

# Assured Corporate Responsibility performance indicators 2013

Syngenta's CR performance is covered throughout the Annual Review, summarized in the CR performance summary below and explained in further detail in the extended Online Annual Report ([www.syngenta.com/ar2013](http://www.syngenta.com/ar2013)).

CR performance data is presented in six categories that align with our business enablers: people, manufacturing and procurement, environment, responsible agriculture, economic value shared and business integrity. Our CR reporting is for the operations of Syngenta Group, including material interactions with selected third parties as reported in the CR performance summary. Our CR reporting is guided by the GRI principles and externally assured by PwC. The CR reporting period is October 1 to September 30, with the exceptions noted.

## Corporate Responsibility performance summary

### People

	2013	2012	2011
<b>People retention<sup>1</sup></b>			
Employees <sup>2</sup>	<b>28,149</b>	27,262	26,333
Europe, Africa and Middle East <sup>3</sup>	<b>12,763</b>	12,417	12,134
North America	<b>4,654</b>	4,598	4,713
Latin America	<b>5,221</b>	5,095	4,681
Asia Pacific	<b>5,511</b>	5,152	4,805
Part-time employees	<b>976</b>	975	881
Turnover rate <sup>4</sup>	<b>14.1%</b>	12.4%	11.6%
of which: <35 years	<b>43%</b>	44%	38%
35-50 years	<b>35%</b>	35%	39%
>50 years	<b>22%</b>	21%	23%
<b>Diversity<sup>1</sup></b>			
Female employees	<b>30%</b>	31%	32%
In management roles	<b>20%</b>	20%	21%
In senior management	<b>13%</b>	13%	12%
Senior managers	<b>366</b>	334	345
Headquarters	<b>47%</b>	50%	49%
Europe, Africa and Middle East	<b>13%</b>	13%	13%
North America	<b>18%</b>	19%	19%
Latin America	<b>12%</b>	10%	10%
Asia Pacific	<b>10%</b>	8%	9%
Nationalities in senior management	<b>41</b>	38	34
<b>Employee development<sup>1, 5</sup></b>			
Training investment (\$m)	<b>27.1</b>	24.6	23.7
Training investment per employee (\$) <sup>2</sup>	<b>964</b>	901	901
<b>Reward and recognition<sup>1</sup></b>			
Employees eligible to participate in Employee Share Purchase Plan (ESPP)	<b>18,790</b>	16,561	16,872
Eligible employees participating in ESPP	<b>47%</b>	46%	46%
Employees participating in long-term equity incentive plans	<b>1,226</b>	1,098	1,047

<sup>1</sup> In 2013 and 2012, reporting year ended September 30. In 2011, reporting year ended December 31

<sup>2</sup> Permanent full-time equivalent (FTE)

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

<sup>4</sup> Including voluntary leavers, retirees and restructuring

<sup>5</sup> Includes only training delivered by external providers

## Corporate Responsibility information continued

### People continued

	2013	2012	2011
<b>Health, safety and wellbeing</b>			
Recordable injury and illness rate (IIR) per 200,000 hours <sup>1</sup>	0.41	0.39	0.44
Recordable injury rate per 200,000 hours <sup>1</sup>	0.35	0.35	0.39
Europe, Africa and Middle East <sup>2</sup>	0.38	0.39	0.38
North America	0.64	0.87	0.99
Latin America	0.38	0.17	0.20
Asia Pacific	0.15	0.16	0.17
Recordable occupational illness rate per 200,000 hours <sup>1</sup>	0.07	0.03	0.05
Europe, Africa and Middle East <sup>2</sup>	0.07	0.07	0.05
North America	0.14	0.00	0.16
Latin America	0.08	0.00	0.00
Asia Pacific	0.02	0.03	0.01
First aid cases	623	693	798
Recordable injuries	148	144	147
Fracture	16%	17%	14%
Bruise, strain and sprain	44%	30%	34%
Burn	2%	1%	3%
Cut and abrasion	22%	30%	28%
Eye injury	5%	6%	7%
Head injury and concussion	1%	3%	3%
Other	10%	13%	11%
Cases of recordable occupational illness	28	14	19
Cases of work-related stress <sup>3</sup>	36	127	32

