# At a Glance

Sustainability at Bayer

2009-2010





Science For A Better Life

## Actively fulfilling a global responsibility



"For Bayer, being successful means creating value sustainably. In this context we are committed to our stakeholders in a number of different ways – as an innovative partner for our customers, an attractive employer for our employees, a professional trustee for our stakeholders and a responsible company toward our neighbors and society as a whole."

Dr. Marijn Dekkers, Chairman of the Board of Management of Bayer AG

Bayer is a global enterprise with core competencies in the fields of health care, nutrition and high-tech materials. Our products and services are designed to benefit people and improve their quality of life. At the same time, we want to create value through innovation, growth and high earning power.

Our primary objective is to achieve a successful and sustainable business. For us, this means achieving commercial success on the basis of solid business models in a way that is compatible with meeting the needs of our employees and society and protecting the environment and natural resources. In this we are committed to the tenets of sustainable development and to the 10 principles of the UN Global Compact.

Our mission statement "Bayer: Science For A Better Life" summarizes the Group's vision, strategy and values. It serves as a basis for the day-to-day activities of all employees. We express our clear commitment to the principles of sustainable development, and to our role as a socially and ethically responsible corporate citizen. Sustainability is a key component of our values and leadership principles.

#### Our values

- → A will to succeed
- A passion for our stakeholders
- Integrity, openness and honesty
- Respect for people and nature
- Sustainability of our actions

## Sustainability brings success

Sustainability at its core means the ability to thrive in the future and is therefore an integral part of our business strategy. Trends in sustainability and overarching challenges show us clearly which solutions must be prioritized in today's global society. They also flag up key market opportunities, toward which we channel our innovative strength. The progress that we make in these areas benefits customers and society and also supports our competitiveness and corporate success sustainably.

#### Our sustainability concept



Bayer is committed to sustainable development. We want to meet this commitment on three levels:

- **1. Products and innovations** Innovations are the driver of sustainability and our products the basis of our value added.
- **2. Business practices** Our interaction with stakeholders, particularly suppliers, employees and customers, is geared toward sustainable work practices. Core elements include compliance, product stewardship, responsible HR policies and sustainable procurement management.
- **3. Corporate social responsibility** Through our foundations and voluntary social initiatives we focus on tasks with a particular social relevance and with a connection to Bayer.

#### 4

## Sustainability management

#### Organization and steering

Responsibility for defining and steering our Group-wide sustainability strategy lies with the very top levels of management. Headed by the member of the Board of Management responsible for Innovation, Technology and Environment, a senior executive committee defines goals, adopts corresponding Group regulations and monitors the implementation of the measures involved.

The members comprise one board of management member from each of the three subgroups, the managing directors/executive board chairmen of the three Bayer service companies, and the heads of six Corporate Center departments. The committee is supported by the Community Council for Sustainable Development chaired by the Head of the Environment & Sustainability Department. The council networks the managers in the Group companies responsible for sustainability issues and, among other duties, ensures coordination with other relevant Group committees focusing on health, safety, environmental protection and quality (HSEQ); innovation; industrial operations; and politics. The global organization is completed by committees at subgroup and regional level.

Voluntary commit- ments, including:	Regulations, such as:	Performance
<ul> <li>→ UN Global Compact</li> <li>→ Responsible Care</li> <li>→ World Business Council for Sustainable Development</li> <li>→ Corporate Citizenship</li> </ul>	<ul> <li>Sustainable         Development</li> <li>Human Rights</li> <li>Corporate         Compliance</li> <li>Process and Plant         Safety</li> <li>Responsible         Lobbying</li> </ul>	<ul> <li>Sustainability Program</li> <li>Climate Program</li> <li>Targets, KPIs</li> <li>Reporting</li> </ul>

Our focus on sustainability is underscored not only by the clear statements in our mission statement but also by our commitment to uphold the 10 principles of the UN Global Compact and to the Responsible Care® initiative of the chemical industry. We have firmly anchored this commitment in our internal Group regulations. These provide a clear framework and an unambiguous code of conduct for all organizational units and employees. To operationalize our sustainability performance, we formulated specific five-year sustainability targets for the first time in 2006. We shall take stock of our performance with regard to these and publish new objectives in our Sustainable Development Report 2010.

