

# Corporate Responsibility Performance 2011

Syngenta is contributing to global food security and sustainable development through innovative products and services that enable growers to improve productivity, build rural prosperity and reduce environmental impacts.

## Supporting UN Global Compact

Syngenta continues to support the 10 principles of the UN Global Compact through an established commitment to Corporate Responsibility and ongoing implementations of policies on human rights, fair labor, environmental protection and anti-corruption.

## Assured CR performance indicators

You can download tables with the assured CR performance indicators from [www.syngenta.com/ar2011](http://www.syngenta.com/ar2011), section "Corporate Responsibility".

## Contact us

Your feedback is important to us and will help us to improve our reporting and inform our sustainability strategy.

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# About our CR reporting

Corporate Responsibility (CR) is part of everything we do – from developing innovative products that help farmers grow more from less to controlling the impact of our operations.

## Our approach

### Transparency, integrity and open dialogue

The trust and confidence of Syngenta's stakeholders is critical to our continuing success, and will only be sustained if the company acts, and is seen to act, in accordance with the highest standards of ethics and integrity. We are committed to build and to maintain trust in Syngenta and to integrating our business, social and environmental responsibilities in everything we do.

To ensure we meet the high standards which our stakeholders expect, we further encourage and enhance transparency and an open dialogue on our Code of Conduct and the related strong policies, guidelines and supporting documents.

Transparent reporting on our corporate responsibility (CR) performance is essential to our stakeholder dialogue. Elements of our CR strategy and approach are integrated throughout our Annual Review, and more detailed information on our performance in key focus areas is reported in this extended online version.

## Materiality

Our corporate responsibility (CR) activities and reporting focus on the issues that are most significant (or "material") to our business and our stakeholders. We have conducted a materiality analysis to identify issues to cover in our reporting and as an input to our strategy and business development. The results are summarized below and agreed by our executive level CR Panel, which also advises on CR priorities, content and implementation of policies, and reporting.

Priority setting is informed through the feedback we get from our global reputational survey, opinion polls as well as researching internal and external stakeholders.

The following topics have been identified as significant, or material:

- Health and safety in the work place: Maintaining a safe and healthy work environment for employees is integral to our success. We set high standards at all our sites and expect each employee to adhere the guidelines and codes of practice.
- Water use, extraction and discharge: Water is an essential resource for farmers in the field, but also as an ingredient or as cooling in our chemical production.
- Ethical compliance within our supply chain: Together with Fair Labor Association (FLA) Syngenta is working to improve labor conditions in our seeds supply chain in Argentina, Brazil, India, and Romania.

## About our CR reporting continued

- Greenhouse gas emissions: Controlling greenhouse gas emissions is a priority to enable us to grow our business while reducing our impact on climate change. Energy consumption is the largest source of greenhouse gas emissions. Managing our energy use is key to delivering on our CO<sub>2</sub> reduction target.
- Safe-use of our products: The success of our business is reliant upon not only providing technology to farmers, but also helping them to use natural resources more efficiently by applying technology safely and responsibly.
- Attracting talent: An appealing value proposition to attract and retain the best people whose talent, commitment and innovation is vital to our success.

## GRI/UNGCP Index

Syngenta is a signatory of the United Nations Global Compact. We are committed to aligning our operations with the Compact's 10 principles in the areas of human rights, labor, environment and anti-corruption. Our corporate responsibility reporting provides Communication on Progress made in implementing these principles.

Our performance on corporate responsibility is reported in our integrated online Annual Review and aligned with the Global Reporting Initiative (GRI) guidelines. We publish an index of our reporting against the Global Compact principles alongside our GRI index. Since 2010, Syngenta has achieved A+ in its level of application of the GRI guidelines.

## Recognition

Our strong reputation and transparent reporting on corporate responsibility is reinforced by our continued recognition from external ESG/SRI rating agencies and indexes. We are focusing our engagement on a few selected key agencies and indexes, together representing a broad coverage of societal expectations. The Dow Jones Sustainability Index and the FTSE4Good Index, are two of the most well-known and referenced indexes for ESG/SRI investors and stakeholder groups. Syngenta encourages further engagements with ESG service providers as long as it is based on a fully transparent and independent approach.

**Dow Jones Sustainability Indices** – Syngenta has been included in the global and regional Dow Jones Sustainability Indexes (DJSI World and DJSI STOXX) since 2006. These indexes recognize the leading sustainability-driven companies worldwide based on a thorough assessment of corporate economic, environmental and social performance.

**FTSE4Good Index** – Syngenta continues to be a member of the FTSE4Good Index, having been first included in 2005.

**Carbon Disclosure Project (CDP)** – Syngenta measures environmental risks in order to manage them strategically, and reports on greenhouse gas emissions and water use through the CDP. In 2011 Syngenta received the disclosure score 88, a recognition for our transparent disclosure on how we manage our greenhouse gas emissions.

About our CR reporting  
continued

## Independent Assurance Report on the Syngenta Corporate Responsibility Reporting

To the Head of Legal and Taxes, Syngenta AG, Basel ('Syngenta')

We have performed assurance procedures to provide assurance on the following aspects of the 2011 Corporate Responsibility (CR) reporting of Syngenta.

### Subject matter

Data and information disclosed in the CR reporting of Syngenta and its consolidated subsidiaries, for the financial year ended December 31, 2011 and with the indicated level of assurance as follows:

- The application of the Syngenta internal Health, Safety and Environment (HSE) and Corporate Community Investment (CCI) reporting guidelines to the CR reporting with a reasonable assurance;
- The internal reporting system and procedures, including the control environment, to collect and aggregate CR data with a reasonable assurance; and
- With the exceptions noted below, the CR performance indicators disclosed in the Corporate Responsibility section of Syngenta Annual Report 2011 website ([www.syngenta.com/ar2011](http://www.syngenta.com/ar2011)) with a limited assurance.

Our assurance procedures do not cover the information presented in the "Corporate Responsibility" landing page, the "About our CR reporting" and "Economic value shared" pages, the side bars and the footers of the Annual Report 2011 website.

### Criteria

- The Syngenta internal HSE and CCI reporting guidelines; and
- The defined procedures by which the CR data are gathered, collated and aggregated internally.

### Responsibility and Methodology

The accuracy and completeness of CR performance indicators are subject to inherent limitations given their nature and methods for determining, calculating and estimating such data. Our assurance report should therefore be read in connection with Syngenta's internal guidelines, definitions and procedures on the reporting of its CR performance.

The Board of Directors of Syngenta AG is responsible for both the subject matter and the criteria. Our responsibility is to provide a conclusion on the subject matter based on our assurance procedures in accordance with the International Standard on Assurance Engagements (ISAE) 3000.

For the subject matter for which we provide limited assurance, the nature, timing and extent of procedures for gathering sufficient appropriate evidence are deliberately limited relative to a reasonable assurance engagement.

### Main Assurance Procedures

Our assurance procedures included the following work:

- **Evaluation of the application of group guidelines**  
Reviewing the application of the Syngenta internal HSE and CCI reporting guidelines.
- **Site visits**  
Visiting the regional office of Syngenta in Sao Paulo as well as a Crop Protection site and a Seeds site in Brazil. The selection was based on quantitative and qualitative criteria. Interviewing personnel responsible for internal reporting and data collection at the sites we visited and at the Group level.
- **Assessment of the performance indicators**  
Performing tests on a sample basis of evidence supporting the CR performance indicators relative to completeness, accuracy, adequacy and consistency.
- **Review of the documentation**  
Reviewing the relevant documentation on a sample basis, including, management and reporting structures and documentation.
- **Review of the management assertions**  
Reviewing the evidence supporting the CR-related management assertions on the Syngenta Annual Review 2011 website relative to accuracy and adequacy.

## About our CR reporting

continued

- **Review of consistency with the printed version of the Syngenta Annual Review 2011**  
Reviewing the consistency of the CR data and information disclosed in the Syngenta Annual Review 2011 website with that disclosed in the CR Performance Summary in the Syngenta Annual Review 2011.
- **Assessment of the processes and data consolidation**  
Reviewing the appropriateness of the management and reporting processes for CR reporting. Assessing the consolidation process of data at the group level.
- **Review of technical processes related to the update of the Syngenta Annual Report 2011 website content (change management, security)**  
Understanding the change management procedures to update the website content. Understanding the security concept around the website and the supporting infrastructure.

### Conclusions

In our opinion

- The internal HSE and CCI guidelines are being applied properly; and
- The internal reporting systems to collect and aggregate CR data are functioning as designed and provide an appropriate basis for its disclosure.

Based on our work described in this report, nothing has come to our attention that causes us to believe that the data and information mentioned in the subject matter and disclosed with the CR reporting in the Syngenta Annual Report 2011 website does not give a fair picture of Syngenta's performance in the area of CR.

Zurich, 6 March 2012



**pwc**

PricewaterhouseCoopers AG  
Gerd Tritschler  
David Pritchett

## Further links

### Corporate Responsibility at Syngenta

[www.syngenta.com/global/corporate/en/about-syngenta/corporate-responsibility](http://www.syngenta.com/global/corporate/en/about-syngenta/corporate-responsibility)

### UN Global Compact

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

### Global Reporting Initiative (GRI)

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

### Fair Labor Association (FLA)

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

# Resource efficiency in agriculture & stewardship

Helping growers use limited natural resources efficiently and make the best use of their inputs is key to increasing farm productivity and building sustainable rural economies. Educating growers is critical to ensure they can use our products effectively, profitably and – above all – safely. This is part of our wider stewardship efforts throughout the lifecycle of our products.

## Resource efficiency in agriculture

### Highlights

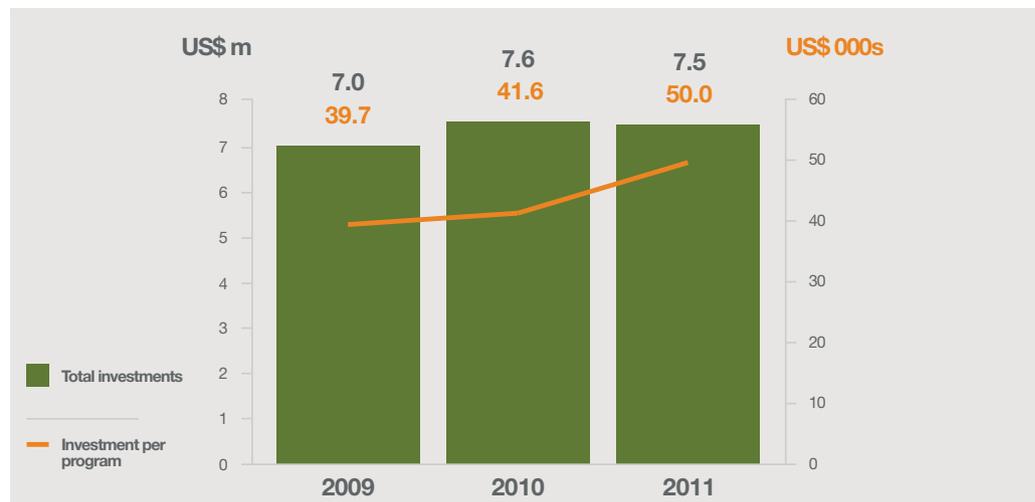
- Operation Pollinator®, MARGINS and Multifunctional Landscapes are examples of Syngenta projects designed to optimize the use of natural resources alongside productive agriculture. Running in 13 European countries with over 2,000 hectares of managed biodiversity and about 2,500 farmers, these projects doubled in scale from 2009 to 2011
- Heliosec®, Syngenta’s bio-purification system, provides an easy and safe solution for managing water contaminated during the cleaning of application equipment. Installation of over 120 demonstration units in 2011 helped to extend the use of this tool from France, to Spain, Greece, UK, Italy and Portugal
- ARTESIAN®, the first corn hybrid to use moisture more efficiently, providing higher yields on drought-stressed land

### Performance

To support more efficient use of basic natural resources, we are developing sustainable technologies that protect the long-term economic and environmental viability of farming. More information on our approach and our investments is reported in the strategy, R&D and growers’ needs sections where future product pipeline highlights for every key crop are also listed.

