Not recorded | 3    | 3    | 5    | 5    |

### Compliance training seminars

|                                                                                                 | 2008         | 2009         | 2010         | 2011   | 2012   |
|-------------------------------------------------------------------------------------------------|--------------|--------------|--------------|--------|--------|
| Number of employees trained in anti-corruption policies and procedures*                         | 556          | 6,400        | 8,600        | 13,399 | 22,890 |
| % of employees trained on the topic of anti-corruption                                          | 2            | 19           | 21           | 33     | 59     |
| Number of employees Global Grade 10 or higher who are trained on the topic of anti-corruption** | Not recorded | Not recorded | Not recorded | 7,540  | 10,164 |
| % of employees Global Grade 10 or higher who are trained on the topic of anti-corruption**      | Not recorded | Not recorded | Not recorded | 53     | 60     |
| % of employees Global Grade 9 or lower who are trained on the topic of anti-corruption**        | Not recorded | Not recorded | Not recorded | 22     | 58     |

\* Until 2010, anti-corruption training was part of Code of Conduct training seminars.

In order to address the special responsibility held by employees of a certain management level, as well as by employees with HR responsibility, these employees are increasingly receiving anti-corruption training. This includes all employees rated Global Grade (GG) 10 or higher.

## Indicators: Employees

### Workforce structure

#### Number of total employees

| As of Dec. 31   | 2008         | 2009   | 2010   | 2011   | 2012   |
|-----------------|--------------|--------|--------|--------|--------|
| Total employees | 32,800       | 33,062 | 40,562 | 40,676 | 38,847 |
| Men             | Not recorded | 19,097 | 23,171 | 23,347 | 22,505 |
| Women           | Not recorded | 13,965 | 17,391 | 17,329 | 16,342 |

The "Fit for 2018" efficiency program made a major impact on HR work in 2012. In the majority of countries in which Merck is represented, structural requirements and agreements were reached with the respective social partners in order to create a socially responsible approach to workforce reduction. For example, a partial retirement program and a voluntary leaver program were offered in Germany, with around 1,200 employees participating by the end of 2012. Compared to 2011, the total number of employees in 2012 decreased by 1,829, or 4.5%.

#### Number of employees according to hierarchical level

| As of Dec. 31                                        | 2008         | 2009         | 2010    | 2011    | 2012   |
|------------------------------------------------------|--------------|--------------|---------|---------|--------|
| Total employees                                      | 32,800       | 33,062       | 40,562  | 40,676  | 38,847 |
| Senior Management<br>(Global Grade above 17)         | Not recorded | Not recorded | 51*     | 49*     | 54     |
| Low and middle<br>management<br>(Global Grade 14-17) | Not recorded | Not recorded | 1,354*  | 1,355*  | 1,719  |
| Other employees<br>(Global Grade below 14)           | Not recorded | Not recorded | 39,157* | 39,272* | 37,074 |

\* Figures do not entirely include the employees of the Millipore Corporation, which was acquired in July 2010. The Global Grading System was instituted there incrementally.

#### Average number of employees according to functional areas

|                             | 2008         | 2009   | 2010   | 2011   | 2012   |
|-----------------------------|--------------|--------|--------|--------|--------|
| Entire Group                | Not recorded | 32,850 | 36,347 | 40,570 | 39,939 |
| Production                  | Not recorded | 6,956  | 8,327  | 9,317  | 9,486  |
| Logistics                   | Not recorded | 1,773  | 1,927  | 2,054  | 1,665  |
| Marketing and sales         | Not recorded | 10,582 | 11,541 | 12,322 | 12,353 |
| Administration              | Not recorded | 3,750  | 4,378  | 4,696  | 4,416  |
| Research and<br>development | Not recorded | 3,627  | 4,116  | 4,632  | 4,558  |
| Infrastructure and other    | Not recorded | 6,162  | 6,058  | 7,549  | 7,461  |

→ Indicators: Employees

## Number of employees by region

| As of Dec. 31                   | 2008   | 2009   | 2010   | 2011   | 2012   |
|---------------------------------|--------|--------|--------|--------|--------|
| Total                           | 32,800 | 33,062 | 40,562 | 40,676 | 38,847 |
| Employees in Europe             | *      | *      | *      | 21,830 | 20,777 |
| thereof women                   | *      | *      | *      | 9,832  | 9,261  |
| Employees in North America      | *      | *      | *      | 4,964  | 4,848  |
| thereof women                   | *      | *      | *      | 2,314  | 2,225  |
| Employees in Emerging markets** | *      | *      | *      | 12,229 | 11,642 |
| thereof women                   | *      | *      | *      | 4,565  | 4,274  |
| Employees in Rest of world      | *      | *      | *      | 1,653  | 1,580  |
| thereof women                   | *      | *      | *      | 618    | 582    |

\* No retroactive calculation based on the new regional structure.

\*\* Latin America and Asia excluding Japan.

## Full-time and part-time employees

| As of Dec. 31            | 2008 | 2009 | 2010 | 2011 | 2012 |
|--------------------------|------|------|------|------|------|
| % of full-time employees | 94   | 94   | 94   | 94   | 94   |
| % of part-time employees | 6    | 6    | 6    | 6    | 6    |

In 2012, the percentage of women working full-time in the Merck Group was 39% (2011: 40%); in 2012, the percentage of women working part-time was 90% (2011: 92%).

In 2011, 11% of employees worked part-time at the Darmstadt, Gernsheim and Grafing sites in Germany, with 13% working part-time there in 2012.

## Temporary and permanent contracts

| As of Dec. 31                                | 2008         | 2009         | 2010         | 2011   | 2012   |
|----------------------------------------------|--------------|--------------|--------------|--------|--------|
| Total employees                              | 32,800       | 33,062       | 40,562       | 40,676 | 38,847 |
| Number of employees with permanent contracts | Not recorded | Not recorded | Not recorded | 39,261 | 37,732 |
| Number of employees with temporary contracts | Not recorded | Not recorded | Not recorded | 1,415  | 1,115  |

Only 3% of Merck Group employees have temporary contracts.

In 2012, 42% of Merck employees with permanent contracts were women (2011: 42%); 46% of the employees with temporary contracts were women (2011: 49%).



→ Indicators: Employees

## Staff turnover

|                            | 2008         | 2009         | 2010         | 2011  | 2012  |
|----------------------------|--------------|--------------|--------------|-------|-------|
| Total turnover rate        | Not recorded | Not recorded | Not recorded | 13.42 | 13.34 |
| Turnover rate by gender    |              |              |              |       |       |
| Men                        | Not recorded | Not recorded | Not recorded | 12.80 | 12.87 |
| Women                      | Not recorded | Not recorded | Not recorded | 14.26 | 13.99 |
| Turnover rate by age group |              |              |              |       |       |
| Up to 29 years old         | Not recorded | Not recorded | Not recorded | 21.74 | 21.76 |
| 30 to 49 years old         | Not recorded | Not recorded | Not recorded | 11.63 | 12.19 |
| 50 or older                | Not recorded | Not recorded | Not recorded | 11.79 | 10.01 |
| Turnover rate by region    |              |              |              |       |       |
| Europe                     | Not recorded | Not recorded | Not recorded | 8.65  | 9.22  |
| North America              | Not recorded | Not recorded | Not recorded | 14.73 | 12.59 |
| Emerging markets           | Not recorded | Not recorded | Not recorded | 20.85 | 20.93 |
| Rest of world              | Not recorded | Not recorded | Not recorded | 16.55 | 14.24 |

The table contains unadjusted turnover rates, calculated as follows: Number of employees departing x 100/average workforce in %.

The adjusted turnover rate excludes employees who leave due to parental leave or a long-term illness, as well as employees who are transitioning to the non-working phase of partial retirement.

## Staff turnover

|                                                                                                         | 2008         | 2009         | 2010         | 2011  | 2012  |
|---------------------------------------------------------------------------------------------------------|--------------|--------------|--------------|-------|-------|
| Turnover rate of employees who were hired during the 18 months preceding Dec. 31 of the respective year | Not recorded | Not recorded | Not recorded | 12.23 | 14.07 |
| Turnover rate by gender                                                                                 |              |              |              |       |       |
| Men                                                                                                     | Not recorded | Not recorded | Not recorded | 13.49 | 15.20 |
| Women                                                                                                   | Not recorded | Not recorded | Not recorded | 10.42 | 12.34 |
| Turnover rate by age group                                                                              |              |              |              |       |       |
| Up to 29 years old                                                                                      | Not recorded | Not recorded | Not recorded | 16.25 | 16.20 |
| 30 to 49 years old                                                                                      | Not recorded | Not recorded | Not recorded | 9.18  | 12.73 |
| 50 or older                                                                                             | Not recorded | Not recorded | Not recorded | 8.51  | 9.69  |
| Turnover rate by region                                                                                 |              |              |              |       |       |
| Europe                                                                                                  | Not recorded | Not recorded | Not recorded | 7.16  | 8.16  |
| North America                                                                                           | Not recorded | Not recorded | Not recorded | 7.30  | 7.91  |
| Emerging markets                                                                                        | Not recorded | Not recorded | Not recorded | 17.11 | 19.06 |
| Rest of world                                                                                           | Not recorded | Not recorded | Not recorded | 5.67  | 11.90 |

Merck records the new employee turnover rate over the course of 18 months because 12 months is too short a time to become truly familiar with a new position, especially when it comes to management positions.

The turnover rate is calculated as follows: (Number of newly hired employees within the preceding 18 months that left Merck within the same period)/(average number of employees in the preceding 18 months)\*100

## → Indicators: Employees

The figures exclude employees who leave due to parental leave or a long-term illness, as well as employees who are transitioning to the non-working phase of partial retirement.

## Core labor standards of the International Labour Organization (ILO)

| As of Dec. 31                                                                                                                                       | 2008 | 2009 | 2010 | 2011 | 2012 |
|-----------------------------------------------------------------------------------------------------------------------------------------------------|------|------|------|------|------|
| % of full-time employees (standard contract, excluding exempts) with contractually stipulated working hours of maximally 48 hours/week <sup>1</sup> | 99   | 99   | 99   | 99   | 99   |
| % of full-time employees (standard contract) with at least 15 vacation days/year <sup>2</sup>                                                       | 93   | 95   | 94   | 96   | 95   |
| % of female employees with access to maternity leave programs <sup>3</sup>                                                                          | 89   | 97   | 100  | 100  | 100  |
| % of employees with the right to collective bargaining <sup>4</sup>                                                                                 | 78*  | 76*  | 96   | 96   | 97   |
| % of sites that rule out complicity in child labor as described in ILO Convention 138                                                               | 100  | 100  | 100  | 100  | 100  |
| Age of youngest employees, excluding apprentices                                                                                                    | 17   | 17   | 17   | 18   | 18   |

1 ILO: Hours of Work (Commerce and Offices) Convention, 1930 (No. 30).

2 ILO: Holidays with Pay Convention (Revised), 1970 (No. 132).

3 ILO: Holidays with Pay Convention (Revised), 1952 (No. 103).

4 ILO: Freedom of Association and Protection of the Right to Organize Convention, 1948 (No. 87).

\* Since 2010, Merck has been recording the percentage of employees who have a right to collective bargaining. In the years prior to this, we recorded the employees who were subject to collective bargaining.

## Local minimum wage

|                                                                  | 2008 | 2009 | 2010 | 2011 | 2012 |
|------------------------------------------------------------------|------|------|------|------|------|
| % of sites that guarantee a salary above the local minimum wage* | 94   | 94   | 100  | 99   | 100  |

\* Minimum wage as stipulated by law, or derived from other provisions such as collective agreements.

The Global Rewards Policy applies to all Merck legal entities worldwide and guarantees a systematic compensation structure. Base pay is oriented to the median base pay, and short-term variable compensation is based on the third quartile of the relevant reference market. The overall compensation package thus exceeds the market median.

→ Indicators: Employees

## Occupational health and safety

## Work-related accidents

|                              | 2008 | 2009 | 2010 | 2011 | 2012 |
|------------------------------|------|------|------|------|------|
| Lost Time Injury Rate (LTIR) | 3.9  | 3.5  | 3.0  | 2.0  | 2.3  |
| Number of deaths             | 1    | 0    | 1    | 0    | 0    |

Merck employees have been included in the calculation of the indicators, but supervised employees of external companies and independent contractors have not been taken into account.

Using the LTIR, we record work-related accidents of Merck employees that involve at least one day of missed work. A work-related accident is an injury that results from the type of work, in the course of doing said work, and that has no internal cause (cumulative trauma). Work-related accidents are considered relevant if they occur on the premises, on business trips, during a transport accident, in the course of external influences (e.g. natural disasters), or due to criminal acts involving personal injury. Commuting accidents and accidents during company sporting activities are not included. First-aid incidents are generally not included in the LTIR since these usually do not result in more than one day of missed work.

Through systematic accident prevention measures (such as training and campaigns to strengthen our corporate safety culture), we attained an LTIR of 2.0 in 2011 and an LTIR of 2.3 in 2012. We are working to lastingly stabilize the LTIR.

For Merck KGaA (24% of the employees of the Merck Group), we report work-related illnesses if these have been diagnosed and certified by a physician. In the 2011–2012 period, one case of work-induced illness was reported. We do not keep track of the number of work-related illnesses throughout the entire Merck Group.