#### Management systems and standards

The implementation of our internal standards is decisively supported in all subgroups and service companies by efficient management systems.

To ensure uniformly high health, safety, environmental protection and quality (HSEQ) standards, Bayer has established management systems that are aligned to acknowledged international standards. Every organizational unit ensures that its systems meet the current requirements by continually updating the HSE management systems and performing internal audits.

Around 90 percent of our production sites possess a Bayer-audited HSE management system. More than one third of them have been certified to ISO 14001 or validated to the European environmental management regulation EMAS. A further 14 percent have a system complying with other external standards. Around 15 percent of our production sites are certified to the international occupational safety management system standard OHSAS 18001. All subgroups and service companies have industry-specific quality management systems meeting, for example, ISO 9001 or GMP (Good Manufacturing Practice).

Our Corporate Compliance Policy commits every Bayer employee to legal compliance and corporate responsibility. To anchor our absolute commitment to legal compliance even more strongly in the leadership organization, we have now included the topic of corporate compliance in the annual performance assessment of our managerial staff. We continuously develop our corporate compliance activities, a process which is supported by various internal initiatives.

In the area of procurement management, we have combined our fundamental sustainability standards and requirements for our suppliers in a Supplier Code of Conduct, which we have been introducing step by step since the end of 2009. The code of conduct comprises the areas of ethics, employee relations, management systems, and health, safety, environmental protection and quality. It covers, for example, the prohibition of corruption and child labor, the observation of human rights, occupational health, and the responsible use of natural resources.

## Sustainability starts in everyday corporate life

Sustainability at Bayer is an integral part of our corporate policy, which is geared to long-term success and high-quality solutions. This commitment is based on the conviction that we can only be commercially successful in the long term if we take ecological and social needs into account as well as economic considerations. Although we have to set priorities, our principles are applied without restriction. The following examples show how sustainability is implemented in the Group's daily business practices:

#### **Actively encouraging employee commitment**

The motivation and commitment of our employees are crucial to the company's success. Our goal is to create a working environment in which every employee can realize their full potential. That is why we place emphasis on a responsible human resources policy which promotes opportunities for training and professional development, a healthy working environment with key activities in the area of occupational health and safety, high standards of pension insurance and health care benefits, employee participation in the company's success, and options for harmonizing career and family life.

Our global commitment to respecting the rights of employees is set out in the Bayer Human Rights Position. We assign particular importance to maintaining social diversity at our company and to ensuring that employees have the opportunity to apply their skills and uphold their convictions in an environment free from discrimination. Bayer promotes equal opportunities for all – regardless of gender, color, religion or sexual persuasion.

- Sustainable human resources policy
- High standards of pension insurance and health care benefits
- Diversity and equal opportunities for all employees
- Answers to demographic change
- Fostering of occupational health and safety
- Bayer Human Rights Position binding on all employees worldwide

#### Responsible use of resources

Bayer has always attached great importance to environmental protection and the responsible use of resources. We leverage our expertise and experience, both in the optimization of technologies and processes and in the development of innovative products, in order to protect the environment, nature and the climate. We develop new solutions to optimize resource utilization, lower emissions and minimize the generation of waste.

- Responsible approach to resources
- Reduction of emissions into air and water
- Use of the Climate Check analysis tool
- Reduction in waste volumes
- Avoidance of environmental incidents and transport accidents
- Protection of biodiversity

Drinking water is a resource that is in increasingly short supply in many regions of the world. Bayer specifically develops and promotes solutions for efficient and responsible water usage and is doing its utmost to conserve this crucial raw material. To this end, we support the CEO Water Mandate initiative of the UN Global Compact. In 2010, as part of the new CDP Water Disclosure initiative of the Carbon Disclosure Project, Bayer published comprehensive information on the use, management and monitoring of water and on the associated risks and opportunities.