Syngenta recognises that resource efficiency needs to be integrated at scale through farm management training, and safe-use programs. One example is minimum tillage, which reduces soil erosion by using crop protection products, as an alternative to extensive ploughing, to control weeds. Other practices include introducing multifunctional field margins on river banks to prevent run off of chemicals into watercourses.

### Investments in resource efficiency programs<sup>1</sup>



<sup>1</sup> Starting 2009, reporting year October 1 to September 30

In 2011, we invested US\$7.5 million in resource efficiency programs and there were 150 active initiatives promoting sustainable agriculture techniques. By focussing on the most effective programs we increased the relative amount spent in 2011 by 20 percent while the number of programs decreased.

Resource efficiency in agriculture & stewardship  
continued

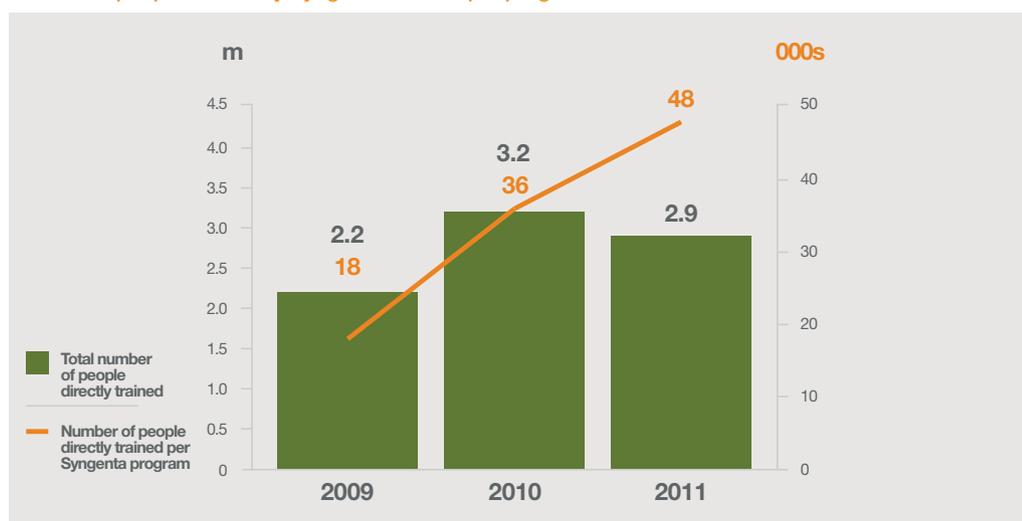
## Stewardship

### Highlights

- Over 200 million farmers trained since 2000 on safe use of crop protection products in partnership with the Ministry of Agriculture in China
- 10th anniversary of the Syngenta Pequeño Agricultor de Syngenta (PAS) program to promote sustainable intensification of farming for smallholders and our Stewardship for Life safe use program in Latin America; so far PAS has reached around 360,000 farmers with advice and training
- More than 10 million farmers trained in safe use and secure storage over the last three years

### Performance

Number of people trained by Syngenta total vs. per program



### Safe use and disposal

We provide training for growers around the world to ensure safe and effective use of our crop protection products, using local partners to tailor our approach. In 2011, our training in safe use reached almost 2.9 million people and there were 61 active training programs. By deciding to focus on the most effective programs and the completion of our televised training pilot, we reduced the total number of people that account for being trained directly through Syngenta. Together with strong partners we concentrate on scalable programs tailored to farmer's needs in the regions. For example, in North America our Syngenta team is strongly promoting proactive, national pesticide stewardship education, regardless of whose pesticide is being used. In China, we have worked with the Ministry of Agriculture to train over 200 million farmers on safe use since 2000. In Australia, our annual SPRAY AWARDS® emphasise the need for safe application of pesticides.

Our "Stewardship for Life" safe use training has reached over 360,000 growers over the last decade. Our online resource centre – [www.stewardshipcommunity.com](http://www.stewardshipcommunity.com) – provides growers with a forum for discussion and a wide range of materials on best practices. Syngenta is also collaborating with the international industry organization CropLife to encourage responsible use and storage of crop protection products in India and to address the issue of obsolete stocks of pesticides in Africa.

Product Stewardship	2009	2010	2011
Number of countries participating in adverse health incident management system	50	84	84

## Resource efficiency in agriculture & stewardship

continued

It takes robust data to continuously improve our stewardship efforts. We promote reporting of adverse health incidents as a result of exposure to crop protection products and in 2011, a total of 84 countries used Syngenta's adverse health management system.

We also train medical personnel on how to deal with pesticide related health incidents. In Argentina, for example, we have trained over 1,200 doctors on how to treat pesticide-related incidents over the past five years through a national toxicology center known as TAS. Building on this success, we have implemented similar medical training programs in China, Indonesia, Thailand and the Philippines.

Product stewardship – biotechnology and regulatory compliance	2009	2010	2011
Number of employees completing regulatory compliance training	1,177	1,593	2,044
Number of trial locations requiring a permit	471	435	406
Number of trial inspections performed by Syngenta <sup>1</sup>	189	237	155

<sup>1</sup> 2011 decrease due to more efficient inspection schedule

### Stewardship from the start of the product lifecycle

Our focus on safety and the environment begins right at the start of our products' lifecycle. We rigorously comply with strict regulations on biotechnology in the development of genetically-modified (GM) crops and follow a quality management system modelled on the international ISO 9001 standard.

In 2011, we trained 2,044 employees and contractors on regulatory compliance. This 28 percent increase from 2010 reflects the rising number of Crop Protection employees now involved in biotechnology field trials as a result of the integration with the Seeds business.

The experience, knowledge and risk awareness of our employees has led to a high level of compliance on our seed sites. This has allowed us to reduce the number of inspections of field trials to monitor compliance by 35 percent.

### Further links

#### Corporate Responsibility at Syngenta

[www.syngenta.com/global/corporate/en/about-syngenta/corporate-responsibility](http://www.syngenta.com/global/corporate/en/about-syngenta/corporate-responsibility)

#### Food and Agricultural Organization (FAO)

[www.fao.org/ag](http://www.fao.org/ag)

#### Stewardship Community

[www.stewardshipcommunity.com](http://www.stewardshipcommunity.com)

#### CropLife

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

# Economic value shared

Syngenta makes a direct contribution to the global economy through the wealth we create, the taxes we pay and the employment we provide in our own operations and those of our suppliers. We also invest in the communities where we operate and in developing markets to promote their sustainable development.

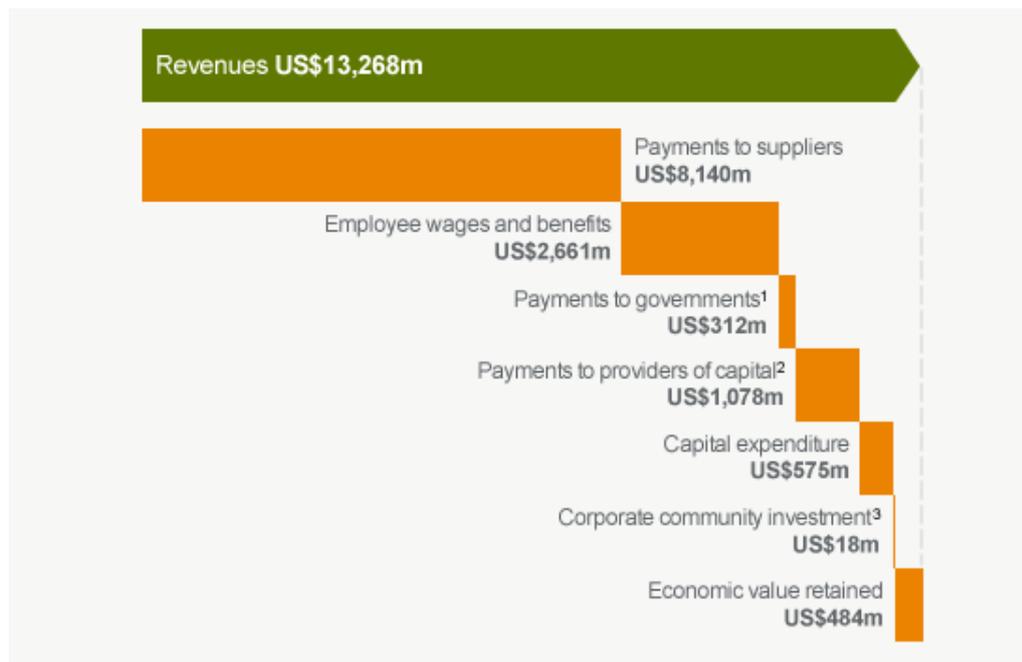
## Highlights

- 14 percent increase in our direct economic contributions to employees, governments and communities
- 2001 – 2011: Ten years anniversary of the Syngenta Foundation for Sustainable Agriculture
- Agronomic knowledge sharing through the second annual Syngenta Connections program, linking organizations, institutions and growers throughout the Asia Pacific

## Our economic contribution

### Performance

#### Our economic contribution



<sup>1</sup> Consists of income and other taxes paid, excluding VAT (included in Payments to suppliers) and employment-related taxes (included in Employee wages and benefits)

<sup>2</sup> Consists of expenditures for dividends, share repurchases (excluding those for employee share plans) and interest on debt

<sup>3</sup> In 2011 US\$0.8 million from resource efficient programs

We use our core capabilities to add value to the economies of the countries and communities in which we operate. By delivering innovative agricultural products and technologies, we build sustainable and productive agricultural systems and strong rural economies – integral components to meeting the world’s growing demand for food.

We share our experience, technology and products with rural communities so that farmers can improve their incomes and their standard of living, making them true stewards of the land. Syngenta also contributes to the creation and distribution of economic value through the products and services we purchase from suppliers, the wages and benefits we offer employees, the taxes we pay to governments, the payments to providers of capital, our capital expenditure and community investments.