## Continuing education and training

## Spending on advanced training for employees (€)

|                                                    | 2008  | 2009  | 2010  | 2011 | 2012 |
|----------------------------------------------------|-------|-------|-------|------|------|
| Average continuing education spending per employee | 1,064 | 1,102 | 1,152 | 982  | 699  |

Due to savings measures within the "Fit for 2018" efficiency program, average continuing education spending per employee in 2012 decreased by 29% relative to 2011, and 2011 spending decreased by 15% relative to 2010. Aside from this, the increasing trend toward e-learning has also contributed to a reduction in training costs.

## Apprentices\*

| As of Dec. 31         | 2008 | 2009 | 2010 | 2011 | 2012 |
|-----------------------|------|------|------|------|------|
| Number of apprentices | 503  | 520  | 513  | 523  | 528  |
| % of apprentices      | 5.6  | 5.7  | 5.9  | 5.6  | 5.7  |

\* Only pertains to the Darmstadt, Gernsheim and Grafing sites in Germany (which accounted for around 24% of Merck Group employees in 2012).

## → Indicators: Employees

## Employees who regularly receive a performance and development evaluation

| As of Dec. 31                                                                 | 2008         | 2009         | 2010 | 2011 | 2012 |
|-------------------------------------------------------------------------------|--------------|--------------|------|------|------|
| % of employees who regularly receive a performance and development evaluation | Not recorded | Not recorded | 88   | 98   | 98   |

Our globally uniform Performance Management process requires annual feedback discussions and performance assessments for all employees that are rated above Global Grade 10 in our position assessment system. Apart from evaluating employee performance, it helps us to identify individual development opportunities. To date, 23,800 employees worldwide have been involved in the process.

For all other employees that do not participate online in this globally uniform process, other methods of performance assessment are available. Thus in 2012, 98% of employees took part in a performance and development evaluation.

## Diversity and inclusion

## Percentage of women

| As of Dec. 31                                                         | 2008         | 2009         | 2010 | 2011 | 2012 |
|-----------------------------------------------------------------------|--------------|--------------|------|------|------|
| % of women in the entire workforce                                    | 42           | 43           | 43   | 43   | 42   |
| % of management positions held by women (Global Grade 14 or above)*   | Not recorded | 17           | 22*  | 23*  | 24   |
| % of women in the Merck Serono and Consumer Health divisions          | Not recorded | Not recorded | 47   | 47   | 46   |
| % of women in the Performance Materials and Merck Millipore divisions | Not recorded | Not recorded | 33   | 38   | 37   |

\* These figures do not entirely include the employees of the Millipore Corporation, which was acquired in July 2010. The Global Grading System was instituted there incrementally.

Since 2009, we have been continually increasing the percentage of management positions held by women. 23% of management positions were held by women in 2011, and 24% were held by women in 2012.

We aim to increase the percentage of management positions (Global Grade 14 or above) held by women to at least 25%–30% by 2016, and we are on the right track to reaching this goal.

## Internationality of employees

|                                                                            | 2008         | 2009 | 2010* | 2011* | 2012 |
|----------------------------------------------------------------------------|--------------|------|-------|-------|------|
| Number of nationalities                                                    | 117          | 111  | 128   | 125   | 121  |
| Number of nationalities in management positions (Global Grade 14 or above) | Not recorded | 56   | 55    | 54    | 57   |

\* These figures do not entirely include the employees of the Millipore Corporation, which was acquired in July 2010. The Global Grading System was instituted there incrementally.

→ Indicators: Employees

## Internationality of employees

|                                                                     | 2008         | 2009 | 2010* | 2011* | 2012 |
|---------------------------------------------------------------------|--------------|------|-------|-------|------|
| % of non-Germans in management positions (Global Grade 14 or above) | Not recorded | 58   | 57    | 56    | 61   |

\* These figures do not entirely include the employees of the Millipore Corporation, which was acquired in July 2010. The Global Grading System was instituted there incrementally.

## Employee age, by individual region

|                    | Worldwide | North America | Europe (including Germany) | Germany | Emerging markets | Rest of world |
|--------------------|-----------|---------------|----------------------------|---------|------------------|---------------|
| 2011               |           |               |                            |         |                  |               |
| Up to 29 years old | 6,856     | 543           | 2,764                      | 1,581   | 3,306            | 243           |
| thereof women      | 3,014     | 269           | 1,371                      | 661     | 1,274            | 100           |
| 30 to 49 years old | 26,513    | 2,996         | 14,407                     | 6,526   | 8,002            | 1,108         |
| thereof women      | 11,563    | 1,397         | 6,664                      | 2,509   | 3,064            | 438           |
| 50 or older        | 7,307     | 1,425         | 4,659                      | 2,793   | 921              | 302           |
| thereof women      | 2,752     | 648           | 1,797                      | 951     | 227              | 80            |
| Average age        | 39.7      | 43.1          | 41.2                       | 41.9    | 35.4             | 39.8          |
| Total employees    | 40,676    | 4,964         | 21,830                     | 10,900  | 12,229           | 1,653         |
| 2012               |           |               |                            |         |                  |               |
| Up to 29 years old | 5,957     | 508           | 2,354                      | 1,466   | 2,878            | 217           |
| thereof women      | 2,476     | 226           | 1,104                      | 593     | 1,067            | 79            |
| 30 to 49 years old | 25,329    | 2,843         | 13,592                     | 6,361   | 7,835            | 1,059         |
| thereof women      | 11,027    | 1,339         | 6,290                      | 2,478   | 2,976            | 422           |
| 50 or older        | 7,561     | 1,497         | 4,831                      | 2,961   | 929              | 304           |
| thereof women      | 2,839     | 660           | 1,867                      | 1,022   | 231              | 81            |
| Average age        | 40.2      | 43.6          | 41.8                       | 42.3    | 36.0             | 40.3          |
| Total employees    | 38,847    | 4,848         | 20,777                     | 10,788  | 11,642           | 1,580         |

## Employees with disabilities\* (%)

| As of Dec. 31                | 2008 | 2009 | 2010 | 2011 | 2012 |
|------------------------------|------|------|------|------|------|
| Employees with disabilities* | 4.2  | 4.1  | 4.1  | 4.2  | 4.9  |

\* Only pertains to the Darmstadt, Gernsheim and Grafing sites in Germany (which accounted for around 24% of Merck Group employees in 2012). The figures for 2009-2011 have been retroactively adjusted (calculations based on the German Social Code IX - SGB IX).

→ Indicators: Employees

## Insurance and retirement benefits for employees

## Insurance and pension systems for employees

|                                                                                           | 2008 | 2009 | 2010 | 2011 | 2012 |
|-------------------------------------------------------------------------------------------|------|------|------|------|------|
| % of employees who are obliged to contribute to a statutory pension system                | 87   | 90   | 95*  | 98   | 99   |
| % of employees in a company pension plan (also in addition to the statutory pension plan) | 70   | 67   | 68   | 68   | 68   |
| % of employees with company accident insurance                                            | 99   | 97   | 100  | 100  | 100  |
| % of employees with statutory health insurance                                            | 82   | 78   | 88   | 88   | 87   |
| % of employees with employer-funded health insurance                                      | 82   | 82   | 88   | 88   | 93   |

\* Due to new data provided these figures have been retroactively adjusted.

## Long-term benefit obligations and retirement pensions (€ million)

|                                                        | 2008  | 2009  | 2010  | 2011  | 2012  |
|--------------------------------------------------------|-------|-------|-------|-------|-------|
| Present value of all benefit obligations as of Dec. 31 | 1,586 | 1,878 | 2,356 | 2,490 | 2,830 |
| Pension expenses                                       | 93    | 98    | 132   | 168   | 159   |

Depending on the legal, economic and fiscal circumstances prevailing in each country, differing retirement benefit systems are provided for the employees of the Merck Group. As a rule, these systems are based on length of service and salary of the employees. Pension obligations of the Merck Group include both defined benefit and defined contribution plans and comprise both obligations from current pensions and accrued benefits for pensions payable in the future. In the Merck Group, defined benefit plans are funded and unfunded. These provisions  also contain other post-employment benefits, such as accrued future health care costs for retirees in the United States (see Annual Report 2012, [Notes to the Provisions for pensions and other post-employment benefits](#) ).

## Reconciling the demands of a career and family

## Flexible working hours

|                                                          | 2008         | 2009         | 2010 | 2011 | 2012 |
|----------------------------------------------------------|--------------|--------------|------|------|------|
| % of employees with the option of working flexible hours | Not recorded | Not recorded | 57   | 58   | 69   |

→ Indicators: Employees

## Parental leave in Germany\*

| As of Dec. 31                                                                               | 2008         | 2009         | 2010         | 2011 | 2012 |
|---------------------------------------------------------------------------------------------|--------------|--------------|--------------|------|------|
| Number of employees with a right to parental leave                                          | Not recorded | Not recorded | Not recorded | 237  | 299  |
| Thereof women (recorded via maternity leave in the respective year)                         | Not recorded | Not recorded | Not recorded | 82   | 139  |
| Thereof men (recorded via special paternity leave in the respective year)                   | Not recorded | Not recorded | Not recorded | 155  | 160  |
| Number of employees who took parental leave                                                 | 234          | 162          | 426          | 401  | 434  |
| Thereof women                                                                               | Not recorded | Not recorded | Not recorded | 283  | 303  |
| Thereof men                                                                                 | Not recorded | Not recorded | Not recorded | 118  | 131  |
| Number of employees on parental leave who worked part time during their leave               | Not recorded | Not recorded | Not recorded | 123  | 137  |
| Thereof women                                                                               | Not recorded | Not recorded | Not recorded | 117  | 135  |
| Thereof men                                                                                 | Not recorded | Not recorded | Not recorded | 6    | 2    |
| Number of employees who returned from parental leave                                        | Not recorded | Not recorded | Not recorded | 144  | 162  |
| Thereof women                                                                               | Not recorded | Not recorded | Not recorded | 58   | 62   |
| Thereof men                                                                                 | Not recorded | Not recorded | Not recorded | 86   | 100  |
| Number of employees still working for Merck one year after their return from parental leave | Not recorded | Not recorded | Not recorded | 140  | ***  |
| Thereof women                                                                               | Not recorded | Not recorded | Not recorded | 55   | ***  |
| Thereof men                                                                                 | Not recorded | Not recorded | Not recorded | 85   | ***  |

\* Figures only pertain to the Darmstadt, Gernsheim and Grafing sites in Germany (which accounted for around 24% of Merck Group employees in 2012). For 2008 and 2009, the figures were calculated based on the data as of Dec. 31 of the respective year; since 2010, the data from the entire year has provided the basis for the calculation, which also includes those employees who took parental leave during the calendar year, but who had returned by Dec. 31.

\*\* Since parental leave can be taken for a period ranging from one month to three years, it is possible for employees to be recorded across a period of up to four calendar years. This explains why the number of employees on parental leave exceeds the number of employees who have a right to it.

\*\*\* Figure will be available on Dec. 31, 2013.

## Indicators: Environment

### Environmental management

#### Spending on environmental protection, safety and health (€ million)

|          | 2008 | 2009 | 2010 | 2011 | 2012 |
|----------|------|------|------|------|------|
| Spending | 131  | 131  | 140  | 141  | 146  |

These figures include both investments in as well as internal and external spending on waste and wastewater management, water, occupational safety, fire protection, noise reduction, air pollution prevention, decontamination, preservation of nature and the landscape, climate protection, and energy efficiency.

### Greenhouse gas emissions

#### Total greenhouse gas emissions (metric kilotons) (Scope 1 and 2 of the GHG Protocol)

|                                       | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|---------------------------------------|------|------|------|------|------|------|------|
| Total CO <sub>2</sub> eq emissions    | 542  | 598  | 513  | 489  | 556  | 521  | 516  |
| Direct CO <sub>2</sub> eq emissions   | 318  | 370  | 303  | 302  | 352  | 318  | 319  |
| Indirect CO <sub>2</sub> eq emissions | 224  | 228  | 210  | 187  | 204  | 203  | 197  |

Portfolio-adjusted in line with the Greenhouse Gas (GHG) Protocol.  
eq = equivalents.

Our response to the [Carbon Disclosure Project](#)  contains a detailed description of our calculation methods.

Greenhouse gas emissions in 2011 decreased 6% relative to 2010. Our EDISON program is thus already making progress. These figures do not include emissions from using biomass to create energy. In 2012, emissions totaled 5.1 metric kilotons (2011: 4.9 metric kilotons).

#### Other relevant indirect greenhouse gas emissions (Scope 3 of the GHG Protocol)

|                                         | 2008         | 2009         | 2010         | 2011         | 2012 |
|-----------------------------------------|--------------|--------------|--------------|--------------|------|
| From air travel (metric kilotons)*      | 35           | 34           | 29           | 47           | 48   |
| From rail travel (metric tons)**        | 147          | 138          | 160          | 121          | 122  |
| From rental car travel (metric tons)*** | Not recorded | Not recorded | Not recorded | Not recorded | 848  |

\* Estimated at around 70%-80% of air travel within the Merck Group. The flight-related CO<sub>2</sub> emissions recorded in this manner are calculated using [atmosfair](#)  (except for 2010).