Unfortunately, even our extensive safety precautions and training procedures cannot entirely prevent environmental incidents or transport accidents from occurring. To improve the safety of transport operations still further, we introduced a new Group regulation on transport safety in 2009. As part of the continuous development of our safety management, we updated our management approach to process and plant safety in 2009, which found expression in a new Group regulation. The first measures, e.g. training, are being implemented in 2010.

#### **Product stewardship**

Bayer assigns maximum priority to meeting its responsibility for the environment and to maintaining the health and safety of everyone who comes into contact with our products. We therefore test and monitor all Bayer products in applications known to us with regard to health, safety, environmental

protection and quality (HSEQ). For us, product stewardship involves a comprehensive evaluation of risks to health and the environment - from the product research and development stage through to production. It also includes responsible practice with regard to the marketing, use and disposal of products. In this area we have aligned ourselves since 1994 to the principles of the voluntary Responsible Care® initiative of the chemical industry and to two recent initiatives, the Responsible Care Global Charter and the Global Product Strategy (GPS) of the International Council of Chemical Associations ICCA.

Our commitment to product stewardship applies to all our products. With respect to future-oriented technologies, we attach great importance to well-founded scientific risk analysis for the purpose of protecting people and the environment. Our positions on gene technology and nanotechnology contain clear guidelines that are supplemented by comprehensive product stewardship programs.

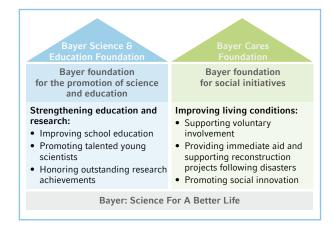
Virtually all products manufactured by Bayer are subject to extensive legal requirements concerning the provision of information, such as the EU chemicals legislation REACH. We completed the mandatory pre-registration phase in 2008. By the end of November 2010, Bayer will have drafted registration dossiers for all substances that we produce or import in large volumes.

We bear particular responsibility in countries of the Third World where, for example, crop protection products may not always be used correctly. WHO Class I formulations may pose difficulties here under certain application conditions. Bayer CropScience will gradually replace these products, for example by changing the formulation. If suitable alternatives are not available, the company provides for the safe use of its products and better user protection. If these measures prove insufficient, the sale of such products on certain markets is discontinued.

- Top priority is given to the safety and compatibility of our products
- Risk assessment based on international standards and regulations
- Well-founded risk analysis in connection with the use of future-oriented technologies
- Comprehensive product information as the basis for responsible and proper use of our products

#### Corporate social responsibility

Corporate social responsibility (CSR) forms an integral part of Bayer's corporate philosophy. We consider ourselves to be a responsible member of society and a good corporate citizen. We see our activities in this area as a long-term investment in the future well-being of society and our company. Our CSR activities are designed to have an enduring impact. We focus on issues of global or particular social relevance in countries where Bayer operates. We endeavor to back-up our employees' commitment by providing technical and economic expertise in areas which have a link to our business operations.



In 2009, we set aside €44 million worldwide for support projects in our four key areas.

Focus	Overview of expenditure in 2009 (in € thousand)
Education & Research	4,879
Environment & Nature	2,659
Health & Social Needs	15,213
Sports & Culture	20,768

## The Bayer Sustainability Program

The world is faced with major challenges. Among the greatest of these is global population growth and the associated increased criticality of other important factors, such as sufficient food, access to health care, and environmental and climate protection. These global issues are at the focus of our sustainability strategy.

Bayer sees itself as a member of society – both globally and also in all the regions and countries in which we operate. Companies like Bayer have a crucial part to play in assuming responsibility and developing solutions. These major global trends have played a key role in shaping our Group strategy, with the aim of safeguarding the future of our company. As well as presenting challenges that we have to accept and overcome, these trends also offer business opportunities.

We have drawn up a Sustainability Program based on our sustainability strategy. The program currently comprises eight "lighthouse projects" that illustrate the focus of our strategy particularly clearly.