## Economic value shared

continued

Our economic contribution is enhanced by our investments in communities, and our promotion of sustainable development, both of which target areas relevant to our business such as efficient use of resources. We tailor our community investment projects according to local needs. In 2011, we invested US\$18 million in community programs focusing on water, land use efficiency, biodiversity conservation, access to technology, health and nutrition, and science and education. Much of this support is channelled through the Syngenta Foundation.

In the 2011 Syngenta Connections program a group of Australian agriculture university students ran farm sustainability workshops with almost 500 East Javanese farmers. The program aims to link organizations, institutions and growers throughout the Asia Pacific. In 2010, the inaugural project saw a dozen students work with rice growers in India.

Bringing farming closer to a wider set of stakeholders is one of the driving forces behind our INTERRA farms in Europe. These farms are on the one hand used as centers of expertise to give local farmers the latest information on a full range of responsible farming practices and environmental stewardship, and on the other hand an opportunity for researchers, schoolchildren, and policy makers, to learn first-hand how farming creates value for the farmer, society and the environment.

## Further links

### Corporate Responsibility at Syngenta

[www.syngenta.com/global/corporate/en/about-syngenta/corporate-responsibility](http://www.syngenta.com/global/corporate/en/about-syngenta/corporate-responsibility)

### Syngenta Foundation

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

### Thought for Food Initiative (TFF)

[www.tffchallenge.com](http://www.tffchallenge.com)

# People

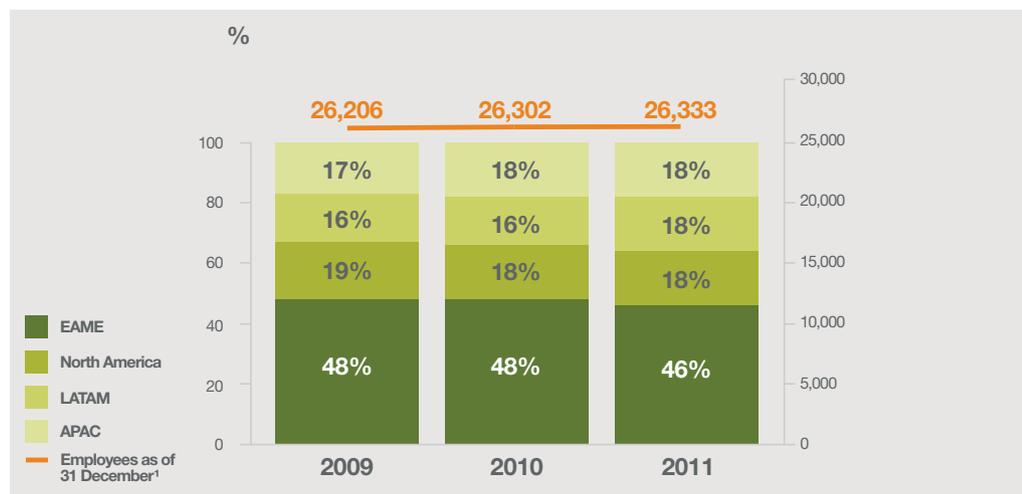
Syngenta offers employees a workplace in which they can grow with a business where their work matters. This value proposition helps us attract and retain the best people, whose talent, commitment and innovation is vital to our success. Our Code of Conduct confirms our commitment to comply with national and international labor laws and to uphold the principles set out in the Universal Declaration of Human Rights and the International Labor Organization's Core Conventions.

## Highlights

- MyCrop e-learning program, myCrop Essentials for Leaders and myCrop Academy: three training programs introduced in 2011 to help employees "think like growers" and deepen their understanding of agronomy
- Syngenta ranked a top 10 employer in biotechnology for second consecutive year by the international Science Careers Top Employers Survey
- Syngenta awarded with the Platinum Well Workplace Award 2011 in the US for forging new ground by linking health promotion objectives to business outcomes
- Syngenta honored for the first time as a European MAKE (Most Admired Knowledge Enterprises) winner

## People retention

### Performance Employees



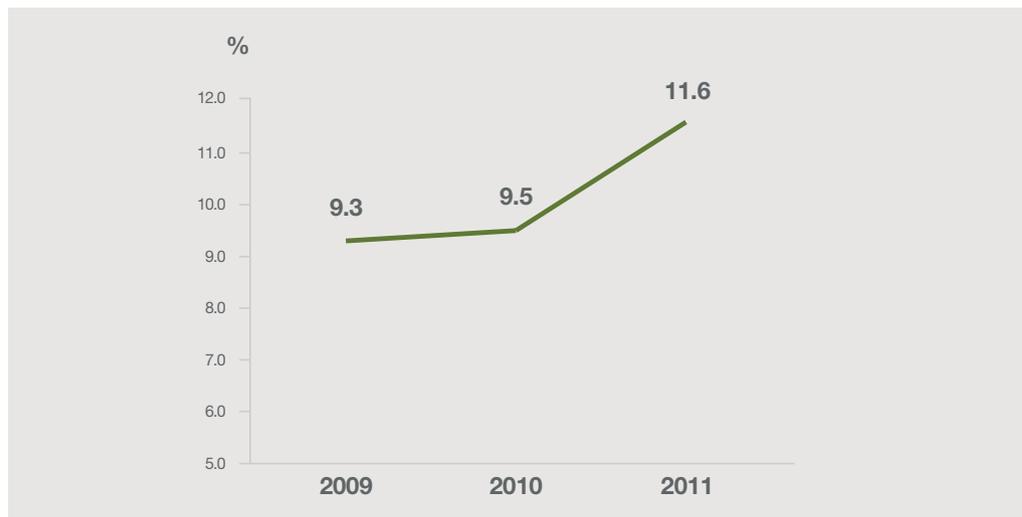
<sup>1</sup> Permanent full-time equivalent (FTE); 2010 and 2009 data revised and updated. EAME including headquarter (Switzerland)

Part-time employees	2009	2010	2011
Total number of part-time employees	763	850	881

Since announcing our new strategy, we have made significant progress in transitioning Syngenta to a fully-integrated organization. This success has been possible through the focus and dedication of our people, and their cross-business collaboration throughout the year. At the end of 2011, Syngenta employed more than 26,000 people worldwide.

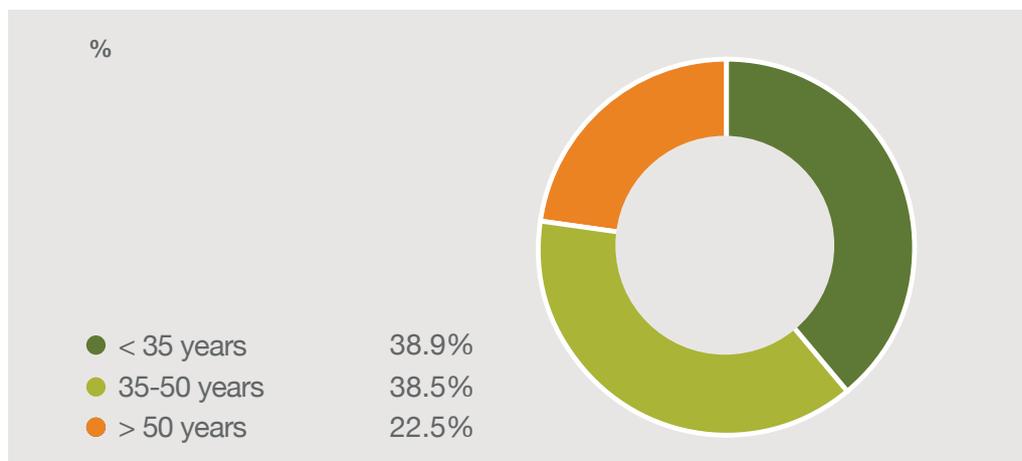
People  
continued

Total turnover rate per year<sup>1</sup>



<sup>1</sup> 2011 increase reflects the inclusion of seasonal workers in Kenya and Ethiopia

Age range distribution based on total turnover rate 2011



Major reorganization has resulted in many employees taking on different roles and responsibilities which require new capabilities and ways of working together.

Our staff turnover rate was 11.6 percent in 2011. The increase from 9.5 percent in 2010 reflects the inclusion of seasonal workers in Kenya and Ethiopia, within our employee head count reports.

Employee loyalty programs	2009	2010	2011
Employees entitled to participate in Employee Share Purchase Plan (ESPP)	15,829	16,262	<b>16,872</b>
Entitled employees participating in ESPP	48%	46%	<b>46%</b>
Employees participating in Long-term Incentive (LTI) plan	1,016	1,031	<b>1,047</b>

We want to recruit and retain the talented employees we need to achieve our ambition and deliver our strategy. To recognize the contribution our employees make to our business, we offer attractive conditions, great development opportunities and a stimulating working environment.

Our compensation practices are flexible and competitive, aligned with the market conditions in our different locations globally. We reward our employees' performance. Our performance management system emphasizes the need for coaching and development alongside appraisal. Incentive award programs are based on company and individual performance indicators and support our global strategy and culture.

**People**  
continued

For instance, the Employee Share Purchase Plan (ESPP) is an instrument that allows Swiss employees to become Syngenta shareholders by purchasing shares at a preferential price. All employees in Switzerland, including members of the Executive Committee, are eligible to participate in the ESPP. Shares purchased under the ESPP are subject to a blocking period of three years. Under the Swiss ESPP, participants can purchase shares for 50 percent of the share value at the date of grant up to a maximum share value of CHF 5,000. 46 percent out of the 16,872 entitled employees executed this right in 2011.

Long-Term Incentive (LTI) is an important element of the compensation of members of the Executive Committee and selected senior managers, and is designed to reward leadership, innovation and performance. It provides participants with 3-year restricted stock-based incentives that link the potential amount of total compensation to Syngenta's market value (share price). In 2011 1,047 employees participated in the LTI plan a slight increase of 2 percent compared to 2010.

**Diversity**  
**Performance**

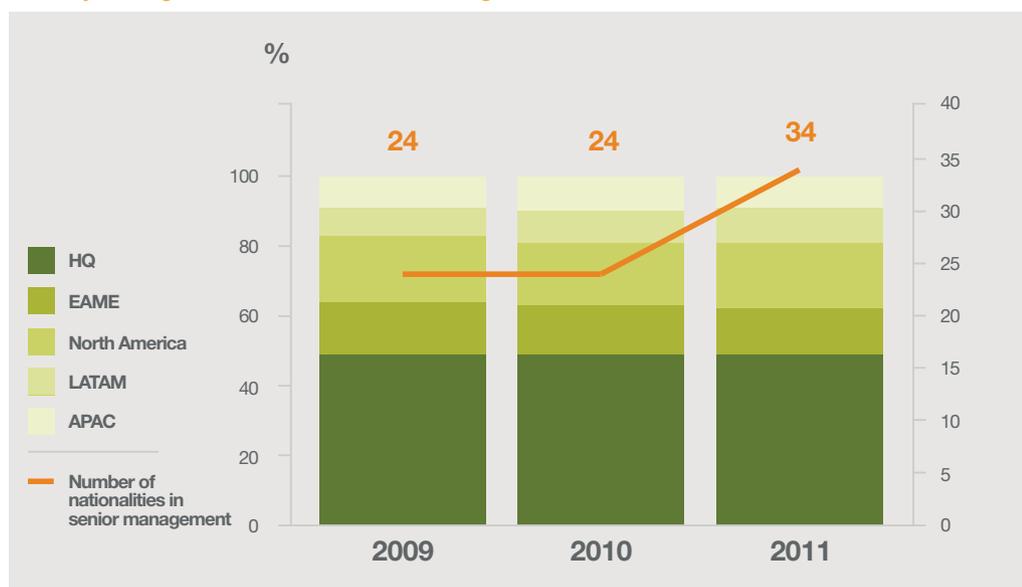
Diversity	2009	2010	2011
Female employees	30%	32%	<b>32%</b>
Female employees in management roles	20%	20%	<b>21%</b>
Female employees in senior management	11%	11%	<b>12%</b>

Valuing diversity and offering our employees opportunities to develop their career and contribute to the business is essential in helping us retain the most talented people, and to ensure business success. We have more than 26,000 employees working in some 90 countries, bringing in diverse skills and experiences that reflect the different markets where we operate.