\*\* Recorded Germany-wide. Data is provided by Deutsche Bahn AG.

\*\*\* Emissions from rental car use in Europe and North America.

eq = equivalent.



## Other air emissions

## Emissions of ozone-depleting substances (metric tons)

|                                               | 2008         | 2009         | 2010 | 2011 | 2012 |
|-----------------------------------------------|--------------|--------------|------|------|------|
| Total emissions of ozone-depleting substances | 1.3          | 0.8          | 0.7  | 1.0  | 1.9  |
| CFC-11eq*                                     | Not recorded | Not recorded | 0.04 | 0.06 | 0.1  |

\* CFC-11eq is a unit of measure used to compare the potential of various substances to deplete the ozone. Reference figure 1 indicates the potential of CFC-11 and CFC-12 to cause the depletion of the ozone layer.

## Other air emissions (metric kilotons)

|                                  | 2008 | 2009 | 2010 | 2011 | 2012 |
|----------------------------------|------|------|------|------|------|
| VOC (Volatile organic compounds) | 1.9  | 0.2  | 0.2  | 0.2  | 0.2  |
| Nitrogen oxide                   | 0.2  | 0.1  | 0.2  | 0.1  | 0.2  |
| Sulfur dioxide                   | 0.05 | 0.03 | 0.03 | 0.02 | 0.02 |
| Dust                             | 0.02 | 0.02 | 0.02 | 0.03 | 0.03 |

The VOC, nitrogen oxide, sulfur dioxide and dust emissions reported here are production-related. These figures do not include emissions from vehicles. Emissions are determined partially based on measurements and partially based on calculations or estimates. Only some sites are required to measure individual parameters.

## Transport

## Transport of finished goods, broken down by means of transportation\*

|            | 2008 | 2009 | 2010 | 2011 | 2012 |
|------------|------|------|------|------|------|
| % Truck    | 63   | 60   | 58   | 58   | 58   |
| % Boat     | 32   | 35   | 36   | 36   | 36   |
| % Airplane | 5    | 5    | 6    | 6    | 6    |

\* Pertains to goods shipped by Merck Group sites in Germany. These figures pertain to the total weight of the transported products. Indicated here is the primary means of transport.

In shipping finished goods from production sites to local warehouses of the legal entities, we are working to reduce the use of air shipping in favor of sea shipping. In doing so, we cut costs and reduce the CO<sub>2</sub> emissions incurred by transporting goods.

In 2012, this switch led to savings of 2,000 metric tons of CO<sub>2</sub>.

## Resource consumption

## Energy consumption (in GWh)

|                             | 2008  | 2009  | 2010  | 2011  | 2012  |
|-----------------------------|-------|-------|-------|-------|-------|
| Total energy consumption    | 1,435 | 1,322 | 1,455 | 1,446 | 1,438 |
| Direct energy consumption   | 913   | 835   | 922   | 917   | 933   |
| Natural gas                 | 810   | 752   | 811   | 808   | 829   |
| Liquid fossil fuels*        | 95    | 68    | 97    | 97    | 91    |
| Biomass                     | 8     | 15    | 14    | 12    | 13    |
| Indirect energy consumption | 522   | 487   | 533   | 529   | 505   |
| Electricity                 | 503   | 466   | 509   | 508   | 488   |
| Steam                       | 19    | 21    | 24    | 21    | 17    |

## Energy consumption (in TJ)

|                             | 2008  | 2009  | 2010  | 2011  | 2012  |
|-----------------------------|-------|-------|-------|-------|-------|
| Total energy consumption    | 5,166 | 4,759 | 5,238 | 5,206 | 5,177 |
| Direct energy consumption   | 3,287 | 3,006 | 3,319 | 3,301 | 3,359 |
| Natural gas                 | 2,916 | 2,707 | 2,920 | 2,909 | 2,984 |
| Liquid fossil fuels*        | 342   | 245   | 349   | 349   | 328   |
| Biomass                     | 29    | 54    | 50    | 43    | 47    |
| Indirect energy consumption | 1,879 | 1,753 | 1,919 | 1,905 | 1,818 |
| Electricity                 | 1,811 | 1,678 | 1,832 | 1,829 | 1,757 |
| Steam                       | 68    | 75    | 87    | 76    | 61    |

Portfolio-adjusted in line with the Greenhouse Gas Protocol.

\* Light and heavy fuel oil, liquified petroleum gas (LPG), diesel and unleaded gas.

At our sites in Billerica, Massachusetts (USA), Bedford, Massachusetts (USA), Molsheim (France), Tel Aviv (Israel), and Rome (Italy), we use photovoltaics to produce power.

Water consumption (in millions of m<sup>3</sup>)

|                                       | 2008 | 2009 | 2010 | 2011 | 2012 |
|---------------------------------------|------|------|------|------|------|
| Total water consumption               | 21.3 | 16.2 | 18.0 | 17.6 | 16.2 |
| Surface water (rivers, lakes)         | 11.3 | 7.6  | 8.7  | 8.3  | 7.0  |
| Groundwater                           | 6.6  | 5.7  | 5.5  | 5.7  | 5.3  |
| Drinking water (from local suppliers) | 3.4  | 2.9  | 3.8  | 3.6  | 3.9  |
| Rain water and other sources          | 0.02 | 0.02 | 0.02 | 0.02 | 0.01 |

The water utilized also includes cooling water that is only ever heated and that never comes into contact with chemical substances. A large portion of the cooling water (around 7 million m<sup>3</sup>) is used for cooling and heating purposes at the Merck

## → Indicators: Environment

Serono site in Geneva. Here, water from Lake Geneva is utilized to air-condition this administrative and laboratory site. Other buildings in the neighboring district are connected to the system. The lake water covers a large portion of the site's energy requirements.

These figures do not include the groundwater that we utilize in relation to safety measures at the Gernsheim site in Germany. Here, the water is fed back directly into natural circulation.

## Wastewater

## Wastewater volume and quality

|                                                         | 2008  | 2009 | 2010 | 2011 | 2012 |
|---------------------------------------------------------|-------|------|------|------|------|
| Total wastewater volume (millions of m <sup>3</sup> )   | 9.5   | 9.3  | 8.8  | 11.1 | 8.4* |
| Chemical oxygen demand (metric tons of O <sub>2</sub> ) | 1,441 | 745  | 967  | 911  | 929  |
| Phosphorous (metric tons)                               | 9     | 6    | 9    | 8    | 7    |
| Nitrogen (metric tons)                                  | 52    | 48   | 61   | 73   | 76   |
| Zinc (kg)                                               | 703   | 808  | 283  | 248  | 267  |
| Chromium (kg)                                           | 31    | 18   | 20   | 21   | 21   |
| Copper (kg)                                             | 30    | 38   | 40   | 34   | 37   |
| Nickel (kg)                                             | 50    | 38   | 39   | 101  | 101  |
| Lead (kg)                                               | 45    | 32   | 38   | 40   | 35   |
| Cadmium (kg)                                            | 9     | 8    | 10   | 10   | 10   |
| Mercury (kg)                                            | 2     | 1    | 1    | 1    | 1    |
| Arsenic (kg)                                            | 7     | 8    | 7    | 6    | 3    |

\* Unlike previous years, the wastewater figures for 2012 do not include groundwater that we utilize for safety measures at the site in Gernsheim, Germany, which is fed back directly into natural circulation. In addition, the figures likewise exclude rainwater at the Gernsheim site.

The wastewater volume includes indirect discharge into both public and Merck-owned wastewater treatment plants, as well as direct discharge (such as rainwater and cooling water). The wastewater volume does not include the water taken from Lake Geneva (around 7 million m<sup>3</sup>) that is exclusively used for cooling and heating and then fed directly back again.

Wastewater from the neighboring municipality of Biebesheim is also treated at the wastewater treatment plant at the Gernsheim site in Germany. The communal wastewater from Biebesheim is included in the wastewater volume as well as in the emissions stated in the table.

Emissions are determined partially based on measurements and partially based on calculations or estimates. Only some sites are required to measure individual parameters.

## Waste

## Hazardous and non-hazardous waste (metric kilotons)

|                          | 2008 | 2009 | 2010 | 2011 | 2012 |
|--------------------------|------|------|------|------|------|
| Total waste              | 216* | 162  | 194* | 199* | 189  |
| Hazardous waste disposed | 56   | 45   | 47   | 43   | 63   |

\* Due to new data provided, these figures have been retroactively adjusted.

## Hazardous and non-hazardous waste (metric kilotons)

|                              | 2008 | 2009 | 2010 | 2011 | 2012 |
|------------------------------|------|------|------|------|------|
| Non-hazardous waste disposed | 22   | 21   | 27   | 36   | 38   |
| Hazardous waste recycled     | 41   | 26   | 29   | 41   | 44   |
| Non-hazardous waste recycled | 97   | 70   | 91   | 79   | 44   |

\* Due to new data provided, these figures have been retroactively adjusted.

## Waste by disposal method

|                                        | 2008 | 2009 | 2010 | 2011 | 2012 |
|----------------------------------------|------|------|------|------|------|
| Total waste (metric kilotons)          | 216* | 162  | 194* | 199* | 189  |
| Waste for disposal (metric kilotons)   | 78   | 66   | 74   | 79   | 101  |
| Landfill waste (metric kilotons)       | 10   | 12   | 13   | 14   | 19   |
| Incinerated waste (metric kilotons)    | 68   | 54   | 61   | 65   | 82   |
| Recycled waste (metric kilotons)       | 138  | 96   | 120  | 120  | 88   |
| Recycled solid waste (metric kilotons) | 115  | 79   | 100  | 97   | 64   |
| Recycled energy (metric kilotons)      | 23   | 17   | 20   | 23   | 24   |
| Recycling rate (%)                     | 64   | 59   | 62   | 60   | 47   |

\* Due to new data provided, these figures have been retroactively adjusted.

In 2011 and 2012, waste from construction and renovation projects constituted a large portion of the waste volume (2011: 36%, 2012: 34%). Due to a major demolition and renovation project at the Darmstadt site in Germany, large quantities of hazardous waste had to be disposed of in 2012. This impacted the recycling rate, which dropped to 47%. At the same time, the volume of recyclable non-hazardous waste declined. A large portion of this waste was generated in 2011 during a major construction project in Darmstadt that was completed in 2012.

## Indicators: Society

### Spending on social engagement (€ million)

|                | 2008 | 2009 | 2010 | 2011 | 2012 |
|----------------|------|------|------|------|------|
| Total spending | 5.3  | 6.2  | 6.9  | 7.9  | 11.8 |

For spending on social engagement, we calculate product donations at their fair value, except for the praziquantel donated within the Merck Praziquantel Donation Program, whose value is calculated according to the WHO Guidelines for Medicine Donations.

The increase in spending from 2011 to 2012 is largely attributable to the Erbitux® China Patients Aid Program (ECPAP), in which we work with the Beijing Red Cross Foundation to provide this drug free-of-charge to low-income patients with colorectal cancer. The program has reached 510 patients in 97 hospitals across 35 cities in China.

### Spending on local social engagement, by region (%)\*

|                  | 2008 | 2009 | 2010 | 2011 | 2012 |
|------------------|------|------|------|------|------|
| Europe           | 45   | 56   | 29   | 39   | 20   |
| North America    | 7    | 11   | 17   | 23   | 13   |
| Emerging markets | 34   | 28   | 49   | 37   | 66   |
| Rest of world    | 14   | 5    | 5    | 1    | 1    |

\* Excluding lighthouse projects.

### Focus of local social engagement (%)\*

|                                                          | 2008 | 2009 | 2010 | 2011 | 2012 |
|----------------------------------------------------------|------|------|------|------|------|
| Health                                                   | –    | –    | –    | 28   | 30   |
| Support for culture and sports activities near our sites | 20   | 15   | 14   | 18   | 28   |
| Education                                                | 23   | 19   | 21   | 22   | 16   |
| Environment                                              | –    | –    | –    | 5    | 9    |
| Other                                                    | 11   | 27   | 27   | 17   | 14   |
| Disaster relief                                          | 5    | 6    | 3    | 10   | 3    |
| Aid to socially disadvantaged people                     | 41   | 33   | 35   | –    | –    |

\* Excluding lighthouse projects, based on number of projects.

In 2011, we reviewed the focuses of our social engagement. Many of our projects in the different focal areas support socially disadvantaged people. In order to clearly categorize our activities, we have therefore stopped using "Aid for socially disadvantaged people" as a sub-category. We have added "Health" and "Environment" as focal areas.

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 Motivations for our social engagement (%)\*
 

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|                                         | 2008 | 2009 | 2010 | 2011 | 2012 |
|-----------------------------------------|------|------|------|------|------|
| Charitable activities                   | 57   | 58   | 56   | 52   | 32   |
| Community investment                    | 16   | 19   | 20   | 24   | 52   |
| Commercial initiatives in the community | 27   | 23   | 24   | 24   | 16   |

\* Excluding lighthouse projects, based on total spending.