Challenge	Global access to health care	Nutrition for a growing population	Climate and environmental protection
Focus	Alliances for sustainable health care	More high- quality food	Solutions for climate protection and resource use
Projects	■ Family Plan- ning ■ Neglected Diseases	■ Food Chain Partnership Vegetables ■ Direct- Seeded Rice	■ EcoCommercial Building Program ■ Energy Efficiency ■ Resource Efficiency

More detailed information can be found at www.sustainabilityprogram.bayer.com



As part of the "Family Planning" lighthouse project, we work with public institutions and NGOs.

#### Alliances for sustainable health care

Bayer's "Family Planning" lighthouse project supports the United Nations' Millennium Development Goals of reducing child mortality, improving health care for mothers and strengthening equal opportunities by 2015. The company is working together with partners to improve knowledge of sexuality, health and contraception in developing countries. These alliances are also making hormonal contraceptives available either free of charge or at reduced prices.

More than 3.3 billion people – mainly the poorest of the poor – are affected by so-called neglected diseases. In cooperation with the World Health Organization (WHO) Bayer provides medicines free of charge to treat African sleeping sickness and Chagas' disease. Bayer is also working together with partners on a new tuberculosis therapy that reduces the present duration of treatment of six months by a third.

#### Partnerships for more high-quality food

Farmers are constantly having to meet the increasingly strict quality requirements that are placed on food. Bayer brings together farmers, processors, carriers and retailers from more than 40 countries through its Food Chain Partnership program with the aim of developing joint solutions. As part of the "Food Chain Partnership Vegetables" lighthouse project, experts from the company will be providing support, by 2012, to a total of 65,000 farmers in India in 125 projects in the cultivation of vegetables based on the rules of profitable, sustainable agricultural practice. For farmers, this means higher yields, better quality, larger-scale sales opportunities and an improved income.

Rice is the most important staple foodstuff in many parts of Asia. Bayer CropScience launched a program in Indonesia in 2009 aimed at achieving sustainable improvement in the yield and income situation of rice farmers. The practice of seeding the rice directly is at the heart of this program. Unlike the customary method of sowing individual young plants in flooded paddies by hand, direct seeding involves the planting of pregerminated seeds by machine. This increases yields, saves enormous quantities of water, reduces the need for fertilizer and also lowers emissions of the greenhouse gas methane by around 30 percent.



The Food Chain Partnership projects aim to network key players along the value added chain – from producers to consumers.



#### Solutions for climate protection and resource use

Energy consumption in buildings is responsible for almost 20 percent of global greenhouse emissions. Bayer's "Eco-Commercial Building Program" lighthouse project already makes climate protection in the building sector a viable option today. Through a partnership network including suppliers, construction companies, architects and property owners, Bayer and its partners create customized solutions for the construction of commercial and public buildings ranging from energy-optimized concepts to zero-emission buildings.

The key goal of constantly reducing the company's own greenhouse gases is being pursued in two other lighthouse projects focusing on energy efficiency. Oxygen depolarized cathode technology based on common salt will be used in the future in chlorine production to reduce energy consumption by between 30 and 50 percent. Improving energy efficiency is also at the center of our new measurement and management method STRUCTese® (Structured Efficiency System for Energy). This method is to be applied to 60 of our most energy-intensive production facilities worldwide by 2012.

Another lighthouse project in 2010 will test the Resource Efficiency Check, a method that is designed to analyze the use, from all angles, of all production-relevant resources, such as energy, water and raw materials, in production processes and processing procedures.

10 Sustainable investment Reporting 11

### Sustainable investment

More and more investors are showing an interest in the extent to which companies integrate ecological and social aspects into their strategies and business activities. Sustainability indices and funds provide a point of reference in this field. Bayer is represented in various indices and funds. We see this as a clear acknowledgement of our commitment to sustainable development within our corporate strategy.



The Dow Jones Sustainability Indices (DJSI) provide a worldrenowned benchmark for sustainable investment. Bayer has been listed continuously in the DJSI World since 1999. Notable achievements in: climate protection, risk management, reporting on sustainability

#### CARBON DISCLOSURE PROJECT

Transparency and performance in the area of climate protection. Bayer has been listed continuously in the Carbon Disclosure Leadership Index (CDLI) for the last six years and is also included in the Carbon Performance Leadership Index (CPLI), which was launched in 2010.