We do not tolerate discrimination on any grounds and ensure that our diversity policies provide fair treatment for all employees. Syngenta aims for the highest internationally-acknowledged benchmarks of fairness, honesty and integrity. Our strong commitment to comply with national and international labor laws is set out in our Syngenta Labor Standards.

The proportion of women in the company remained constant at 32 percent. Female representation in management has increased with women accounting for 12 percent of senior managers and 21 percent of all managers.

**Diversity and regional distribution in senior management 2011<sup>1</sup>**



<sup>1</sup> 2011 increase due to new senior management categorization

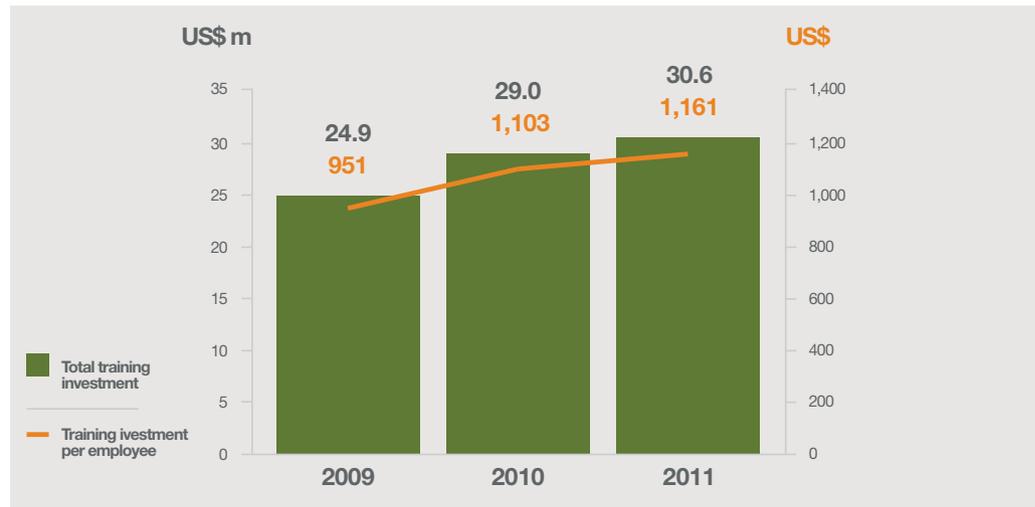
People  
continued

In 2011 Syngenta re-categorized the senior management levels. This led to an increase from 196 to 345 senior managers. The number of nationalities represented by our senior management team increased to 34.

## Employee development

### Performance

Investment in employee development 2011



Major reorganization has resulted in many employees taking on different roles and responsibilities which require changes in capabilities and new ways of collaboration and working together. We are committed to ensuring our people understand our purpose and strategy and the role they play in delivering it.

People development is a key to our success. Our Performance Management process includes objective setting, development planning, feedback and formal reviews. Achievement against personal performance objectives is tied to our annual incentive programs. Each employee meets with their line manager at least once a year to discuss their performance against agreed objectives and their individual development plan which is tailored to their talents and needs.

Our business grows and develops with our employees. In 2011, we invested US\$30.6 million in training and development programs to help our people achieve their full potential – equivalent to US\$1,161 per employee. We assess development needs in each of our markets through local learning and development groups, and tailor our approach accordingly. Examples of development programs we ran in 2011 include a new leadership program to promote collaboration across boundaries in cooperation with the Center for Creative Leadership, the extension of our Marketing and Sales Excellence (MaSE) program and the establishment of our three-part agronomics program.

## Health and safety

### Performance

Health and safety	2009	2010	2011
Recordable injury and illness rate (IIR) per 200,000 hours <sup>1, 2</sup>	0.42	0.41	<b>0.44</b>
Recordable injury rate per 200,000 hours <sup>1, 2</sup>	0.38	0.39	<b>0.39</b>
EAME <sup>3</sup>	0.47	0.43	<b>0.38</b>
North America	0.58	0.75	<b>0.99</b>
LATAM	0.19	0.22	<b>0.20</b>
APAC	0.19	0.18	<b>0.17</b>
Recordable occupational illness rate per 200,000 hours <sup>1</sup>	0.03	0.02	<b>0.05</b>
EAME <sup>3</sup>	0.05	0.01	<b>0.05</b>
North America	0.06	0.06	<b>0.16</b>
LATAM	0.03	0.00	<b>0.00</b>
APAC	0.00	0.01	<b>0.01</b>
First aid cases	712	820	<b>798</b>

<sup>1</sup> According to US OSHA definition for injuries and illness

<sup>2</sup> 2010 data corrected due to six late recordables after closing of the reporting year

<sup>3</sup> Including headquarter (Switzerland)

Maintaining a safe and healthy work environment for employees is integral to our success. We expect every employee to adhere to the standards, codes of practice and guidance outlined in our Health, Safety and Environment (HSE) management system. We communicate these expectations through our intranet, training and site visits, and carefully monitor performance at all our sites worldwide. All incidents must be reported every month through our HSE Performance Reporting System.

We aim to maintain leading health and safety performance in our industry and set a clear goal to keep our Injury and Illness Rate (IIR) below 0.5 per 200,000 employee hours. In 2011, the IIR remained within this target at 0.44. The total number of occupational health cases increased from six to 19 in 2011 and the recordable illness rate rose to 0.05 per 200,000 hours worked. This increase is largely due to specific events affecting several individuals, including incidents of photo-dermatitis as a result of clearing wild parsnips in the UK and allergic reactions to pollinating flowers leading to rhinitis at our newly acquired site in Gilroy, US. In November 2011 we were saddened by the accidental death of an employee at our Monthey facility in Switzerland. We have conducted an internal investigation into the causes of the accident. The Swiss authorities have also conducted an investigation.

**People**  
continued

Health and safety	2009	2010	2011
Total number of recordable injuries <sup>1</sup>	122	154	<b>147</b>
Fracture	10%	18%	<b>14%</b>
Bruise/strain/sprain	40%	31%	<b>34%</b>
Burn	1%	1%	<b>3%</b>
Cut/abrasion	27%	33%	<b>28%</b>
Eye injury	3%	3%	<b>7%</b>
Head injury/concussion	4%	3%	<b>3%</b>
Other	15%	12%	<b>11%</b>
Total number of cases of recordable occupational illness	11	6	<b>19</b>
Cases of work related stress	20	28	<b>32</b>
% of sites with NO recordable injuries or illness	76%	70%	<b>69%</b>

<sup>1</sup> 2010 data corrected due to six late recordables after closing of the reporting year

Individual markets and sites organize health and safety awareness programs locally to target specific issues. In Kenya, for example, we ran a two-month HIV/AIDS awareness campaign in 2011. We made counselling available and over 370 employees volunteered to be tested for HIV. Additionally we are continuously fostering new safety initiatives to further improve motor vehicle and driving safety in Asia.

We also encourage our people to maintain a healthy, balanced lifestyle. We offer a range of locally tailored programs to enhance wellbeing, including sports centers, healthy options at staff restaurants, health checks, family counselling and legal advice. To promote a healthy work-life balance, we offer flexible, full and part-time working options where possible to enable employees to choose whatever suits their work and family commitments. Childcare facilities are available at many of our sites.

**Further links**

**Corporate Responsibility at Syngenta**

[www.syngenta.com/global/corporate/en/about-syngenta/corporate-responsibility](http://www.syngenta.com/global/corporate/en/about-syngenta/corporate-responsibility)

**UN Global Compact Human Rights**

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

**Syngenta Careers**

[www.syngenta.com/global/corporate/en/careers/pages/careers.aspx](http://www.syngenta.com/global/corporate/en/careers/pages/careers.aspx)

# Environment

Our Health, Safety and Environment policy sets out our commitment to minimize environmental impacts from our operations. We monitor, measure and identify opportunities to reduce these impacts using our robust environmental management system. Local targets enable sites to focus on the areas where they can achieve the biggest reductions. We report environmental data in absolute terms and normalized to US\$EBIT<sup>1</sup> to better relate our performance in these areas to value creation.

<sup>1</sup> Excluding restructuring and impairment

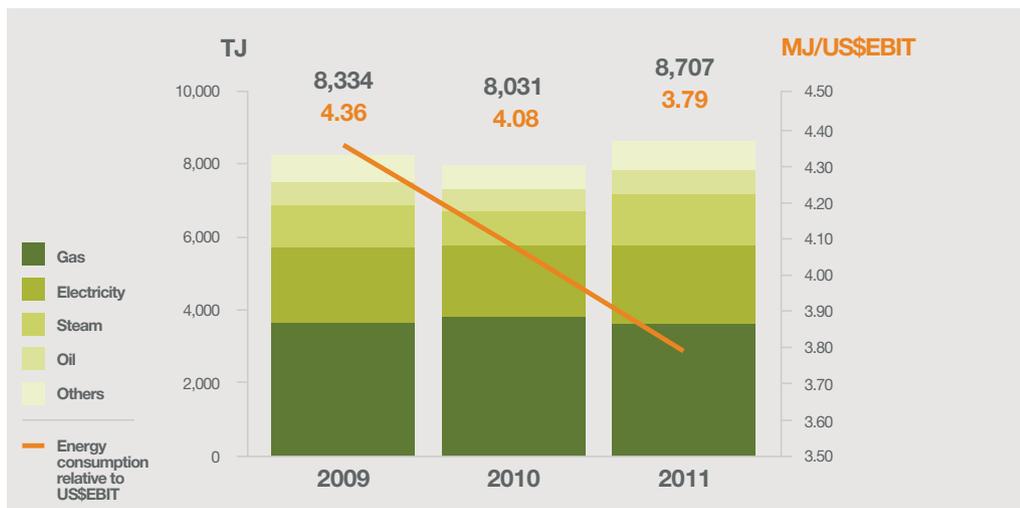
## Highlights

- 7 percent reduction in energy use (MJ/US\$EBIT) compared to 2010
- 8 percent reduction in CO<sub>2</sub>e equivalent emissions (CO<sub>2</sub>e/US\$EBIT) compared to 2010
- 8 percent reduction in water consumption (liters/US\$EBIT) compared to 2010
- Extension and improvement of our data collection system by including further 10 seed sites in 2011

## Energy efficiency

### Performance

#### Energy consumption



Reducing operational energy consumption is critical to help us cut associated greenhouse gas emissions. Our energy strategy encourages sites to monitor energy use, identify and implement opportunities to improve efficiency, and share best practice across the company.