We assign the motivations for our engagement to categories based on the model of the London Benchmarking Group and the guidelines of the Bertelsmann Foundation for corporate social engagement. Projects that primarily aim to make improvements within the community are classified as "Community investment". Projects that are predominantly aimed at company-relevant factors such as image or personnel recruitment are classified as "Commercial initiatives in the community". "Charitable activities" comprises any other projects that benefit a charitable organization, but cannot be assigned to either of the other two motivation categories due to missing data or their narrow scope.

## Goals

### Strategy and management

#### Goals: CR strategy and management

| Strategic goal                  | Action                   | By?         | Status in 2011 and 2012                                                        | Status                                                                              |
|---------------------------------|--------------------------|-------------|--------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Improve management of CR topics | Establish a CR Committee | End of 2011 | The CR Committee was founded in 2011. It convened four times in 2011 and 2012. |  |

Legend:  Achieved  In progress  Not achieved  New goal

## Products

#### Goals: Product safety

| Strategic goal                                                                                                                                                     | Action                                                                                                                                                                    | By?         | Status in 2011 and 2012                                                                                                                                                                                                                                                                                                                                                            | Status                                                                                |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Establish a globally uniform hazard and risk communication system for all relevant Merck chemicals in the supply chain, incorporating the principles of prevention | Implementation of REACH:                                                                                                                                                  | End of 2011 | The program SciDeEx®  has been published on Merck's website.                                                                                                                                                                                                                                  |  |
|                                                                                                                                                                    | Publish the SciDeEx® calculation program on the Merck Chemicals portal                                                                                                    |             |                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                       |
|                                                                                                                                                                    | Provide all mixtures with new safety data sheets in accordance with REACH Annex II                                                                                        | End of 2012 | All safety data sheets were converted to the new format by the deadline.                                                                                                                                                                                                                                                                                                           |  |
|                                                                                                                                                                    | Register substances produced in quantities ranging from 100-1,000 metric tons per year (phase 2 of REACH implementation) and register non-phase-in substances             | Mid-2013    | For more than 75 substances, and thus a majority of the relevant substances, the work has already been done. Merck is on schedule in terms of reaching its goal.                                                                                                                                                                                                                   |  |
|                                                                                                                                                                    | Register substances produced in quantities ranging from 1-100 metric tons per year (phase 3 of REACH implementation) and register non-phase-in substances                 | Mid-2018    | We have started the process of registering substances for phase 3.                                                                                                                                                                                                                                                                                                                 |  |
|                                                                                                                                                                    | Implementation of GHS/CLP:<br><br>Classify mixtures and sets according to the CLP regulation                                                                              | Mid-2015    | We have started the process of classifying mixtures.                                                                                                                                                                                                                                                                                                                               |  |
|                                                                                                                                                                    | Implementation of the Global Product Strategy (GPS):<br><br>Within the scope of GPS, provide product safety summaries for all hazardous substances registered under REACH | End of 2020 | The first product safety summaries are available on the website of the International Council of Chemical Associations (ICCA  ). In parallel to the registration of substances for REACH, Merck will produce further product safety summaries in order to achieve the goal for all substances. |  |

## → Goals

## Goals: Product safety

| Strategic goal | Action                                                                                      | By?         | Status in 2011 and 2012                             | Status                                                                              |
|----------------|---------------------------------------------------------------------------------------------|-------------|-----------------------------------------------------|-------------------------------------------------------------------------------------|
|                | Projects for hazard communication:<br>Update safety data sheets for non-hazardous materials | End of 2020 | We have started updating the safety data sheets.    |  |
|                | Increase the number of safety data sheets prepared to a globally uniform standard           | End of 2020 | A Group-wide standard is currently being developed. |  |

## Goals: Animal testing

| Strategic goal                                                  | Action                                                                                      | By?         | Status in 2011 and 2012 | Status                                                                                |
|-----------------------------------------------------------------|---------------------------------------------------------------------------------------------|-------------|-------------------------|---------------------------------------------------------------------------------------|
| Harmonize animal welfare throughout the Merck Group             | Establish Group-wide governance for Corporate Animal Science & Welfare                      | End of 2014 |                         |    |
|                                                                 | Develop a Group-wide audit concept for contract animal testing facilities                   | End of 2015 |                         |    |
| Harmonize the high quality of animal facilities at Merck Serono | Obtain AAALAC International accreditation for all Merck Serono laboratory animal facilities | End of 2015 |                         |  |

## Goals: Storage &amp; transport

| Strategic goal                                 | Action                                                                                       | By?         | Status in 2011 and 2012 | Status                                                                                |
|------------------------------------------------|----------------------------------------------------------------------------------------------|-------------|-------------------------|---------------------------------------------------------------------------------------|
| Further improve warehouse and transport safety | Create a Group-wide standard for safe logistics                                              | End of 2013 |                         |  |
|                                                | Systematically share best warehouse and transport safety practices among employees worldwide | End of 2013 |                         |  |
|                                                | Expand scope of transport safety audits, to include contracted service providers             | End of 2014 |                         |  |
|                                                | Develop additional performance indicators to assess warehouse and transport activities       | End of 2014 |                         |  |

Legend:  Achieved  In progress  Not achieved  New goal



## Suppliers

### Goals: Supplier management

| Strategic goal                     | Action                                                                                                                                                                                                                                                              | By?         | Status in 2011 and 2012                                                                     | Status                                                                                |
|------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Sustainability in the supply chain | Introduce the new supplier management process within the most important legal entities                                                                                                                                                                              | End of 2012 | A new supplier management process has been instituted in the most important legal entities. |    |
|                                    | Adapt the general terms and conditions to integrate the Merck Responsible Sourcing Principles into all orders                                                                                                                                                       | End of 2013 |                                                                                             |    |
|                                    | Conduct CR audits on 30 suppliers with a risk potential                                                                                                                                                                                                             | End of 2013 |                                                                                             |    |
|                                    | Create the technical prerequisites for obtaining supplier self-disclosures in France, the United States, China, Italy, the United Kingdom, and Ireland by implementing a new computerized supplier management system                                                | End of 2013 |                                                                                             |    |
|                                    | Collect supplier self-disclosures from higher-risk suppliers from whom we procure a volume above a defined threshold, in the countries Germany, Brazil, Mexico, Switzerland, Japan, India, France, the United States, China, Italy, the United Kingdom, and Ireland | End of 2013 |                                                                                             |  |

Legend:  Achieved  In progress  Not achieved  New goal

## Employees

### Goals: Attracting and developing talent

| Strategic goal                            | Action                                                                                                               | By?         | Status in 2011 and 2012                                                          | Status                                                                                |
|-------------------------------------------|----------------------------------------------------------------------------------------------------------------------|-------------|----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Introduce a performance management system | Introduce performance management systems for all employees with target agreements, feedback and coaching             | End of 2013 | In 2012, 98% of employees took part in a performance and development evaluation. |  |
|                                           | Introduce development plans for all employees with performance evaluations, target agreements, feedback and coaching | End of 2013 | By the end of 2012, development plans had been instituted for 77% of employees.  |  |

## → Goals

## Goals: Attracting and developing talent

| Strategic goal                                                                                              | Action                                                                                                                                                           | By?         | Status in 2011 and 2012                                                                                                                                                                                                                                                                                                                                                                                 | Status                                                                              |
|-------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                                                                                                             | Introduce development plans for all managers from Millipore Corporation, which was acquired in 2010                                                              | End of 2011 | The Global Grading System was introduced incrementally for the employees of Millipore Corporation, which was acquired in 2010. This process had not yet reached completion as of the end of 2011, which is why the status cannot be specified for the end of 2011. At the end of 2012, development plans were instituted for 85% of the management; this process is to be completed by the end of 2013. |  |
| Talent & Succession Management: Fill at least 2/3 of positions at global grade 16+ with internal candidates | Use the Talent & Succession Management Process to identify suitable employees with management potential and define a process to systematically develop employees | Ongoing     | In 2011, we initiated the Performance & Talent Process to systematically develop management. In 2012, 88% of the vacant management positions were filled internally.                                                                                                                                                                                                                                    |  |

## Goals: Occupational health &amp; safety

| Strategic goal                                                                        | Action                                                                     | By?         | Status in 2011 and 2012                                                                                                                                                                                                                                                               | Status                                                                                |
|---------------------------------------------------------------------------------------|----------------------------------------------------------------------------|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Reduce work accidents throughout the entire Merck Group (lost time injury rate = 2.5) | Implement the BeSafe! program; hold EHS forums on "Safety Behavior Change" | End of 2015 | In 2011, we launched the BeSafe! program. Through systematic accident prevention measures (such as training and campaigns to strengthen our corporate safety culture), we attained an LTIR of 2.0 in 2011 and an LTIR of 2.3 in 2012. We are working to lastingly stabilize our LTIR. |  |

## Goals: Diversity and inclusion

| Strategic goal                                                                              | Action                                                                                                                          | By?         | Status in 2011 and 2012                                                                                          | Status                                                                                |
|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|-------------|------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Increase the percentage of management positions (Global Grade 14+) held by women to 25%-30% | Increase the percentage of management positions held by women through numerous initiatives that move women into those positions | End of 2016 | 23% of management positions were held by women in 2011; 24% were held by women in 2012, a 2% increase over 2010. |  |

Legend:  Achieved  In progress  Not achieved  New goal

## Environment

### Goals: Environmental management

| Strategic goal                          | Action                                                                                            | By?     | Status in 2011 and 2012                                                                                                                                                                     | Status                                                                              |
|-----------------------------------------|---------------------------------------------------------------------------------------------------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Obtain ISO 14001:2004 Group certificate | Certify all production sites to ISO 14001:2004; certify the Millipore sites acquired in July 2010 | Ongoing | New production sites were successively added to the Group certificate. Four Millipore production sites are scheduled to be externally certified and added to the Group certificate in 2013. |  |

### Goals: Climate protection

| Strategic goal                                                                                                   | Action                                                                | By?         | Status in 2011 and 2012                                                                                                                                                                                                              | Status                                                                                |
|------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 20% reduction of direct and indirect greenhouse gas emissions (Scope 1 and 2) of the Merck Group (2006 baseline) | Systematically examine the energy consumption at the individual sites | End of 2020 | The production plants in Darmstadt and Gernsheim were systematically examined in terms of energy savings potential. In addition to this, energy checks were conducted at the Altdorf, Semoy, Taicang, Savannah, and Eppelheim sites. |    |
|                                                                                                                  | Identify and implement potential ways to save energy                  | End of 2020 | Nearly 70 projects to save energy or reduce greenhouse gas emissions have been initiated, and some of them have already reached completion.                                                                                          |  |
|                                                                                                                  | Reduce process-related emissions                                      | End of 2020 | We have made progress in reducing process-related emissions. Despite increased production volume, we managed to lower emissions slightly.                                                                                            |  |

Legend:  Achieved  In progress  Not achieved  New goal

## Society

## Goals: Praziquantel

| Strategic goal                                       | Action                                                                                               | By?         | Status in 2011 and 2012                                                                                                                                                                                                                                                                                                                                                                                                                     | Status                                                                                |
|------------------------------------------------------|------------------------------------------------------------------------------------------------------|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Eliminate the worm disease schistosomiasis in Africa | Provide tablets containing praziquantel free of charge to treat school children in Africa            | Ongoing     | More than 100 million tablets were donated from the beginning of the project to the end of 2012. More than 28 million children were treated in total (figure not yet final; figures for 2012 will not be finalized until July 2013). In 2011 and 2012, over seven million children were treated.<br><br>2011: 25 million tablets provided to nine countries in Africa<br><br>2012: 27 million tablets provided to eight countries in Africa |    |
|                                                      | Run an awareness program to explain the causes of schistosomiasis and potential preventive measures. | End of 2013 | Until mid-2012, instructional materials were tested in Senegal and Malawi as part of a pilot project. In 2013, the awareness program will be initiated in both countries, taking into account experience from the pilot projects.                                                                                                                                                                                                           |  |
|                                                      | Incrementally increase the number of tablets donated annually by a factor of ten, up to 250 million  | End of 2016 | Currently searching for additional API suppliers.                                                                                                                                                                                                                                                                                                                                                                                           |  |
|                                                      | Research a new formulation of praziquantel for children under 6 years old                            |             | In July 2012, a public-private partnership (PPP) was founded. Milestone: Preclinical development is to be completed by 2014; clinical development is scheduled to start in 2014.                                                                                                                                                                                                                                                            |  |
|                                                      | Optimize the praziquantel formulation                                                                | End of 2014 | Development of a film coating to make the tablets easier for patients to swallow and to make them even more resistant to long transport times.                                                                                                                                                                                                                                                                                              |  |

## Goals: Minilab

| Strategic goal                                                                           | Action                                                                                                                    | By?         | Status in 2011 and 2012                                                                                                                                               | Status                                                                                |
|------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Combat counterfeit medicines by providing and further developing the mobile GPHF Minilab | Develop new test methods for five active ingredients and add the descriptions of the new test methods to the user manuals | End of 2011 | 2011: Seven new test methods were developed.<br><br>2012: Five training seminars were conducted on using the GPHF Minilab, and seven new test methods were developed. |  |

→ Goals

## Goals: Praziquantel

| Strategic goal | Action                                                                                                      | By?         | Status in 2011 and 2012 | Status |
|----------------|-------------------------------------------------------------------------------------------------------------|-------------|-------------------------|--------|
|                | Conduct three training seminars on using the GPHF Minilab, sell 50 Minilabs, develop seven new test methods | End of 2013 |                         | +      |