Notable achievements in: well-founded reporting on climate targets and strategy and specific measures and successes in reducing emissions



#### FTSF4Good

The FTSE4Good Index Series provides a global decision-making tool for investors interested in sustainability. Bayer has been listed continuously in the FTSE4 Good Global and Europe since they were launched in 2001.

Notable achievements in: environmental management, climate protection, risk management



Storebrand is a Norwegian financial services provider that focuses on sustainable investment. Bayer has met the investment criteria since 1999 and has been crowned "Best in Class" in the pharmaceuticals sector since 2010.

Notable achievements in: position on human rights, environmental management



The Low Carbon Europe 100 Index lists major European companies with low greenhouse gas emissions. Bayer has been listed in the Index since it was first drawn up in 2008.

Notable achievements in: low CO<sub>2</sub> intensity in the chemical sector

## Our reporting

Communication with our stakeholders featuring transparent, open and targeted dialogue is an indispensable part of our corporate policy. It helps us view challenges from different perspectives in order to define relevant focal points for our activities.

We also base our reporting on dialogue with our stakeholders, who include employees, customers, suppliers and investors. Of equal importance to Bayer are the interests of our direct neighbors at our sites and of non-governmental organizations (NGOs), public administration, politicians and academic circles. We see it as our duty to critically review our sustainability performance and the challenges we face, both in the management report of the Bayer Annual Report and in our annual Sustainable Development Report (www.sustainability2009.bayer.com). In doing so, we strive to achieve optimal transparency and verifiability. The statements relating to corporate policy in our Sustainable Development Report and in this flyer apply to all the sites and activities of the Bayer Group worldwide.

The data and statements in the focus issue articles and in the entire performance report of our Sustainable Development Report have been reviewed and certified by an independent auditor.

Our Sustainable Development Report complies with the current guidelines (G3) of the Global Reporting Initiative (GRI), achieving level A+, and covers all of the core indicators recommended by the GRI. In a progress report we annually outline our activities, management systems and achievements with respect to the implementation of the 10 principles of the UN Global Compact.

Guidelines for our reporting





12 Key figures Key figures 13

## Key figures at a glance

Bayer uses clearly defined goals and indicators to report on its sustainability performance. In this way we want to provide our stakeholders with transparent and rapid access to all the data and information on our sustainability activities. This is supplemented by specific objectives which we also publish (see also "Sustainability management" on page 4). Our overview provides an insight into key facts and figures that are relevant to sustainability management in the Group.

Further information and explanations of the key performance indicators are available in the performance report of the current Sustainable Development Report from page 49 or our website: www.sustainability2009.bayer.com

Category	Key Performance Indicator	2008	2009
Key economic data (in € million)			
	Net sales	32,918	31,168
	Income after taxes	1,724	1,359
	Capital expenditures*	1,982	1,669
	Research and development expenses	2,653	2,746
	Personnel expenses (incl. pension expenses)	7,491	7,776
	Pension obligations**	14,910	15,931
	Net financial debt	14,152	9,691
	Volume of products sold (in million metric tons)	10.0	8.7
Employees	and society***		
Employ- ment	Europe	55,500	54,500
	North America	17,000	16,300
	Asia/Pacific	20,800	21,600
	Latin America/Middle East/Africa	15,300	16,000
	Total	108,600	108,400
	of which trainees	2,900	2,700
Diversity and oppor- tunity	Percentage of women in senior management positions	4.7	5.5
	Number of different nationalities in senior management positions	23	22
	Percentage of employees with health insurance (state or employer/employee-funded)	97	95