Our total energy use in 2011 was 8,707 TJ, an 8 percent increase from 2010 in absolute terms due to increased production, however energy use per US\$EBIT decreased by 7 percent to 3.79 MJ/US\$EBIT. Energy from renewable sources comprised 17 percent of our total electricity use.

In 2011 Syngenta improved reporting on gas and steam energy use at Swiss sites. These sites now report the steam they purchase and not the natural gas used to produce this steam. As a result the use of natural gas was reduced by 5 percent and steam consumption increased by 54 percent and energy from other sources rose by 23 percent, also driven by increased production.

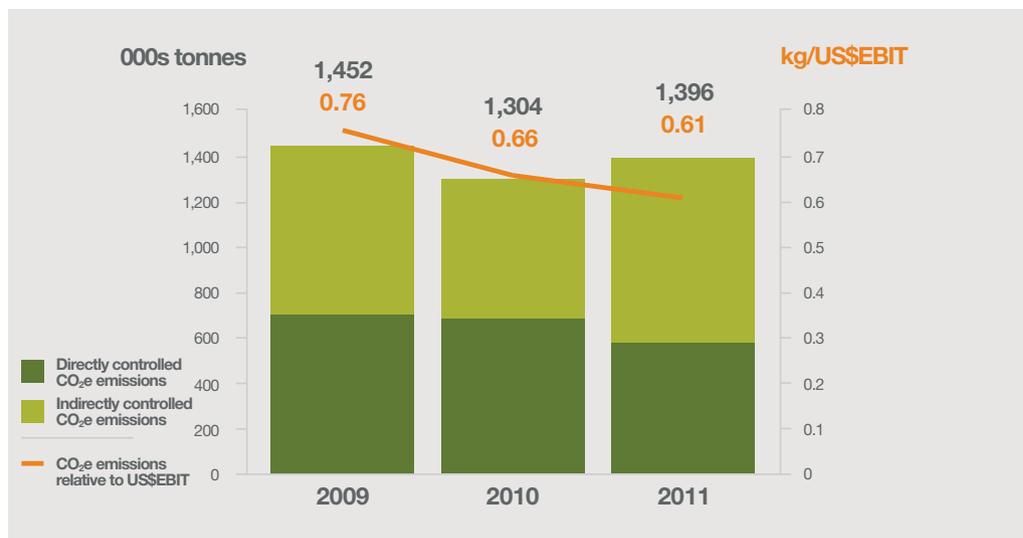
Local teams are responsible for improving energy efficiency at each site. In 2011, 19 of our manufacturing sites had set energy targets, representing more than 66 percent of our total energy use. Depending on the site level requirements, different energy-saving initiatives, such as coolers that shut down when the outside temperature drops, and sensors that switch off lights in unoccupied offices are in place.

Environment  
continued

## GHG emissions

### Performance

Directly and indirectly controlled CO<sub>2</sub> equivalent emissions



Controlling greenhouse gas emissions is a priority to enable us to grow our business while reducing our impact on climate change. In 2011, we continued to work towards our established target to reduce emissions relative to earnings before interest and tax (US\$EBIT) by 40 percent by 2012 compared with the 2006 baseline.

Our total greenhouse gas emissions increased by 7 percent to 1.4 million tonnes of CO<sub>2</sub>-equivalent (CO<sub>2</sub>e) in 2011, due to increased production and distribution activities as well as improved reporting on indirect emissions. Emissions relative to US\$EBIT continued to decline, decreasing by 8 percent compared with 2010 to 0.61 kg/US\$EBIT. This is equivalent to a 34 percent reduction from the 2006 baseline, and we are on track to meet our 40 percent reduction target by the end of 2012.

Scope 1 emissions, including those resulting from our own operations and company vehicles, declined by 15 percent in 2011.

Scope 2 emissions from the energy we purchase to run our operations increased by 24 percent. This increase in 2011 is partly due to an increase in production, but also because we changed the way we report on gas and steam energy use at Swiss sites. These sites now report the steam they purchase and not the natural gas used to produce this steam. As a result, these emissions are now reported as Scope 2 (indirect emissions from energy we purchase externally) instead of Scope 1 (direct emissions from our own operations).

Scope 3 emissions associated with the distribution of our products went up by 31 percent due to an increase of the distribution activities and minor changes in the transportation mix. We strive to reduce emissions arising from transport associated with sourcing raw materials and moving products to our customers. A key focus is to shift distribution away from roads to rail. CO<sub>2</sub> emissions arising from rail transport are some 90 percent lower than truck transport.

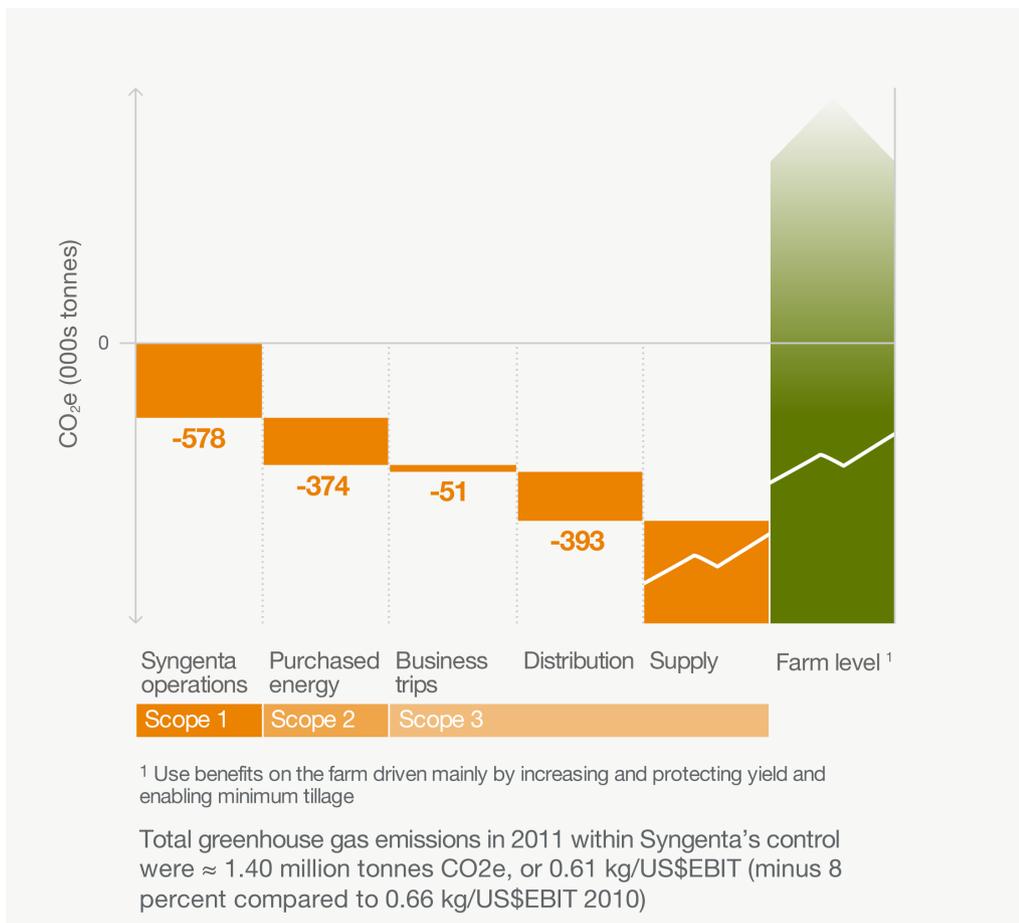
Although employee travel emissions are very low in relation to the overall emissions, company policy is to limit business travel whenever possible. We request our travel agency to continue improving the data it provides. In 2011 the number of countries included in the data collection increased from 23 to 42, resulting in an increase of Scope 3 emissions from employee travel.

Greenhouse gas emissions also arise from our outsourced activities, such as suppliers. We are actively supporting the WRI/WBCSD protocol to properly measure and capture the greenhouse gas emissions in our supply chain. We work with our suppliers to improve their data collection systems and help reducing their carbon footprint.

## Climate change and carbon footprint

### Performance

2011 Greenhouse gas emissions (CO<sub>2</sub>e in 000s tonnes)



The diagram above illustrates our carbon footprint at each stage of our products' lifecycle: from supply chain to production through to use by growers. We distinguish between direct emissions from our own operations and indirect emissions from purchased electricity, business travel, and distribution of products. Where we cannot accurately quantify the impact of emissions outside our control – from our suppliers and on customers' farms – we indicate their footprint. Based on these figures and estimates, we strongly believe that the overall carbon footprint of our products is positive.

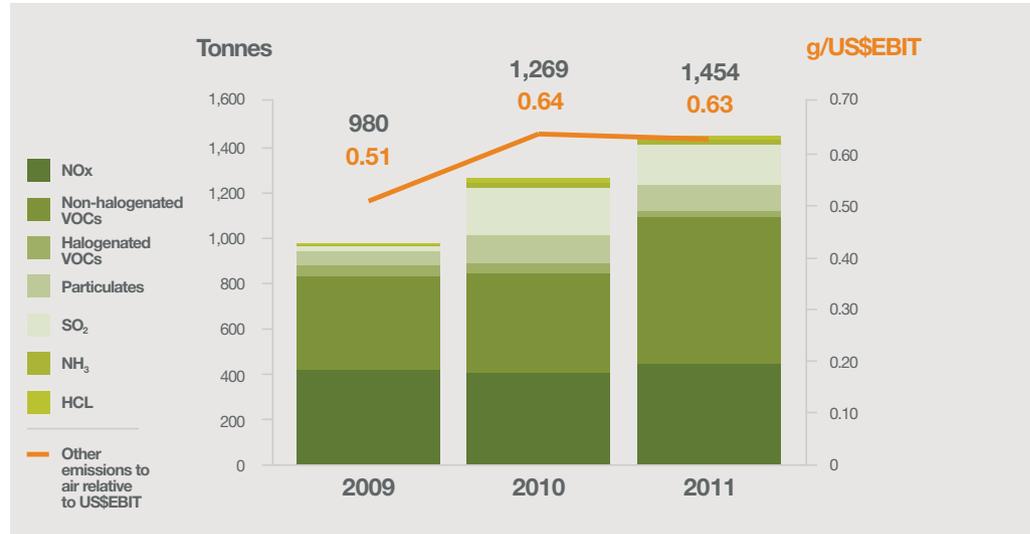
Helping farmers increase resource efficiency on the farm, by using less land, less energy, less water, to grow higher and better yields is the single most important activity to reduce global greenhouse gas emissions. Syngenta contributes to this by developing tailored solutions that allow farmers all around the world, large and small, to adapt to changing climates, reduce their greenhouse gas emissions, and maximize the potential of their land.