Legend:  Achieved  In progress  Not achieved  New goal

## Awards and recognition



### Awards and recognition in the 2011–2012 period

| Name                                                                                                                                           | For what?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | When?         |
|------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| Sustainability ratings in the capital market                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |               |
| Carbon Disclosure Project                                     | The Carbon Disclosure Project (CDP) is an independent not-for-profit organization that works on behalf of investors to motivate companies to transparently report their greenhouse gas emissions and water consumption. In the Carbon Disclosure Leadership Index, which assesses the extent and transparency of a company's reporting, Merck scored 80 out of 100 possible points. In the Carbon Disclosure Performance Index, which rates a company's performance in reducing emissions, Merck received a B rating on a scale of A to E, thus clearly placing it among the top-ranking companies from Germany, Austria and Switzerland. | 2012          |
| FTSE4Good Index                                             | Since 2008, Merck shares have been included in the FTSE4Good Index, the leading international sustainability index that annually evaluates companies' ecological and ethical conduct.                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 2011 and 2012 |
| oekom research sustainability rating                        | The sustainability rating agency oekom research AG has given Merck a C+ on a scale of A+ (top grade) to D-, which means Merck has once more achieved prime status. This puts Merck in tenth place in the pharmaceuticals & biotechnology sector. A total of 69 companies were evaluated.                                                                                                                                                                                                                                                                                                                                                  | 2011          |
| Sustainalytics sustainability rating for DAX® 30 companies  | In a study comparing the sustainability performance of the 30 largest publicly traded German companies, Merck holds 14th place (2009: 11th place). The analysis conducted by Sustainalytics followed the ESG method, which focuses on environmental, social and governance aspects.                                                                                                                                                                                                                                                                                                                                                       | 2011          |
| STOXX® Global ESG Leaders index                             | Since October 2011, Merck shares have been included in the STOXX Global ESG Leaders sustainability index, which rates companies based on key environmental, social and governance criteria.                                                                                                                                                                                                                                                                                                                                                                                                                                               | 2011 and 2012 |
| Awards for product responsibility                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |               |
| Access to Medicine Index                                    | In the Access to Medicine Index, Merck rose to eighth place (2011: 17th place). This index rates pharmaceutical companies with regard to their activities to improve access to medicines in developing health care systems. The index is published every two years by the Access to Medicine Foundation, an international not-for-profit organization.                                                                                                                                                                                                                                                                                    | 2012          |
| Bio-IT World Best Practices Award                           | Merck's cross-divisional Innospire initiative received the Bio-IT World Best Practices Award for the "Knowledge Management" category. The award is granted by the Cambridge Healthtech Institute in the United States.                                                                                                                                                                                                                                                                                                                                                                                                                    | 2012          |

## → Awards and recognition

## Awards and recognition in the 2011–2012 period

| Name                                                                                                                                                 | For what?                                                                                                                                                                                                                                                                                                                                                                                          | When? |
|------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
| Boston Business Journal Green Business Award                                                                                                         | Merck Millipore's Lab Water business field developed the ech2o-program for recycling water filter cartridges, which was recognized with the Boston Business Journal Green Business Award in May 2012.                                                                                                                                                                                              | 2012  |
| Customer service for MS patients                                                                                                                     | The <b>MS LifeLines®</b>  initiative in the United States, sponsored by <b>EMD Serono</b>  and Pfizer, was recognized by the J.D. Power and Associates Call Center Program for outstanding customer service to the MS community. | 2012  |
| MassRecycle Business Innovation Award                                                                                                                | As one of the leading suppliers of products for the life science industry, Merck Millipore and five customers jointly launched a take-back program for single-use products in the United States in 2012. The program was honored in November 2012 with the MassRecycle Business Innovation Award.                                                                                                  | 2012  |
| <b>R&amp;D Magazine 100 Award</b>                                   | The Somplicity® filtration system from Merck Millipore was chosen by R&D Magazine as one of the 100 most technologically significant products introduced into the marketplace in the United States.                                                                                                                                                                                                | 2012  |
| Awards for our performance as an employer                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                    |       |
| Work and Family audit                                                                                                                                | The charitable Hertie Foundation recognized the Merck sites in Darmstadt and Gernsheim, Germany for the third consecutive time as being "family-friendly". The distinction is based on an audit conducted on family-friendliness using predefined criteria and is valid for three years.                                                                                                           | 2012  |
| Top employer in the Netherlands                                                                                                                      | Merck Serono was recognized by the Corporate Research Foundation as a top employer in the Netherlands.                                                                                                                                                                                                                                                                                             | 2011  |
| <b>Top Employer in the Greater Toronto Area</b>                   | Merck Serono was recognized by "The Globe and Mail" as one of the top employers in the Greater Toronto Area.                                                                                                                                                                                                                                                                                       | 2011  |
| Ranking of the best employers in Germany for senior scientists                                                                                       | Merck attained sixth place in the ranking of the best employers in Germany for senior scientists.                                                                                                                                                                                                                                                                                                  | 2012  |
| <b>Ranking of the top 125 companies for continuing education</b>  | EMD Serono was recognized by "Training Magazine" as one of the companies in the United States that excel at employee development.                                                                                                                                                                                                                                                                  | 2012  |
| Recognition of our social engagement                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                    |       |
| Capital Philanthropy Award                                                                                                                           | Merck Serono was presented the Capital Philanthropy Award in China for its Erbitux China Patients Aid Program. This award is among the most renowned ones given in Beijing for charitable activities. A total of 70 companies were recognized as a Philanthropic Enterprise Beijing.                                                                                                               | 2012  |
| Golden Bee CSR China Honor Roll                                                                                                                      | In recognition of Merck's exemplary corporate social engagement, Merck was admitted to the Golden Bee CSR China Honor Roll.                                                                                                                                                                                                                                                                        | 2012  |
| Recognition as an "Empresa con Prácticas Transparentes (EPT)" in Mexico                                                                              | <b>CETIFARMA</b>  , the Consejo de Ética y Transparencia de la Industria Farmacéutica en México (Council for ethics and transparency in the pharmaceutical industry), recognized Merck in Mexico for its ethical and transparent conduct.                                                                       | 2012  |

Further awards and recognition can be found in the printed version of our **Annual Report 2011**  (back page) and our **Annual Report 2012**  (p. 210).

## GRI Index

The CR Report 2012 is based on the guidelines of the [Global Reporting Initiative](#) (Version G3.1). It meets the criteria for an **A+ application level** (confirmed by GRI). The following GRI Index provides an overview of the GRI indicators, the scope to which Merck reports them, and where the corresponding contents can be found.



In addition, the table presents the UN Global Compact (UNGC) principles. Interested readers can use the references to learn about the progress Merck has made in implementing the principles (Communication on Progress).

› [Download GRI-Statement](#)

### More in this chapter:

- › [GRI Index: Company and report profile](#)
- › [GRI Index: Economic performance indicators](#)
- › [GRI Index: Environmental performance indicators](#)
- › [GRI Index: Social performance indicators](#)

### Legend:

- |       |                                                                                           |
|-------|-------------------------------------------------------------------------------------------|
| ● ● ● | This indicator is fully reported.                                                         |
| ● ●   | This indicator is not fully reported.                                                     |
| ●     | This indicator is currently not reported.                                                 |
| +     | Indicators shown in light gray are additional indicators and may be addressed optionally. |



## GRI index: Company and report profile

| UNGC      | GRI indicator                                                                                                              | Comments                                                                             | Reference                                                                                               | Status |
|-----------|----------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|--------|
| <b>1.</b> | <b>Strategy and Analysis</b>                                                                                               |                                                                                      |                                                                                                         |        |
| 1.1       | Statement from the Chief Executive Officer about the relevance of sustainability                                           |                                                                                      | Letter from Karl-Ludwig Kley, CR strategy                                                               | ● ● ●  |
| 1.2       | Impact of business activity and its risks as well as opportunities for the company                                         |                                                                                      | CR strategy                                                                                             | ● ● ●  |
| <b>2.</b> | <b>Organizational Profile</b>                                                                                              |                                                                                      |                                                                                                         |        |
| 2.1       | Name                                                                                                                       |                                                                                      | Company profile                                                                                         | ● ● ●  |
| 2.2       | Primary brands, products and services                                                                                      |                                                                                      | Company profile, Products                                                                               | ● ● ●  |
| 2.3       | Operational structure                                                                                                      |                                                                                      | Company profile                                                                                         | ● ● ●  |
| 2.4       | Location of headquarters                                                                                                   |                                                                                      | Company profile                                                                                         | ● ● ●  |
| 2.5       | Countries where the organization operates                                                                                  |                                                                                      | Company profile, Share ownership by country <a href="#">↗</a>                                           | ● ● ●  |
| 2.6       | Nature of ownership and legal form                                                                                         |                                                                                      | Company profile                                                                                         | ● ● ●  |
| 2.7       | Markets served                                                                                                             |                                                                                      | Company profile                                                                                         | ● ● ●  |
| 2.8       | Scale of organization                                                                                                      |                                                                                      | Number of employees, Products and sites, Net sales <a href="#">↗</a> , Capitalization <a href="#">↗</a> | ● ● ●  |
| 2.9       | Significant changes regarding size, structure or ownership                                                                 |                                                                                      | Scope of consolidation <a href="#">↗</a> , Fit for 2018                                                 | ● ● ●  |
| 2.10      | Awards                                                                                                                     |                                                                                      | Awards and recognition                                                                                  | ● ● ●  |
| <b>3.</b> | <b>Report Parameters</b>                                                                                                   |                                                                                      |                                                                                                         |        |
| 3.1       | Reporting period                                                                                                           |                                                                                      | Report profile                                                                                          | ● ● ●  |
| 3.2       | Date of publication of the most recent reports                                                                             |                                                                                      | Report profile                                                                                          | ● ● ●  |
| 3.3       | Reporting cycle                                                                                                            |                                                                                      | Report profile                                                                                          | ● ● ●  |
| 3.4       | Contact person for questions regarding the report                                                                          |                                                                                      | Report profile                                                                                          | ● ● ●  |
| 3.5       | Process for defining report content                                                                                        |                                                                                      | Report profile                                                                                          | ● ● ●  |
| 3.6       | Boundary of the report                                                                                                     |                                                                                      | Report profile                                                                                          | ● ● ●  |
| 3.7       | Specific limitations on the scope or boundary of the report                                                                |                                                                                      | Report profile                                                                                          | ● ● ●  |
| 3.8       | Organizational units included in reporting                                                                                 |                                                                                      | Report profile                                                                                          | ● ● ●  |
| 3.9       | Data measurement techniques and the bases of calculations                                                                  |                                                                                      | Report profile                                                                                          | ● ● ●  |
| 3.10      | Explanation of any restatements of information                                                                             | Data has been adjusted in individual cases; the corresponding changes are indicated. | Report profile                                                                                          | ● ● ●  |
| 3.11      | Explanation of changes to the report parameters                                                                            |                                                                                      | Report profile                                                                                          | ● ● ●  |
| 3.12      | GRI Index                                                                                                                  |                                                                                      |                                                                                                         | ● ● ●  |
| 3.13      | External assurance of the report                                                                                           |                                                                                      | Independent assurance report <sup>1</sup>                                                               | ● ● ●  |
| <b>4.</b> | <b>Corporate Governance, Commitments and Engagement</b>                                                                    |                                                                                      |                                                                                                         |        |
| 4.1       | Governance structure of the organization, including committees                                                             |                                                                                      | Executive bodies <a href="#">↗</a> , Diversity, Articles of Association <a href="#">↗</a>               | ● ● ●  |
| 4.2       | Independence of the Chief Executive Officer                                                                                |                                                                                      | Executive bodies <a href="#">↗</a> , Articles of Association <a href="#">↗</a>                          | ● ● ●  |
| 4.3       | Independent members of the Executive Board                                                                                 |                                                                                      | Executive bodies <a href="#">↗</a> , Articles of Association <a href="#">↗</a>                          | ● ● ●  |
| 4.4       | Mechanics for shareholders and employees to provide recommendations and directions                                         |                                                                                      | Shareholder: Articles of Association <a href="#">↗</a> , Employees: Dialogue and co-determination       | ● ● ●  |
| 4.5       | Linkage between compensation for members of the Executive Board and executive employees and the organization's performance |                                                                                      | Compensation Report <a href="#">↗</a>                                                                   | ● ● ●  |
| 4.6       | Processes in place to ensure conflicts of interest are avoided                                                             |                                                                                      | Compliance, Corporate Governance Practices <a href="#">↗</a>                                            | ● ● ●  |