Category	Key Performance Indicator	2008	2009
Employees	and society***		
	Percentage of employees eligible to take part in a company pension program (including programs to supplement statutory pension plans)	76	74
	Percentage of full-time employees with contractually agreed working time of max. 48 hours per week	100	100
	Percentage of employees covered by collective agreements (sector or inhouse agreements)	57	56
Vocational and further training	Expenditure on vocational and further training (as % of personnel expenses)	2.7	1.9
Safety	Occupational injuries resulting in days lost (per million hours worked)	2.2	2.0
	Fatal occupational injuries	2	4
Key ecolog	jical data		
Use of	Energy use (in petajoules)	82.8	77.3
resources	Water use (in million m³/day)	1.20	1.11
Emissions	Direct greenhouse gas emissions (CO <sub>2</sub> equiv. in million metric tons)****	5.09	4.57
	Indirect greenhouse gas emissions (CO <sub>2</sub> equiv. in million metric tons)****	3.57	3.53
	VOC emissions (in 1,000 metric tons p.a.)	3.16	2.59
	Total phosphorus in wastewater (in 1,000 metric tons p.a.)	0.78	0.74
	Total organic carbon (TOC) in wastewater (in 1,000 metric tons p.a.)	1.59	1.35
	Total nitrogen in wastewater (in 1,000 metric tons p.a.)	0.67	0.64
Waste	Hazardous waste generated (in 1,000 metric tons p.a.)	365	375
	Hazardous waste landfilled (in 1,000 metric tons p.a.)	81	89
Environ- mental incidents and transport accidents	Number of transport accidents p.a.	10	10
	Number of environmental incidents and incidents causing damage p.a.	9	13

- \* As per segment table of the Annual Report 2009
- \*\* Present value of defined benefit obligations for pensions and other post-employment benefits
- \*\*\* Converted into full-time equivalents
- \*\*\*\* Portfolio adjusted as per Greenhouse Gas Protocol

## The company and its structure

Bayer is a global enterprise with core competencies in the fields of health care, nutrition and high-tech materials. Our products and services are designed to benefit people and improve their quality of life. At the same time, we want to create value through innovation, growth and high earning power. Under the leadership of the management holding company, we focus our activities in three subgroups - HealthCare, CropScience and Material Science. These provide us with access to major global growth markets and are supported by our service companies. Bayer AG defines common values, goals and strategies for the entire Group. The Corporate Center supports the Group Management Board in its task of strategic leadership.

In fiscal 2009, Bayer employed 108,400 people and recorded sales of €31.2 billion. Bayer is represented on five continents with around 300 companies and is headquartered in Leverkusen.



## Subgroups and service companies

Bayer HealthCare is among the world's foremost innovators in the field of pharmaceutical and medical products. The subgroup's goal is to research, develop, manufacture and market innovative products that improve the health of humans and animals throughout the world.

Bayer CropScience, with its highly effective products, pioneering innovations and keen customer focus, holds global leadership positions in crop protection and non-agricultural pest control. The company also has major activities in seeds and plant traits.

Bayer MaterialScience is a renowned supplier of high-tech polymers and develops innovative solutions for a broad range of applications relevant to everyday life. Products holding leading positions on the world market account for a large proportion of the company's sales.

Bayer Business Services is the Bayer Group's global competence center for IT and business services. Its portfolio is focused on services in the core areas of IT infrastructure and applications, procurement and logistics, human resources and management services, and finance and accounting.

Bayer Technology Services is the global technological backbone and a major innovation driver of the Bayer Group in terms of the development, planning, construction and optimization of processes and facilities.

Currenta offers services for the chemical industry, including utility supply, waste management, infrastructure, safety and security, analytics and training.

## Reports, information and contact details

#### Reports

Bayer Sustainable Development Report 2009 Bayer Annual Report 2009

#### Websites

www.sustainability2009.bayer.com www.annualreport2009.bayer.com www.bayer.com

#### **Published by**

Bayer AG Corporate Communications 51368 Leverkusen Germany

### **Edited by**

Bayer AG Corporate Communications Dr. Katrin Schneider

Phone: +49 (0) 214 30-48825 Fax: +49 (0) 214 30-71985

E-mail: katrin.schneider@bayer.com

Bayer AG

**Environment & Sustainability** 

Dagmar Jost

Phone: +49 (0) 214 30-75284 Fax: +49 (0) 214 30-53407 E-mail: dagmar.jost@bayer.com

### Date of publication

October 2010