As part of ongoing environmental management programs, and in response to an increasing number of requests from customers and external agencies for carbon footprint information about its products, Syngenta initiated a program to work on carbon footprinting together with ERM (Environmental Resources Management) in 2010. ERM confirmed that the challenge for Syngenta in reducing its carbon footprint is that a considerable proportion of the footprint is outside Syngenta's operational control. Beyond Syngenta's own efficiency initiatives, significant opportunities for reductions can be found through engaging with suppliers to identify low carbon options, as well as securing the benefits of supplier carbon management initiatives.

Environment  
continued

## Other emissions to air

Performance  
Other emissions to air



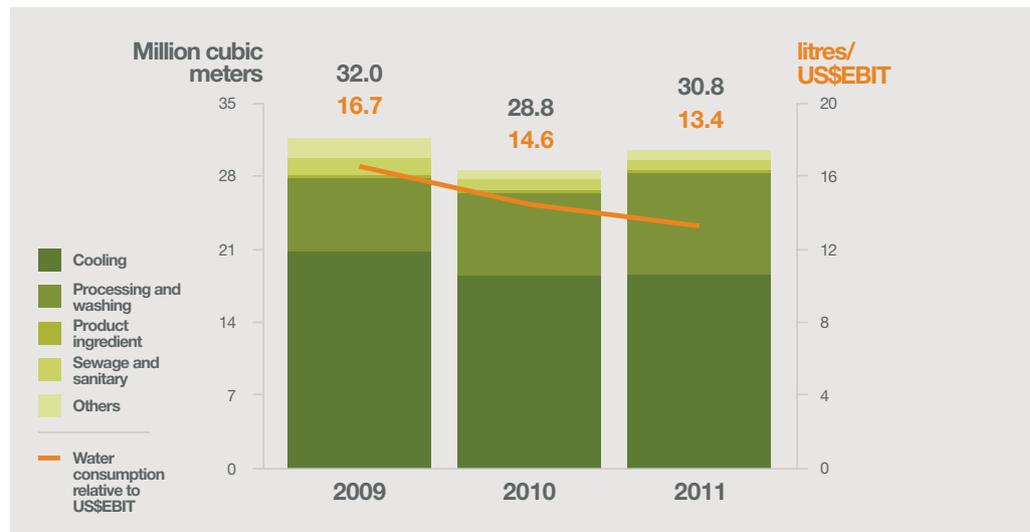
Greenhouse gases are not the only emissions we monitor and control. Nitrogen oxides (NO<sub>x</sub>), sulfur dioxide (SO<sub>2</sub>), particulates and volatile organic compounds (VOCs) are also released by our manufacturing sites. Our aim is to limit these emissions and improve air quality through systematic local programs.

Nitrogen oxides increased by 10 percent as a result of higher production volumes. Non-halogenated VOCs rose by 47 percent as a result of new measurements and technical difficulties in a device designed to reduce emissions at one site in Switzerland.

In 2011, we reduced emissions of halogenated VOCs by 40 percent as a result of production modifications, and emissions of hydrochloric acid by 26 percent, sulfur dioxide by 13 percent and particulates by 7 percent due to a reduction of heavy fuel usage in APAC.

## Water

Performance  
Water consumption

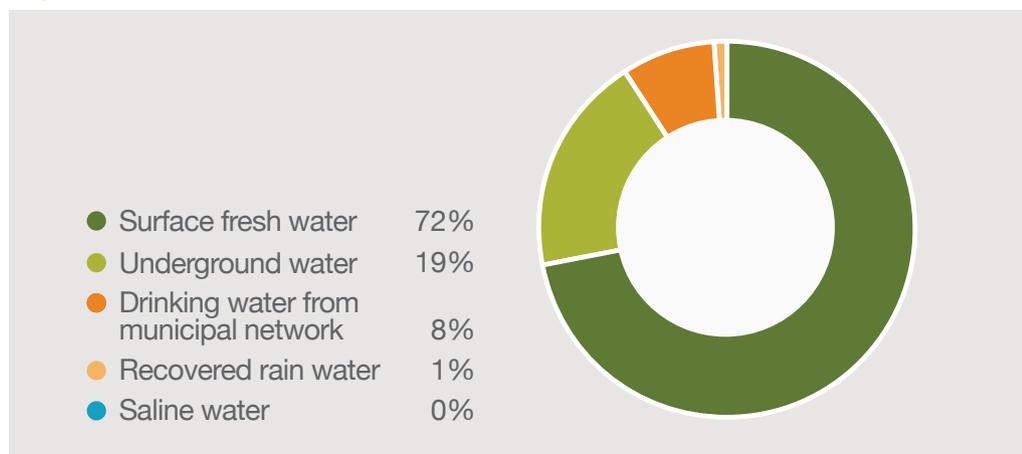


**Environment**  
continued

Water is an essential resource and increasingly scarce in some regions. The most significant contribution we can make to reducing global water use is to help growers conserve water by developing innovative products and promoting sustainable agriculture techniques.

Our total water withdrawal in 2011 was 30.8 million cubic metres, an increase of 7 percent in absolute numbers from the previous year. This is largely due to the addition of data from new seed sites which use significant amounts of irrigation water. Relative to US\$EBIT, however, this translates into a 8 percent reduction compared to 2010.

**Origin of Water 2011**

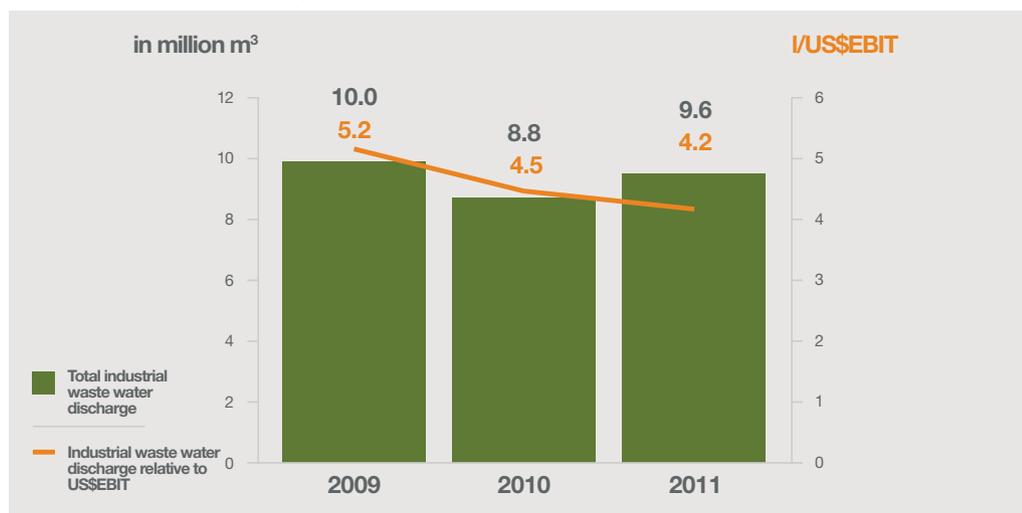


Surface fresh water accounts for most (around 72 percent) of the water we use. By carefully monitoring consumption, using direct measurements where meters are available, we can identify opportunities to cut water use. Local initiatives to conserve water at our sites include recycling condensation from air conditioning units and installing low-flush toilets.

**Waste water**

**Performance**

**Industrial waste water discharge**



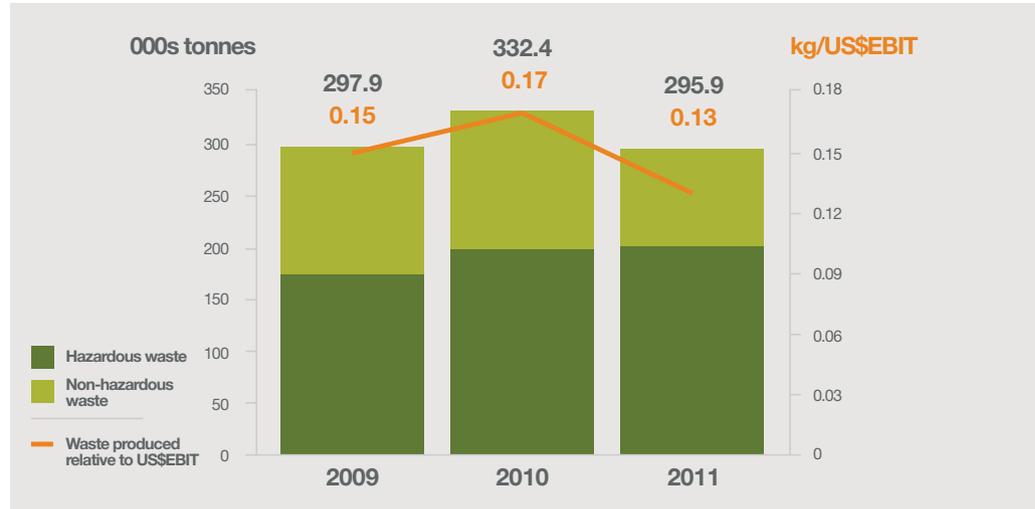
Waste water discharge	2009	2010	2011
Direct discharge of uncontaminated cooling water (million cubic meters)	20.8	18.5	18.5

Industrial waste water used in our operations is treated through on- or off-site waste water treatment plants before it is discharged. In 2011, total wastewater increased by 9 percent as a result of increased activity at sites with a waste water treatment plant. Taking business expansion into account relative changes show a decrease of 7 percent compared to 2010 amounting to 4.2 liters/US\$EBIT.

Environment  
continued

Waste

Performance  
Waste produced



Our total hazardous waste was 201,400 tonnes in 2011, of which chemical waste accounted for 59 percent. The majority (60 percent) of hazardous waste was incinerated under controlled high-temperature conditions to ensure safe disposal.

We use obsolete seeds as renewable energy in cement kilns or as a component in alcohol production.

We achieved a 29 percent reduction in non-hazardous waste – including plant waste – in 2011 with the year’s total reaching 94,500 tonnes. Around 68 percent of non-hazardous waste was recycled, up from 57 percent in 2010. There was a significant decline in inert waste from demolition work as well as lower volumes of obsolete treated seeds and less organic waste. In addition, seed by-products sold for feed in the United States are no longer classified as waste.

Overall we decreased in 2011 our total waste relative to US\$EBIT by 24 percent from 0.17 kg/US\$EBIT in 2010 to 0.13 kg/US\$EBIT.

Minimizing waste is high priority for our site management. Site managers submit their site targets and action plans to global operations. In 2011, 16 of our manufacturing sites had set waste reduction targets.

Further links

Corporate Responsibility at Syngenta

[www.syngenta.com/global/corporate/en/about-syngenta/corporate-responsibility](http://www.syngenta.com/global/corporate/en/about-syngenta/corporate-responsibility)

World Business Council for Sustainable Development (WBCSD)

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

World Resources Institute (WRI)

[www.wri.org/climate](http://www.wri.org/climate)

# Compliance

Syngenta requires employees to conduct business according to the high ethical, social and environmental standards set out in our Code of Conduct. The Code is designed to ensure compliance with applicable national and international regulations in all our markets, and minimize risks to our business. We also set high standards for our suppliers and monitor their performance through sample audits.