## → GRI index: Company and report profile

|      |                                                                                                                |  |                                                                                                                                                                                                                                                                                                                                                          |       |
|------|----------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
| 4.7  | Qualification and experience of members of the Executive Board                                                 |  | Executive bodies  , Articles of Association  , Objectives of the Supervisory Board  , Diversity | ● ● ● |
| 4.8  | Internally developed statements of mission or values, codes of conduct and principles                          |  | Company values and external initiatives, Compliance                                                                                                                                                                                                                                                                                                      | ● ● ● |
| 4.9  | Procedures of the Executive Board for overseeing and controlling the organization's sustainability performance |  | CR strategy                                                                                                                                                                                                                                                                                                                                              | ● ● ● |
| 4.10 | Processes for evaluating the performance of the members of the Executive Board                                 |  | Articles of Association  , Supervisory Board  , Board of Partners                               | ● ● ● |
| 4.11 | Explanation of how the precautionary approach is addressed                                                     |  | CR strategy, Environmental management                                                                                                                                                                                                                                                                                                                    | ● ● ● |
| 4.12 | Externally developed charters, principles or initiatives                                                       |  | Company values and external initiatives                                                                                                                                                                                                                                                                                                                  | ● ● ● |
| 4.13 | Memberships in associations and advocacy organizations                                                         |  | Stakeholder dialogue                                                                                                                                                                                                                                                                                                                                     | ● ● ● |
| 4.14 | Stakeholder groups engaged by the organization                                                                 |  | Stakeholder dialogue                                                                                                                                                                                                                                                                                                                                     | ● ● ● |
| 4.15 | Basis for selection of stakeholders                                                                            |  | Stakeholder dialogue                                                                                                                                                                                                                                                                                                                                     | ● ● ● |
| 4.16 | Approaches to stakeholder engagement                                                                           |  | Stakeholder dialogue                                                                                                                                                                                                                                                                                                                                     | ● ● ● |
| 4.17 | Topics and concerns of stakeholders                                                                            |  | Stakeholder dialogue, Fit for 2018, Report profile                                                                                                                                                                                                                                                                                                       | ● ● ● |

## GRI index: Economic performance indicators

| UNGC                              | GRI indicator                                                                           |                                                                                | Comments                                                                                                                                                                                                                                                                                                                                                                                                       | Reference                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Status |
|-----------------------------------|-----------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
|                                   |                                                                                         | Management approach                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                | Economic performance  , Products and climate protection, Pension plans  , Supplier selection, Local executives, Indirect economic impacts: Access to health, Procurement of mica raw material, Dialogue and co-determination, Retrologistics                                                           | ● ● ●  |
| Aspect: Economic performance      |                                                                                         |                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |        |
|                                   | EC1                                                                                     | Direct economic value generated and distributed                                |                                                                                                                                                                                                                                                                                                                                                                                                                | Income Statement  , Cash Flow Statement  , Figures by division, country and region  , Community investments, Personnel expenses  | ● ● ●  |
| 7,8,9                             | EC2                                                                                     | Financial implications for the organization's activities due to climate change | In our response to the Carbon Disclosure Project, we describe the opportunities and risks that we see for Merck as a result of climate change. Owing to the complexity of contents and the different probabilities of occurrence, we cannot make any meaningful estimate of the financial implications.                                                                                                        | Climate protection,Carbon Disclosure Project                                                                                                                                                                                                                                                                                                                                             | ● ● ●  |
| 1                                 | EC3                                                                                     | Company retirement pension                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                | Pension plans  , Indicators: Employees                                                                                                                                                                                                                                                                                                                                                   | ● ● ●  |
|                                   | EC4                                                                                     | Financial assistance received from government                                  |                                                                                                                                                                                                                                                                                                                                                                                                                | Accounting policies for property, plant and equipment  , Property, plant and equipment  , Research and development spending                                                                                  | ● ● ●  |
| Aspect: Market presence           |                                                                                         |                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |        |
| 1                                 | EC5  | Ratio of standard entry level salary compared to local minimum salary          | According to the requirement of the Merck Social Charter, all sites guarantee a salary above the local minimum salary.                                                                                                                                                                                                                                                                                         | Attracting and developing employees, Social Charter  , Indicators: Employees                                                                                                                                                                                                                                                                                                           | ● ●    |
|                                   | EC6                                                                                     | Locally based suppliers                                                        | Merck does not have any specific, global policies and guidelines that are generally applicable for purchasing with local suppliers. We procure our raw materials globally, depending on availability and supply. However, there are cases in which local suppliers have a competitive advantage owing to their spatial proximity, for example technical purchases as well as purchases of packaging materials. |                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | ● ● ●  |
| 6                                 | EC7                                                                                     | Local hiring                                                                   | We promote local hiring of employees and international appointments at all levels of the hierarchy. The percentage of local executives is not recorded as it is not relevant to strategic personnel planning at Merck.                                                                                                                                                                                         | Diversity, Indicators: Employees                                                                                                                                                                                                                                                                                                                                                                                                                                            | ● ●    |
| Aspect: Indirect economic impacts |                                                                                         |                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |        |
|                                   | EC8                                                                                     | Infrastructure investments and services provided for public purposes           |                                                                                                                                                                                                                                                                                                                                                                                                                | Investments in infrastructure: Vocational school's technical unit, Hospital in Pakistan, Education and health care opportunities in India, Charitable activities: Social engagement, Indicators: Society                                                                                                                                                                                                                                                                    | ● ● ●  |
|                                   | EC9  | Indirect economic impacts                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                | Access to health, Procurement of mica raw material, Dialogue and co-determination, Retrologistics                                                                                                                                                                                                                                                                                                                                                                           | ● ● ●  |

## GRI index: Environmental performance indicators

| UNGC              | GRI indicator | Comments                                                       | Reference                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Status                                           |
|-------------------|---------------|----------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|
| 7, 8, 9           |               | Management approach                                            | Environmental management, Sustainable products, Transport safety                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | ● ● ●                                            |
| Aspect: Materials |               |                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                  |
| 8                 | EN1           | Materials used                                                 | Where possible and appropriate, as for example in the case of packaging, we use recycled materials. Overall, the possibilities for using recycled materials in our portfolio are limited. Since this indicator is not applicable to Merck, we do not record Group-wide data on this.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Resource consumption, Packaging<br>● ●           |
| 8,9               | EN2           | Percentage of materials used that are recycled input materials | Where possible and appropriate, as for example in the case of packaging, we use recycled materials. Overall, the possibilities for using recycled materials in production are limited, as we are at the beginning of value chains with our business model. Since this indicator is not applicable to Merck, Group-wide data are not recorded.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Packaging<br>● ●                                 |
| Aspect: Energy    |               |                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                  |
| 8                 | EN3           | Direct energy consumption                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Indicators: Environment<br>● ● ●                 |
| 8                 | EN4           | Indirect energy consumption                                    | Merck currently only records purchased secondary energy – this is primarily electricity and, to a lesser extent, heat/steam. Details on the local energy mix, including the respective percentage of primary energy, renewable energy, etc. are currently not available. Data on local energy efficiency in electricity or heat generation are currently not available either. Merck production sites are located in countries with a widely varying energy mix. Our Darmstadt and Gernsheim sites in Germany have a high energy consumption. At these sites, fossil energy (coal, gas, etc.) accounts for approx. 61%, nuclear energy approx. 18% and renewable energies approx. 21% of the energy mix. Renewable energies account for a higher share in electricity generation at production sites in Switzerland, and nuclear energy in France and Japan. Based on an estimated global energy efficiency of 37% for the conversion and distribution of generated electricity, this results in a primary energy consumption of 1318 GWh for 2012. Based on an estimated global energy efficiency of 85% for heat/steam, this results in a primary energy consumption of 20 GWh for 2012. This gives a total primary energy consumption of 1,338 GWh for 2012. (The calculation is based on factors stated in "Handbuch für betriebliches Energiemanagement – Systematisch Energiekosten senken" ("Manual for energy management in practice – Systematically reducing energy costs") published by DENA, 12/2012). | Indicators: Environment<br>● ● ●                 |
| 8,9               | EN5 +         | Energy savings and energy efficiency                           | In 2012, we implemented projects enabling us to save approx. 8.9 MWh of energy and thus avoiding approx. 3,460 metric tons of CO <sub>2</sub> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Examples of climate protection projects<br>● ● ● |

## → GRI index: Environmental performance indicators

|                                        |        |                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                               |       |
|----------------------------------------|--------|-----------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
| 8,9                                    | EN6 +  | Energy-efficient products and services                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Examples of products from our Performance Materials division               | ● ● ● |
| 8,9                                    | EN7 +  | Initiatives to reduce indirect energy consumption                     | We use a variety of measures to reduce indirect energy consumption. These include encouraging the use of public transportation and carpooling at some sites. Our business travel policy for Germany allows air travel for only a limited number of routes. The use of video and telephone conferencing is encouraged within the company. We can quantify the energy savings for only some of these measures. Based on our present knowledge, we will not be able to comprehensively report robust data in the coming years either, as the data situation – at our company as well as our business partners – is not sufficient for meaningful reporting in this respect. | Climate protection, Work-life balance                                                                                                                         | ● ● ● |
| Aspect: Water                          |        |                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                               |       |
| 8                                      | EN8    | Total withdrawal of water                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Indicators: Environment                                                                                                                                       | ● ● ● |
| 8                                      | EN9 +  | Water sources                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Resource consumption                                                                                                                                          | ● ● ● |
| 8, 9                                   | EN10 + | Water recycled and reused                                             | At Merck, cooling water for production processes is recycled and, in some processes, production wastewater is prepared for reuse. At Merck's largest site, Darmstadt in Germany, for example, more than 10 million m <sup>3</sup> of cooling water is recycled. The cooling water is circulated several times. Only approx. 1% of this water quantity needs to be replaced in the recycling process (to compensate for any losses caused by evaporation or sludge water from the cooling towers). These water quantities are not systematically recorded for the Merck Group.                                                                                            |                                                                                                                                                               | ● ● ● |
| Aspect: Biodiversity                   |        |                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                               |       |
| 8                                      | EN11   | Land in protected areas and areas of high biodiversity value          | None.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Biodiversity                                                                                                                                                  | ● ● ● |
| 8                                      | EN12   | Impacts of products and services on protected areas                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Biodiversity                                                                                                                                                  | ● ● ● |
| 8                                      | EN13 + | Habitat protected or restored                                         | This indicator is not relevant to our business activities, as our production sites are located only in declared industrial areas.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                               | ●     |
| 8                                      | EN14 + | Strategy, objectives and actions for managing biodiversity            | see EN13                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Biodiversity                                                                                                                                                  | ●     |
| 8                                      | EN15 + | Endangered plant and animal species                                   | see EN13                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                               | ●     |
| Aspect: Emissions, effluents and waste |        |                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                               |       |
| 8                                      | EN16   | Direct and indirect greenhouse gas emissions                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Indicators: Environment                                                                                                                                       | ● ● ● |
| 8                                      | EN17   | Other relevant greenhouse gas emissions                               | In our response to the Carbon Disclosure Project, we assessed the relevance of various Scope 3 emissions.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Carbon Disclosure Project                                                | ● ● ● |
| 7, 8, 9                                | EN18   | Reduction of greenhouse gas emissions                                 | In our response to the Carbon Disclosure Project 2013, we describe projects to reduce greenhouse gas emissions.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Carbon Disclosure Project  , Climate protection, Indicators: Environment | ● ● ● |
| 8                                      | EN19   | Emissions of ozone-depleting substances                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Indicators: Environment                                                                                                                                       | ● ● ● |
| 8                                      | EN20   | NO <sub>x</sub> , SO <sub>x</sub> and other significant air emissions |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Indicators: Environment                                                                                                                                       | ● ● ● |
| 8                                      | EN21   | Total water discharge                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Water protection, Indicators: Environment                                                                                                                     | ● ● ● |
| 8                                      | EN22 + | Total waste and disposal method                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Waste management, Indicators: Environment                                                                                                                     | ● ● ● |
| 8                                      | EN23   | Significant spills                                                    | There were no significant spills.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Process and plant safety                                                                                                                                      | ● ● ● |

→ GRI index: Environmental performance indicators

|                               |        |                                                                              |                                                                                                                                                                                                                                                                                                                                             |                                           |       |
|-------------------------------|--------|------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|-------|
| 8                             | EN24 + | Transport of hazardous waste                                                 |                                                                                                                                                                                                                                                                                                                                             | Waste management                          | ● ●   |
| 8                             | EN25 + | Waters and habitats significantly affected by discharges of water and runoff | There were no significant discharges. At the Darmstadt site, the discharge of purified wastewater into the Darmbach (a stream in the Darmstadt area) accounts for over 5% of the average annual discharge volume. This has been permitted by the relevant authorities. It involves no significant impacts on the water or related habitats. |                                           | ● ● ● |
| Aspect: Products and services |        |                                                                              |                                                                                                                                                                                                                                                                                                                                             |                                           |       |
| 7, 8, 9                       | EN26   | Initiatives to mitigate environmental impacts of products and services       |                                                                                                                                                                                                                                                                                                                                             | Sustainable products                      | ● ● ● |
| 8, 9                          | EN27   | Reclaim and recycling of product packaging                                   | We take back product packaging and have developed special return systems for this. We do not record precise percentages owing to the large number of our products (more than 60,000) and their wide diversity.                                                                                                                              | Reuse and recycling                       | ● ● ● |
| Aspect: Compliance            |        |                                                                              |                                                                                                                                                                                                                                                                                                                                             |                                           |       |
| 8                             | EN28   | Fines and sanctions for non-compliance with laws and regulations             | There were no significant incidents of non-compliance during the 2011–2012 period.                                                                                                                                                                                                                                                          |                                           | ● ● ● |
| Aspect: Transport             |        |                                                                              |                                                                                                                                                                                                                                                                                                                                             |                                           |       |
| 8                             | EN29 + | Environmental impacts of transportation                                      |                                                                                                                                                                                                                                                                                                                                             | Transport safety, Indicators: Environment | ● ●   |
| Aspect: Overall               |        |                                                                              |                                                                                                                                                                                                                                                                                                                                             |                                           |       |
| 7, 8, 9                       | EN30 + | Total environmental protection expenditures and investments                  |                                                                                                                                                                                                                                                                                                                                             | Indicators: Environment                   | ● ● ● |