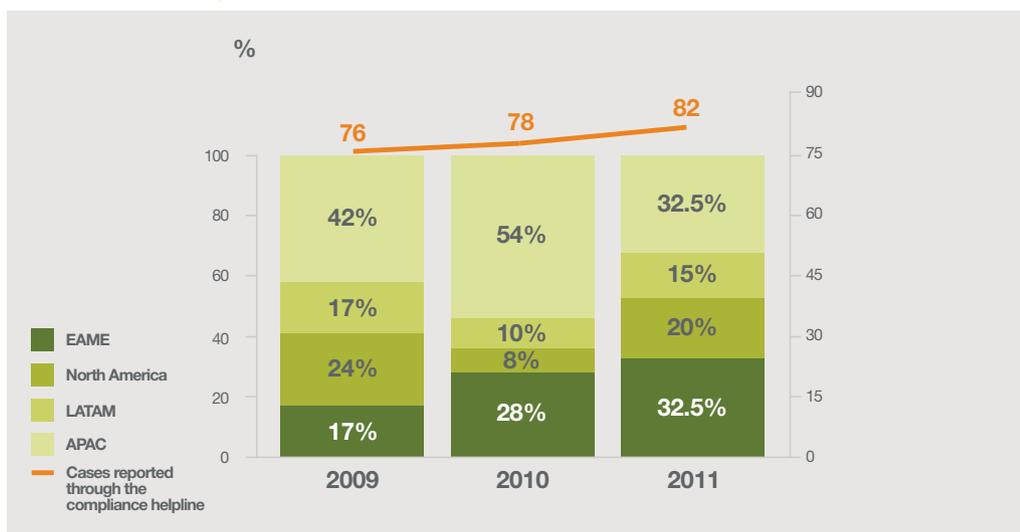
## Highlights

- Global Anti-Bribery Policy, Gifts and Entertainment Policy and an Anti-Fraud Policy
- Establishment of Compliance and Risk Management Committees on territory level initiated after having been established on global and regional level
- More than 16,800 farmers participating in our program together with the Fair Labor Association (FLA) in India, Argentina, Brazil and Romania

## Corporate conduct

### Performance

Cases reported through the compliance hotline<sup>1</sup>



<sup>1</sup> EAME including headquarter (Switzerland)

Employees can report suspected violations of the Code of Conduct to their line manager, to a member of our Legal, Compliance or Human Resources teams, or anonymously through our independent Compliance Helpline. In 2011 we continued our awareness campaigns. All reports received through the Compliance Helpline are taken seriously and are appropriately investigated. Also, we do not tolerate any retaliation against employees who submit a report or the deliberate misuse of the Compliance Helpline.

Compliance and risk management is everybody's responsibility. We have established processes to train and support our employees on compliance matters. At the end of 2011, we completed the training of 62 percent of our employees on our Code of Conduct through online courses. New employees receive their own copy of the Code and complete e-learning training when they join the company.

## Compliance

continued

Internal controls help monitor our performance. Our global team of compliance officers works directly with managers around the world to ensure the implementation of consistent policies and guidelines. These managers comprise representatives from legal, financial compliance, risk management, corporate responsibility, security, health, safety and environment.

In 2011, Syngenta launched new global anti-bribery, gifts and entertainment, and anti-fraud policies. These address bribery in both the public and private sectors, and prohibit facilitation payments. Charitable contributions, sponsorships, donations, and political contributions are also addressed. The policies are cascaded through Syngenta's management to all employees, and face-to-face training is provided to selected employee groups.

## Supplier assessment

### Performance

Health, Safety, Environment and Social compliance in supply	2009	2010	2011
Number of seed supply farms included in Syngenta/FLA program <sup>1</sup>	9,094	11,886	<b>16,880</b>
Number of HSEQ assessments at chemical suppliers <sup>2</sup>	65	70	<b>97</b>
Number of HSEQ assessments at warehouse/logistic service providers <sup>3</sup>	–	–	<b>129</b>

<sup>1</sup> In 2011, the FLA program was extended to Argentina, Brazil and Romania. The scope of the indicator was amended to represent the total number of farms in the program

<sup>2</sup> Starting in 2011, formulation, fill and packaging supplier assessments are included

<sup>3</sup> 2011 first year of reporting

Syngenta expects suppliers to uphold the same high ethical standards as we set ourselves. We assess suppliers against our global minimum standards for health, safety, environment, labor and human rights. In 2011, our HSEQ team assessed 97 chemical suppliers: six in EAME, five in North America, 25 in LATAM and 61 in APAC. We recorded a further improvement in suppliers' average observed HSE performance for the ninth consecutive year, and extended the scope of our HSE support for our most important suppliers to include process risk assessment. In addition, we carried out 129 HSEQ assessments at warehouse and logistics service providers to ensure compliance with our standards.

We also assess seed supply farms using the methodology developed with the Fair Labor Association (FLA), which focuses on health and safety, child labor (below 15 years old), awareness of workers' rights, wages and benefits, work hours, harassment and abuse, and discrimination. In 2011 we were able to extend the program to more seed suppliers in Brazil, Argentina and Romania. This means that in total – together with the Indian program – the number of seed supply farms included in the program amounted to 16,880 by the end of 2011.

In parallel the FLA conducted independent audits of our supply seed farms, including farm visits, document checks, and interviews with workers and growers. Each of these audits lasted three days and was timed to coincide with peak production seasons when the risk of non-compliance is greatest.

In 2011, the findings of the FLA and Syngenta audits were again broadly consistent in highlighting health and safety as areas of concern, as well as a number of cases where wages were below minimum levels. In addition, the FLA detected cases of child labor, most of which were on farms of growers who are first time producers in our supply chain. In order to address this Syngenta is undertaking corrective actions targeted at strengthening the awareness program among its new growers.

Syngenta consults with the FLA to develop detailed remediation plans in response to the audit findings. Records are published on the FLA website.

## Compliance

continued

### Animals in research

#### Performance

Animal welfare	2009	2010	2011
Number of audits performed in contract laboratories	3	6	8
Number of instances of non-compliance found	0	0	0

Syngenta uses alternatives to animal research wherever possible. However, in many countries, and some industries, legislation requires animal testing to ensure the safety of customers and the environment. We set highest standards for animal care, and we audit our sites and those of major contractors to ensure these standards are consistently applied. In 2011, we conducted eight audits and found no instances of non-compliance.

### Environmental compliance

#### Performance

Environmental compliance	2009	2010	2011
Significant unplanned releases <sup>1</sup>	0	0	0

<sup>1</sup> Releases that escape beyond the site boundary and that cause either environmental impact and/or concern from neighbours, regulators, etc.

Syngenta has robust management systems that help our facilities comply with environmental regulations. Each of our sites measures and monitors its environmental impacts, and reports data to group and regional HSE managers. Performance data is reviewed quarterly by the Compliance and Risk Management Committee, and annually by the Syngenta Executive Committee and the Board-level Corporate Responsibility Committee.

Unplanned releases from our chemical manufacturing activities are a particular concern and we allocate significant resources to prevent them. In 2011, for the third consecutive year, there were no unplanned releases from any of our sites.

### Further links

#### Corporate Responsibility at Syngenta

[www.syngenta.com/global/corporate/en/about-syngenta/corporate-responsibility](http://www.syngenta.com/global/corporate/en/about-syngenta/corporate-responsibility)

#### Syngenta Compliance Helpline

[www.syngenta.com/global/corporate/en/about-syngenta/governance/code-of-conduct/pages/compliance-helpline.aspx](http://www.syngenta.com/global/corporate/en/about-syngenta/governance/code-of-conduct/pages/compliance-helpline.aspx)

#### Fair Labor Association (FLA)

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

# Assured Corporate Responsibility performance indicators 2011

- 1 Excluding restructuring and impairment  
 2 For further information see Note 5 to the consolidated financial statements in the Financial Report 2011

The environmental performance numbers have been normalized to US\$EBIT<sup>1</sup> to better relate our performance in these areas to value creation.

In 2011, Syngenta re-organized its region structure resulting in certain countries moving from one region to another and the former region "NAFTA" becoming region "North America". For comparability purposes, 2009 and 2010 region information has been adjusted to reflect the new region structure.<sup>2</sup> For more detailed information on our Corporate Responsibility performance in 2011, see the Annual Report website [www.syngenta.com/ar2011](http://www.syngenta.com/ar2011)

## Resource efficiency programs and stewardship

Soil, water, biodiversity, IPM/ICM, safe use <sup>1</sup>	2011	2010	2009
Total investment (US\$m)	7.5	7.6	7.0
EAME <sup>2</sup>	48%	42%	29%
North America	20%	20%	25%
LATAM	14%	21%	27%
APAC	18%	18%	19%
Active programs	150	182	177
Investment per program (US\$ 000s)	50.0	41.6	39.7
<b>Product stewardship</b>			
Total number of people trained (m)	2.9	4.3	3.9
Direct training	2.9	3.2	2.2
Televised training <sup>3</sup>	0	1.1	1.7
Active training programs	61	90	129
Number of people directly trained per Syngenta program (000s)	48	36	18
Number of countries participating in adverse health incident management system	84	84	50
<b>Product stewardship – biotechnology and regulatory compliance</b>			
Number of employees completing regulatory compliance training	2,044	1,593	1,177
Number of trial locations requiring a permit	406	435	471
Number of trial inspections performed by Syngenta	155	237	189

1 Starting 2009, reporting year October 1 to September 30

2 Including headquarters (Switzerland)

3 Televised training pilot completed

## Economic value shared<sup>1</sup>

Economic value shared	2011	2010	2009
Revenues (US\$m)	13,268	11,641	10,992
Payments to suppliers	8,140	6,851	6,959
Employee wages and benefits	2,661	2,305	2,176
Payments to governments <sup>1</sup>	312	292	186
Payment to providers of capital <sup>2</sup>	1,078	884	625
Capital expenditure	575	526	771
Corporate community investment <sup>3</sup>	18	17	18
Economic value retained	484	766	257

1 Consists of income and other taxes paid, excluding VAT (included in Payments to suppliers) and employment-related taxes (included in Employee wages and benefits)

2 Consists of expenditures for dividends, share repurchases (excluding those for employee share plans) and interest on debt

3 In 2011 US\$0.8 million from resource efficient programs

- 1 Except the Corporate community investment these figures have not been included in the CR assurance