## GRI index: Social performance indicators

### Labor practices and decent work: Management approach and indicators

| UNGC                                   | GRI indicator                                                                           |                                                                                     | Comments                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Reference                                                                                                                    | Status |
|----------------------------------------|-----------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|--------|
| 1, 3, 6                                |                                                                                         | Management approach                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | HR Management, Dialogue and co-determination, Occupational health and safety, Attracting and developing employees, Diversity | ● ● ●  |
| Aspect: Labor/Management relations     |                                                                                         |                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                              |        |
|                                        | LA1                                                                                     | Total workforce                                                                     | We do not currently record data on supervised workers, e.g. temps, in our data systems for employees. We are working to record these data in the future, making them available in 2014.                                                                                                                                                                                                                                                                                                                                         | Indicators: Employees, Code of Conduct    | ● ●    |
| 6                                      | LA2                                                                                     | Rate of employee turnover                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Attracting and developing employees, Indicators: Employees                                                                   | ● ● ●  |
|                                        | LA3    | Benefits provided                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Attracting and developing employees, Indicators: Employees                                                                   | ● ● ●  |
|                                        | LA15                                                                                    | Parental leave                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Indicators: Employees                                                                                                        | ● ● ●  |
| Aspect: Employer-employee relationship |                                                                                         |                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                              |        |
| 1, 3                                   | LA4                                                                                     | Employees covered by collective bargaining agreements                               | We currently report the percentage of employees who qualify to be covered by collective bargaining agreements in the Merck Group. In the next report we will present the percentage of employees who are actually covered by collective bargaining agreements.                                                                                                                                                                                                                                                                  | Dialogue and co-determination, Indicators: Employees                                                                         | ● ●    |
| 3                                      | LA5                                                                                     | Minimum notice periods regarding significant operational changes                    | The regulations on notice periods vary worldwide. As we comply with the applicable regulations, we have not defined a Group-wide uniform notice period.                                                                                                                                                                                                                                                                                                                                                                         | Dialogue and co-determination, Fit for 2018                                                                                  | ● ● ●  |
| Aspect: Occupational health and safety |                                                                                         |                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                              |        |
| 1                                      | LA6  | Workforce represented in health and safety committees                               | Occupational health and safety committees are stipulated by law in Germany. Therefore, all employees of the sites in Germany (Darmstadt, Gernsheim, and Grafing) are represented in health and safety committees working at site level. This accounts for approx. 24% of the total workforce.                                                                                                                                                                                                                                   |                                                                                                                              | ● ● ●  |
| 1                                      | LA7                                                                                     | Injuries, occupational diseases, lost days, days of absence and work-related deaths | We have defined the lost time injury rate (LTIR) as an important indicator in the Merck Group. Therefore, we do not present any separate figures on workplace accidents, lost days and days of absence. The LTIR is currently not broken down by gender and region. We intend to include a breakdown by region in the next report. Occupational diseases are reported for Merck KGaA in Germany if they have been medically diagnosed and certified. One case of an occupational diseases was reported in the 2011-2012 period. | Indicators: Employees, Occupational health and safety                                                                        | ● ●    |
| 1                                      | LA8                                                                                     | Health care and counseling                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Occupational health and safety                                                                                               | ● ● ●  |
| 1                                      | LA9  | Health and safety agreements with trade unions                                      | For our sites in Germany there is a company agreement on occupational health and safety.                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                              | ● ● ●  |
| Aspect: Training and education         |                                                                                         |                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                              |        |

## → GRI index: Social performance indicators

|                                                     |        |                                                                                   |                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                               |       |
|-----------------------------------------------------|--------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
|                                                     | LA10   | Average annual further training per employee                                      | The costs of training and education for our employees are currently recorded and reported. The average number of hours of advanced training are currently not recorded, but are to be made available in the next fiscal year.                                                                                                                                               | Indicators: Employees, Attracting and developing employees, Training on specific topics: Compliance, Occupational safety, Diversity, Animal welfare, Company environmental protection, Product-related crime                                                                                                                                                  | ●     |
|                                                     | LA11 + | Skills management and lifelong learning                                           |                                                                                                                                                                                                                                                                                                                                                                             | Attracting and developing employees, Fit for 2018                                                                                                                                                                                                                                                                                                             | ● ● ● |
|                                                     | LA12 + | Employee performance and career development reviews                               |                                                                                                                                                                                                                                                                                                                                                                             | Attracting and developing employees, Indicators: Employees                                                                                                                                                                                                                                                                                                    | ● ● ● |
| <b>Aspect: Diversity and equal opportunity</b>      |        |                                                                                   |                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                               |       |
| 1, 6                                                | LA13   | Composition of governance bodies and breakdown of employees by diversity criteria | As there is no globally uniform definition of the term "minority", we do not record any data on this. Moreover, the recording of our employees' personal data is strictly regulated in many countries in which we operate.                                                                                                                                                  | Executive Board  , Supervisory Board  , Objectives of the Supervisory Board  , Indicators: Employees | ● ●   |
| <b>Aspect: Equal remuneration for women and men</b> |        |                                                                                   |                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                               |       |
| 1, 6                                                | LA14   | Ratio of basic salary of men to women                                             | The salaries at Merck are linked to the job descriptions that are defined in the global grade system. This system has fixed salary bands that are identical for men and women. Bonuses that we pay within the scope of our performance-oriented compensation are paid on the basis of target agreement and achievement. A performance management system steers the process. | Attracting and developing employees                                                                                                                                                                                                                                                                                                                           | ● ● ● |

## Human Rights: Management approach and indicators

| UNGC                                                     | GRI indicator |                                                                                                      | Comments                                                                                                                                                                                         | Reference                                                                                          | Status |
|----------------------------------------------------------|---------------|------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|--------|
| 1, 2, 3, 4, 5, 6                                         |               | Management approach                                                                                  |                                                                                                                                                                                                  | Human rights, Compliance, HR Management, Safety of our drugs, Clinical trials, Supplier management | ● ● ●  |
| Aspect: Investment and procurement practices             |               |                                                                                                      |                                                                                                                                                                                                  |                                                                                                    |        |
| 1, 2, 3, 4, 5, 6                                         | HR1           | Investment agreements that include human right clauses                                               | In all decisions relating to mergers and acquisitions, we screen our potential partners for their compliance with human rights. A special focus is on labor standards and environmental aspects. | Supplier management                                                                                | ● ● ●  |
| 1, 2, 3, 4, 5, 6                                         | HR2           | Suppliers that have undergone screening on human rights and actions taken                            |                                                                                                                                                                                                  | Supplier management, Clinical trials                                                               | ● ● ●  |
| 1, 2, 3, 4, 5, 6                                         | HR3           | Employee training on human rights                                                                    | We train our employees on diverse topics that show a relationship to human rights. Interdisciplinary training is currently not carried out on the topic of human rights.                         | Diversity, Product-related crime, Access to health, Supplier management, Compliance                | ● ● ●  |
| Aspect: Non-discrimination                               |               |                                                                                                      |                                                                                                                                                                                                  |                                                                                                    |        |
| 1, 2, 6                                                  | HR4           | Number of incidents of discrimination and actions taken                                              |                                                                                                                                                                                                  | Diversity                                                                                          | ● ● ●  |
| Aspect: Freedom of association and collective bargaining |               |                                                                                                      |                                                                                                                                                                                                  |                                                                                                    |        |
| 1, 2, 3                                                  | HR5           | Risks to the right to exercise freedom of association and collective bargaining in business activity |                                                                                                                                                                                                  | Human rights, Compliance, Supplier management                                                      | ● ● ●  |
| Aspect: Child labor                                      |               |                                                                                                      |                                                                                                                                                                                                  |                                                                                                    |        |
| 1, 2, 5                                                  | HR6           | Risk of child labor in business activity                                                             |                                                                                                                                                                                                  | Human rights, Compliance, Supplier management                                                      | ● ● ●  |
| Aspect: Forced and compulsory labor                      |               |                                                                                                      |                                                                                                                                                                                                  |                                                                                                    |        |
| 1, 2, 4                                                  | HR7           | Risk of forced or compulsory labor in business activity                                              |                                                                                                                                                                                                  | Human rights, Compliance, Supplier management                                                      | ● ● ●  |
| Aspect: Security practices                               |               |                                                                                                      |                                                                                                                                                                                                  |                                                                                                    |        |



## → GRI index: Social performance indicators

|                                     |       |                                                                                                                    |                                                                                                                                                                            |       |
|-------------------------------------|-------|--------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
| 1, 2                                | HR8 + | Security personnel trained in aspects of human rights                                                              | Security personnel are currently not being trained in aspects of human rights. We are developing the corresponding training modules, which are scheduled to start in 2014. | ●     |
| Aspect: Rights of indigenous people |       |                                                                                                                    |                                                                                                                                                                            |       |
| 1, 2                                | HR9 + | Incidents of violations involving rights of indigenous people                                                      | There were no significant incidents of non-compliance during the 2011–2012 period.                                                                                         | ● ● ● |
| Aspect: Assessment                  |       |                                                                                                                    |                                                                                                                                                                            |       |
| 1, 2                                | HR10  | Percentage and total number of operations that have been subject to human rights reviews and/or impact assessments | Compliance, Human rights                                                                                                                                                   | ● ● ● |
| Aspect: Remediation                 |       |                                                                                                                    |                                                                                                                                                                            |       |
| 1, 2                                | HR11  | Number of grievances related to human rights filed, addressed, and resolved through formal grievance mechanisms    | Compliance, Human rights, Supplier management, Product safety                                                                                                              | ● ● ● |

## Society: Management approach and indicators

| UNGC                              | GRI indicator | Comments                                                                                                                                | Reference                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Status |
|-----------------------------------|---------------|-----------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| 1, 2, 3, 4, 5, 6, 7, 8, 9, 10     |               | Management approach                                                                                                                     | Compliance, Stakeholder dialogue, Dialogue and co-determination                                                                                                                                                                                                                                                                                                                                                                                                                                                              |        |
| Aspect: Society                   |               |                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |        |
|                                   | S01           | Programs that assess the impact of operations on society                                                                                | Company strategy  , CR strategy, Stakeholder dialogue, Social engagement                                                                                                                                                                                                                                                                                                                                                                | ● ● ●  |
|                                   | S09           | Operations with significant potential or actual negative impacts on local communities                                                   | Company environmental protection, Supplier management, Reuse and recycling                                                                                                                                                                                                                                                                                                                                                                                                                                                   | ● ● ●  |
|                                   | S010          | Prevention and mitigation measures implemented in operations with significant potential or actual negative impacts on local communities | Compliance, Supplier management, Dialogue and co-determination, Stakeholder dialogue                                                                                                                                                                                                                                                                                                                                                                                                                                         | ● ● ●  |
| Aspect: Corruption                |               |                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |        |
| 10                                | S02           | Analysis of risks related to corruption in business units                                                                               | Compliance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | ● ● ●  |
| 10                                | S03           | Training in anti-corruption                                                                                                             | Compliance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | ● ● ●  |
| 10                                | S04           | Incidents of corruption and actions taken                                                                                               | Compliance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | ● ● ●  |
| Aspect: Public policy             |               |                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |        |
| 1, 2, 3, 4, 5, 6, 7, 8, 9, 10     | S05           | Political positions and lobbying                                                                                                        | Merck acts according to the political positions published. This also applies to direct dialog with politicians and to representatives of political interests through associations.                                                                                                                                                                                                                                                                                                                                           | ● ● ●  |
| 10                                | S06 +         | Contributions to political parties and politicians                                                                                      | Merck does not make financial contributions to holders of or candidates for political office, political parties or related organizations. This is defined in our Code of Conduct. In the United States, EMD Political Action Committees (PACs) have been set up via which our employees support political candidates and organizations with donations. These are not donations by the company, but donations by the employees. The contributions donated are reported to the U.S. Federal Election Commission and published. | ● ● ●  |
| Aspect: Anti-competitive behavior |               |                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |        |
| 10                                | S07 +         | Number of legal actions as a result of anti-competitive behavior                                                                        | Merck is currently involved in two antitrust proceedings.                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | ● ● ●  |
| Aspect: Compliance                |               |                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |        |

## → GRI index: Social performance indicators

|     |                                                                  |                                                                                    |       |
|-----|------------------------------------------------------------------|------------------------------------------------------------------------------------|-------|
| S08 | Fines and sanctions for non-compliance with laws and regulations | There were no significant incidents of non-compliance during the 2011–2012 period. | ● ● ● |
|-----|------------------------------------------------------------------|------------------------------------------------------------------------------------|-------|

## Product responsibility: Management approach and indicators

| UNGC                                 | GRI indicator |                                                                                             | Comments                                                                                                                                                                                                                                                  | Reference                                                                                     | Status |
|--------------------------------------|---------------|---------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|--------|
| 1, 7, 8                              |               | Management approach                                                                         |                                                                                                                                                                                                                                                           | Product safety, Responsible marketing, Compliance                                             | ● ● ●  |
| Aspect: Customer health and safety   |               |                                                                                             |                                                                                                                                                                                                                                                           |                                                                                               |        |
| 1                                    | PR1           | Analysis of the health and safety impact of products and services                           |                                                                                                                                                                                                                                                           | Product safety, Sustainable products                                                          | ● ● ●  |
| 1                                    | PR2 +         | Incidents of non-compliance with regulations on health protection and safety                | Risks arising from litigation and legal proceedings are published in the Risk Report contained in the Annual Report.                                                                                                                                      |                                                                                               | ● ●    |
| Aspect: Product and service labeling |               |                                                                                             |                                                                                                                                                                                                                                                           |                                                                                               |        |
| 8                                    | PR3           | Labeling of products and services                                                           |                                                                                                                                                                                                                                                           | Product safety                                                                                | ● ● ●  |
| 8                                    | PR4 +         | Non-compliance with regulations concerning labeling of products and services                | Risks arising from litigation and legal proceedings are published in the Risk Report contained in the Annual Report.                                                                                                                                      |                                                                                               | ● ●    |
|                                      | PR5 +         | Measurement of customer satisfaction and results                                            | The results of customer surveys are confidential.                                                                                                                                                                                                         | Stakeholder dialogue, Sustainable products, Packaging, Interactions in the health care system | ● ●    |
| Aspect: Marketing communications     |               |                                                                                             |                                                                                                                                                                                                                                                           |                                                                                               |        |
|                                      | PR6           | Responsible marketing                                                                       |                                                                                                                                                                                                                                                           | Responsible marketing                                                                         | ● ● ●  |
|                                      | PR7 +         | Non-compliance with regulations on marketing                                                | Risks arising from litigation and legal proceedings are published in the Risk Report contained in the Annual Report.                                                                                                                                      |                                                                                               | ● ●    |
| Aspect: Customer privacy             |               |                                                                                             |                                                                                                                                                                                                                                                           |                                                                                               |        |
| 1                                    | PR8 +         | Total number of substantiated complaints by customers regarding breaches of data protection | A corporate directive regulates data protection within the Merck Group. In line with increasing requirements, we resolved to expand our data protection organization. We received no significant complaints from external parties or regulatory agencies. |                                                                                               | ● ● ●  |
| Aspect: Compliance                   |               |                                                                                             |                                                                                                                                                                                                                                                           |                                                                                               |        |
|                                      | PR9           | Fines and sanctions for non-compliance with laws and regulations                            | During the 2011-2012 period we recorded a normal course of business without any significant fines.                                                                                                                                                        |                                                                                               | ● ● ●  |

## GRI-Statement



### Statement GRI Application Level Check

GRI hereby states that **Merck** has presented its report “CR report 2012” to GRI’s Report Services which have concluded that the report fulfills the requirement of Application Level A+.

GRI Application Levels communicate the extent to which the content of the G3.1 Guidelines has been used in the submitted sustainability reporting. The Check confirms that the required set and number of disclosures for that Application Level have been addressed in the reporting and that the GRI Content Index demonstrates a valid representation of the required disclosures, as described in the GRI G3.1 Guidelines. For methodology, see [www.globalreporting.org/SiteCollectionDocuments/ALC-Methodology.pdf](http://www.globalreporting.org/SiteCollectionDocuments/ALC-Methodology.pdf)

Application Levels do not provide an opinion on the sustainability performance of the reporter nor the quality of the information in the report.

Amsterdam, 23 April 2013

Nelmara Arbex  
Deputy Chief Executive  
Global Reporting Initiative



The “+” has been added to this Application Level because Merck has submitted (part of) this report for external assurance. GRI accepts the reporter’s own criteria for choosing the relevant assurance provider.

*The Global Reporting Initiative (GRI) is a network-based organization that has pioneered the development of the world’s most widely used sustainability reporting framework and is committed to its continuous improvement and application worldwide. The GRI Guidelines set out the principles and indicators that organizations can use to measure and report their economic, environmental, and social performance. [www.globalreporting.org](http://www.globalreporting.org)*

**Disclaimer:** Where the relevant sustainability reporting includes external links, including to audio visual material, this statement only concerns material submitted to GRI at the time of the Check on 15 April 2013. GRI explicitly excludes the statement being applied to any later changes to such material.

## Global Compact Communication on Progress

### 2012 Communication on Progress regarding the implementation of the Global Compact Principles

The Global Compact (GC) is a UN initiative founded in 2000. Signatories of the initiative commit themselves to ten principles based on key UN conventions regarding human rights, labor standards, environmental protection, and anti-corruption. At the same time, the compact obliges the signatories to actively engage themselves in propagating the principles within their own sphere of influence.



Merck has been a Global Compact participant since 2005. The following table presents the key measures that Merck took in 2011 and 2012 to implement the principles of the Global Compact.

[www.unglobalcompact.org](http://www.unglobalcompact.org)

#### Global Compact COP

| UNGC Principles                                                 | Relevant GRI indicators                          | Key actions in 2011 and 2012                                                                                                                                                                                                                                                                 | Link                                            |
|-----------------------------------------------------------------|--------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|
| Principle 1: Support and respect human rights                   | EC5, LA4, LA6-9, LA13-14, HR1-9, SO5, PR1-2, PR8 | <ul style="list-style-type: none"> <li>→ Human rights risk assessment</li> <li>→ Supplier management further developed in terms of CR aspects; creation of the "Merck Responsible Sourcing Principles"</li> <li>→ Increase in praziquantel donations to eliminate schistosomiasis</li> </ul> | Human rights, Supplier management, Praziquantel |
| Principle 2: Rule out complicity in human rights abuses         | HR1-9, SO5                                       | <ul style="list-style-type: none"> <li>→ Internal audits conducted on the Social Charter</li> <li>→ Human rights risk assessment</li> <li>→ Supplier management further developed in terms of CR aspect; creation of the "Merck Responsible Sourcing Principles"</li> </ul>                  | Compliance, Human rights, Supplier management   |
| Principle 3: Uphold freedom of association                      | LA4-5, HR1-3, HR5, SO5                           | <ul style="list-style-type: none"> <li>→ Internal audits conducted on the social charter</li> <li>→ Human rights risk assessment</li> <li>→ Supplier management further developed in terms of CR aspects; creation of the "Merck Responsible Sourcing Principles"</li> </ul>                 | Compliance, Human rights, Supplier management   |
| Principle 4: Eliminate all forms of forced and compulsory labor | HR1-3, HR7, SO5                                  | <ul style="list-style-type: none"> <li>→ Internal audits conducted on the Social Charter</li> <li>→ Human rights risk assessment</li> <li>→ Supplier management further developed in terms of CR aspects; creation of the "Merck Responsible Sourcing Principles"</li> </ul>                 | Compliance, Human rights, Supplier management   |

## Global Compact COP

| UNGC Principles                                                           | Relevant GRI indicators                    | Key actions in 2011 and 2012                                                                                                                                                                                                                                                                                                                                            | Link                                                                                                                                         |
|---------------------------------------------------------------------------|--------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| Principle 5: Abolition of child labor                                     | HR1-3, HR6, SO5                            | <ul style="list-style-type: none"> <li>→ Internal audits conducted on the Social Charter</li> <li>→ Human rights risk assessment</li> <li>→ Supplier management further developed in terms of CR aspects; creation of the "Merck Responsible Sourcing Principles"</li> </ul>                                                                                            | Compliance, Human rights, Supplier management                                                                                                |
| Principle 6: Eliminate discrimination                                     | EC7, LA2, LA13-14, HR1-4, SO5              | <ul style="list-style-type: none"> <li>→ Internal audits conducted on the social charter</li> <li>→ Corporate goal to increase percentage of management positions held by women</li> </ul>                                                                                                                                                                              | Compliance, Diversity and inclusion                                                                                                          |
| Principle 7: Take a precautionary approach to environmental challenges    | EC2, EN18, EN26, EN30, SO5                 | <ul style="list-style-type: none"> <li>→ ISO 14001 Group certificate for company environmental management</li> <li>→ EHS standards implemented and updated (e.g. for process and plant safety, storage and transport, water protection, and waste management)</li> <li>→ Product safety measures (e.g. REACH, GHS, Global Product Strategy)</li> </ul>                  | Environmental management, Process and plant safety, Storage and transport, Water protection, Waste management, Product safety                |
| Principle 8: Promote greater environmental responsibility                 | EN1-30, SO5, PR3-4                         | <ul style="list-style-type: none"> <li>→ EHS standards implemented and updated (e.g. for process and plant safety, storage and transport, water protection, and waste management)</li> <li>→ Initiation of EDISON climate protection program</li> <li>→ Energy checks conducted at sites</li> <li>→ Product labeling</li> <li>→ Packaging take-back programs</li> </ul> | Process and plant safety, Storage and transport, Water protection, Waste management, Climate protection, Product safety, Reuse and recycling |
| Principle 9: Encourage diffusion of environmentally friendly technologies | EN2, EN5-7, EN10, EN18, EN26-27, EN30, SO5 | <ul style="list-style-type: none"> <li>→ Product life cycle analyses</li> <li>→ Innovative products developed</li> </ul>                                                                                                                                                                                                                                                | Sustainable products, Performance Materials             |
| Principle 10: Anti-corruption measures                                    | SO2-6                                      | <ul style="list-style-type: none"> <li>→ Internal audits conducted on corruption</li> <li>→ Anti-corruption training</li> </ul>                                                                                                                                                                                                                                         | Compliance                                                                                                                                   |

## Independent assurance report<sup>1</sup>

### To the Executive Board of Merck KGaA, Darmstadt

We were engaged to provide assurance on the indicators in the chapter 'Facts and figures', including explanatory notes, in the online 'Corporate Responsibility Report 2012' (further 'The Report') for the business years 2011 and 2012 of Merck KGaA, Darmstadt (further 'Merck'). The Executive Board is responsible for the appropriateness of the determination and presentation of the indicators in The Report in accordance with the reporting criteria, including the identification of material issues. Our responsibility is to issue an assurance report on the selected indicators, including the explanatory notes, published in The Report.

### Scope

Our assurance engagement was designed to provide limited assurance on whether the indicators, including the explanatory notes, in the chapter 'Facts and figures' for the business years 2011 and 2012 of The Report are presented, in all material respects, in accordance with the reporting criteria:

- Indicators: Economics
- Indicators: Compliance
- Indicators: Employees
- Indicators: Environment
- Indicators: Society

Procedures performed to obtain a limited level of assurance are aimed at determining the plausibility of information and are less extensive than those for a reasonable level of assurance.

### Reporting criteria and assurance standards

Merck applies the Sustainability Reporting Guidelines G3.1 of the Global Reporting Initiative, the Corporate Accounting and Reporting Standard (Scope 1 und 2), and the Corporate Value Chain (Scope 3) Standard of World Resources Institute/World Business Council for Sustainable Development, supported by internal guidelines, as described in the section 'Report profile', as reporting criteria.

We conducted our engagement in accordance with the International Standard on Assurance Engagements (ISAE) 3000: Assurance Engagements other than Audits or Reviews of Historical Financial Information, issued by the International Auditing and Assurance Standards Board. This standard requires, amongst others, that the assurance team possesses the specific knowledge, skills and professional competencies needed to provide assurance on sustainability information, and that we comply with the requirements of the Code of Ethics for Professional Accountants of the International Federation of Accountants to ensure our independence.

### Work undertaken

Our procedures included:

- Evaluation of the design and implementation of the systems and processes for the collection, processing and control of the indicators, including the consolidation of the data, at corporate and site level.
- Interviews with relevant staff on corporate level responsible for providing and consolidating the data, as well as carrying out internal control procedures on the data including the explanatory notes.
- Visits to Darmstadt and Gernsheim (both Germany) to assess local data collection and reporting processes and the reliability of the reported data.
- An analytical review of the data and trend explanations submitted by all sites for consolidation at Group level.
- Use of the insights and relevant work performed for the group and statutory audit of the (consolidated) financial statements for the year ended December 31 of Merck KGaA for the business years 2011 and 2012 with regard to audit procedures on those information and indicators that were derived from those consolidated financial statements.

→ Independent assurance report<sup>1</sup>

→ An evaluation of the overall presentation of the selected indicators, including the explanatory notes, within the scope of our engagement.

### Conclusion

Based on the procedures performed, as described above, nothing has come to our attention to indicate that the selected indicators, including the explanatory notes, in The Report are not, in all material respects, presented in accordance with the reporting criteria.

Frankfurt am Main, 26. April 2013

**KPMG AG**

Wirtschaftsprüfungsgesellschaft

[Original German version signed by:]

**Fischer**

Wirtschaftsprüferin

**Glöckner**

Wirtschaftsprüfer

<sup>1</sup> Translation of the independent assurance report, authoritative in German language