## People

	2011	2010	2009
<b>People retention</b>			
Employees as of December 31 <sup>1</sup>	<b>26,333</b>	26,302	26,206
EAME <sup>2</sup>	<b>12,134</b>	12,509	12,564
North America	<b>4,713</b>	4,809	4,978
LATAM	<b>4,681</b>	4,282	4,300
APAC	<b>4,805</b>	4,702	4,364
Part-time employees	<b>881</b>	850	763
Turnover rate <sup>3</sup>	<b>11.6%</b>	9.5%	9.3%
Of which:			
< 35 years	<b>38.9%</b>	38.5%	32.7%
35–50 years	<b>38.5%</b>	38.8%	32.9%
>50 years	<b>22.5%</b>	22.7%	34.4%
Employees entitled to participate in Employee Share Purchase Plan (ESPP)	<b>16,872</b>	16,262	15,829
Entitled employees participating in ESPP	<b>46%</b>	46%	48%
Employees participating in Long-term Incentive (LTI) plan	<b>1,047</b>	1,031	1,016
<b>Diversity</b>			
Female employees	<b>32%</b>	32%	30%
In management roles	<b>21%</b>	20%	20%
In senior management	<b>12%</b>	11%	11%
<b>Proportion of senior management from each region</b>			
Number of senior managers <sup>4</sup>	<b>345</b>	196	196
HQ	<b>49%</b>	49%	49%
EAME	<b>13%</b>	14%	15%
North America	<b>19%</b>	18%	19%
LATAM	<b>10%</b>	9%	8%
APAC	<b>9%</b>	10%	9%
Number of nationalities in senior management <sup>4</sup>	<b>34</b>	24	24
<b>Employee development</b>			
Total training investment (US\$m)	<b>30.6</b>	29.0	24.9
EAME <sup>2</sup>	<b>19.9</b>	18.4	16.3
North America <sup>5</sup>	<b>2.9</b>	4.1	2.5
LATAM <sup>5</sup>	<b>3.5</b>	3.3	3.1
APAC	<b>4.3</b>	3.1	3.0
Training investment per employee (US\$) <sup>1</sup>	<b>1,161</b>	1,103	951
<b>Health and safety</b>			
Recordable injury and illness rate (IIR) per 200,000 hours <sup>6,7</sup>	<b>0.44</b>	0.41	0.42
Recordable injury rate per 200,000 hours <sup>6,7</sup>	<b>0.39</b>	0.39	0.38
EAME <sup>2</sup>	<b>0.38</b>	0.43	0.47
North America	<b>0.99</b>	0.75	0.58
LATAM	<b>0.20</b>	0.22	0.19
APAC	<b>0.17</b>	0.18	0.19
Recordable occupational illness rate per 200,000 hours <sup>6</sup>	<b>0.05</b>	0.02	0.03
EAME <sup>2</sup>	<b>0.05</b>	0.01	0.05
North America	<b>0.16</b>	0.06	0.06
LATAM	<b>0.00</b>	0.00	0.03
APAC	<b>0.01</b>	0.01	0.00
First aid cases	<b>798</b>	820	712

<sup>1</sup> Permanent full-time equivalent (FTE), 2010 and 2009 data revised and updated

<sup>2</sup> Including headquarters (Switzerland)

<sup>3</sup> 2011 increase reflects the inclusion of seasonal workers in Kenya and Ethiopia

<sup>4</sup> 2011 increase due to new senior management categorization

<sup>5</sup> 2010 and 2009 reflecting figures according to previous organizational structure

<sup>6</sup> According to US OSHA definition for injuries and illness

<sup>7</sup> 2010 data corrected due to six late recordables after closing of the reporting year

<sup>1</sup> In 2011 additional seeds sites have been added to the data collection system

## Environment<sup>1</sup>

<b>Energy</b>	2011	2010	2009
Energy (TJ)	<b>8,707</b>	8,031	8,334
MJ/US\$EBIT	<b>3.79</b>	4.08	4.36
Gas (TJ)	<b>3,655</b>	3,851	3,675
Electricity (TJ)	<b>2,155</b>	1,963	2,096
Steam (TJ)	<b>1,438</b>	935	1,153
Oil (TJ)	<b>660</b>	631	635
Others (TJ)	<b>799</b>	652	775
Number of sites setting energy targets	<b>19</b>	22	19
<b>Greenhouse gases</b>			
Total CO <sub>2</sub> e emissions (000s tonnes)	<b>1,396</b>	1,304	1,452
kg/US\$EBIT	<b>0.61</b>	0.66	0.76
Within direct control:			
CO <sub>2</sub> e emissions from own operations (000s tonnes)	<b>513</b>	616	641
kg/US\$EBIT	<b>0.22</b>	0.31	0.34
of which: CO <sub>2</sub> (000s tonnes)	<b>332</b>	329	426
kg/US\$EBIT	<b>0.14</b>	0.17	0.22
CO <sub>2</sub> emissions from company vehicles (000s tonnes)	<b>65</b>	68	65
kg/US\$EBIT	<b>0.028</b>	0.035	0.034
Within indirect control:			
CO <sub>2</sub> e emissions from purchased energy (000s tonnes)	<b>374</b>	301	418
CO <sub>2</sub> emissions from business trips (000s tonnes) <sup>1</sup>	<b>51</b>	20	25
CO <sub>2</sub> emissions from distribution (000s tonnes)	<b>393</b>	299	303
<b>Other air emissions</b>			
Total other air emissions (tonnes)	<b>1,454</b>	1,269	980
g/US\$EBIT	<b>0.63</b>	0.64	0.51
NO <sub>x</sub> (tonnes)	<b>445</b>	404	416
g/US\$EBIT	<b>0.19</b>	0.21	0.22
Non-halogenated VOCs (tonnes)	<b>647</b>	440	415
g/US\$EBIT	<b>0.28</b>	0.22	0.22
Halogenated VOCs (tonnes)	<b>29</b>	48	49
g/US\$EBIT	<b>0.01</b>	0.02	0.03
Particulates (tonnes)	<b>114</b>	123	63
g/US\$EBIT	<b>0.05</b>	0.06	0.03
SO <sub>2</sub> (tonnes)	<b>180</b>	208	20
g/US\$EBIT	<b>0.08</b>	0.11	0.01
NH <sub>3</sub> (tonnes)	<b>22</b>	23	7
g/US\$EBIT	<b>0.01</b>	0.01	0.004
HCL (tonnes)	<b>17</b>	23	10
g/US\$EBIT	<b>0.01</b>	0.01	0.005

<sup>1</sup> The increase in 2011 is due to improved data provided by our travel agency, which includes 42 countries instead of 23 in 2010

**Environment** continued

<b>Water</b>	2011	2010	2009
Water consumption (million cubic meters)	<b>30.8</b>	28.8	32.0
liters/US\$EBIT	<b>13.4</b>	14.6	16.7
Cooling (million cubic meters)	<b>18.7</b>	18.6	21.0
Processing and washing (million cubic meters)	<b>9.9</b>	8.0	7.1
Product ingredient (million cubic meters)	<b>0.2</b>	0.2	0.2
Sewage and sanitary (million cubic meters)	<b>1.0</b>	1.1	1.7
Others (million cubic meters)	<b>1.0</b>	0.9	2.0
<b>Origin of Water:</b>			
Surface fresh water (million cubic meters)	<b>22.4</b>	22.1	–
Underground water (million cubic meters)	<b>5.9</b>	4.1	–
Drinking water from municipal network (million cubic meters)	<b>2.6</b>	2.5	–
Recovered rain water (million cubic meters)	<b>0.1</b>	0.1	–
<b>Waste water effluents</b>			
Total industrial waste water discharge (million cubic meters)	<b>9.6</b>	8.8	10
liters/US\$EBIT	<b>4.2</b>	4.5	5.2
of which: total organic carbon (TOC) (tonnes)	<b>1,033</b>	769	783
chemical oxygen demand (COD) (tonnes)	<b>3,119</b>	2,336	2,677
biological oxygen demand (BOD) (tonnes)	<b>308</b>	240	234
total suspended solids (tonnes)	<b>520</b>	393	303
soluble salts discharged (000s tonnes)	<b>120</b>	114	123
Direct discharge of uncontaminated cooling water (million cubic meters)	<b>18.5</b>	18.5	20.8
<b>Waste water discharge</b>			
From off-site treatment plant	<b>51%</b>	51%	–
From on-site treatment plant	<b>48%</b>	46%	–
Others <sup>1</sup>	<b>1%</b>	3%	–
<b>Waste</b>			
Hazardous waste (000s tonnes)	<b>201.4</b>	198.7	173.9
kg/US\$EBIT	<b>0.09</b>	0.10	0.09
of which: recycled/re-used (000s tonnes)	<b>66.9</b>	64.0	51.4
incinerated (000s tonnes)	<b>121.5</b>	124.0	97.1
landfill (000s tonnes)	<b>0.4</b>	0.4	0.7
other (000s tonnes)	<b>12.6</b>	10.3	24.7
<b>Hazardous waste by type</b>			
Chemical	<b>59%</b>	61%	57%
Solvents	<b>29%</b>	31%	30%
Others	<b>12%</b>	8%	11%
Non-hazardous waste (000s tonnes)	<b>94.5</b>	133.7	124.0
kg/US\$EBIT	<b>0.04</b>	0.07	0.06
of which: recycled/re-used (000s tonnes)	<b>64.3</b>	76.6	66.4
incinerated (000s tonnes)	<b>7.1</b>	18.0	25.2
landfill (000s tonnes)	<b>19.1</b>	28.7	15.5
other (000s tonnes)	<b>4.0</b>	10.4	16.9
Number of sites with reduction programs	<b>16</b>	19	19
<b>Non-hazardous waste by type</b>			
Plant & seed waste from seed sites	<b>56%</b>	51%	63%
Inerts	<b>5%</b>	22%	9%
Packaging materials	<b>9%</b>	6%	7%
Household	<b>5%</b>	3%	7%
Others	<b>25%</b>	18%	14%

<sup>1</sup> Incinerated water, sanitary water directly released, water used for fire exercises, evaporated water in process equipment

## Compliance

<b>Corporate conduct</b>	2011	2010	2009
Cases reported through the Compliance Helpline	<b>82</b>	78	76
EAME <sup>1</sup>	<b>32.5%</b>	28.2%	17.1%
North America	<b>20.0%</b>	7.7%	23.7%
LATAM	<b>15.0%</b>	10.3%	17.1%
APAC	<b>32.5%</b>	53.8%	42.1%
<b>Health, Safety, Environment and Social compliance in supply</b>			
Number of seed supply farms included in Syngenta/FLA program <sup>2</sup>	<b>16,880</b>	11,886	9,094
Number of HSEQ assessments at chemical suppliers <sup>3</sup>	<b>97</b>	70	65
Number of HSEQ assessments at warehouse/logistic service providers <sup>4</sup>	<b>129</b>	–	–
<b>Animal welfare</b>			
Number of audits performed in contract laboratories	<b>8</b>	6	3
Number of instances of non-compliance found	<b>0</b>	0	0
<b>Environmental compliance</b>			
Significant unplanned releases <sup>5</sup>	<b>0</b>	0	0

1 Including headquarters (Switzerland)

2 In 2011, the FLA program was extended to Argentina, Brazil and Romania. The scope of the indicator was also amended to represent the number of farms in the program

3 Starting in 2011, formulation, fill and packaging supplier assessments are included

4 2011 first year of reporting

5 Releases that escape beyond the site boundary and that cause either environmental impact and/or concern from neighbors, regulators, etc