1 According to US OSHA definition for injuries and illness

2 Including headquarters (Switzerland)

3 The increase in 2012 is due in most cases to a change in shift pattern at our Monthey site in Switzerland. Following extensive consultation, a new shift pattern was implemented early in 2013



Read more about "People" on  
[www.syngenta.com/ar2013](http://www.syngenta.com/ar2013)

### Manufacturing and procurement

	2013	2012	2011
<b>Our production and R&amp;D sites<sup>1, 2</sup></b>			
Active ingredient production	8	8	
Formulation, fill and packaging	23	23	
Lawn and Garden supply chain	15	15	
Seed processing	67	62	
Research and development	139	154	
<b>Quality management<sup>1, 3</sup></b>			
Quality audits performed on own sites	83	91	
Quality audits performed on third parties <sup>4</sup>	496	89	
<b>Security management<sup>1</sup></b>			
Evaluated sites in medium and high risk countries	70	72	
Of which: production sites	44%	39%	
<b>Responsible supply chain<sup>5</sup></b>			
Seed supply farms included in Syngenta/FLA program	22,895	17,625	16,880
HSEQ assessments at chemical suppliers <sup>6</sup>	86	74	67
HSEQ assessments at formulation, fill and packaging suppliers	38	35	30
HSEQ assessments at warehouse/logistics service providers	157	115	129

1 2012 first year of reporting

2 Including 34 multi-functional sites in 2013 and 35 in 2012

3 In 2013, reporting year ended September 30. In 2012, reporting year ended December 31

4 411 audits occurred in 2013 in North America due to the wider introduction of a trait technology

5 In 2013 and 2012, reporting year ended September 30. In 2011, reporting year ended December 31

6 2012 and 2011 values have been restated to separately report HSEQ assessments at formulation, fill and packaging suppliers



Read more about "Manufacturing and procurement" on  
[www.syngenta.com/ar2013](http://www.syngenta.com/ar2013)

## Corporate Responsibility information continued

## Environment

	2013	2012	2011
<b>Energy</b>			
<b>Energy intensity (MJ/\$EBIT)<sup>1</sup></b>	<b>4.50</b>	3.70	3.79
Energy (TJ)	<b>10,202</b>	9,336	8,707
Gas (TJ)	<b>4,050</b>	3,936	3,655
Electricity (TJ)	<b>2,459</b>	2,347	2,155
Steam (TJ)	<b>1,578</b>	1,419	1,438
Oil (TJ)	<b>975</b>	703	660
Other (TJ)	<b>1,140</b>	931	799
Sites setting energy targets	<b>15</b>	19	19
<b>Greenhouse gases</b>			
<b>Total CO<sub>2</sub>e emissions intensity (kg/\$EBIT)<sup>1</sup></b>	<b>0.75</b>	0.62	0.61
Total CO <sub>2</sub> e emissions (000s tonnes) <sup>2</sup>	<b>1,710</b>	1,574	1,396
Within direct control:			
CO <sub>2</sub> e emissions from own operations (000s tonnes)	<b>634</b>	665	513
CO <sub>2</sub> emissions from company vehicles (000s tonnes)	<b>76</b>	68	65
Within indirect control:			
CO <sub>2</sub> e emissions from purchased energy (000s tonnes)	<b>417</b>	391	374
CO <sub>2</sub> emissions from business trips (000s tonnes)	<b>40</b>	45	51
CO <sub>2</sub> emissions from distribution (000s tonnes) <sup>2,3</sup>	<b>543</b>	405	393
<b>Other air emissions</b>			
<b>Other air emissions intensity (g/\$EBIT)<sup>1</sup></b>	<b>0.67</b>	0.56	0.63
Other air emissions (tonnes) <sup>4</sup>	<b>1,514</b>	1,421	1,454
NO <sub>x</sub> (tonnes)	<b>440</b>	476	445
Non-halogenated VOCs (tonnes)	<b>427</b>	505	647
Halogenated VOCs (tonnes)	<b>21</b>	13	29
Particulates (tonnes)	<b>105</b>	108	114
SO <sub>2</sub> (tonnes) <sup>4,5</sup>	<b>494</b>	295	180
NH <sub>3</sub> (tonnes)	<b>8</b>	8	22
HCl (tonnes)	<b>19</b>	16	17
<b>Water</b>			
<b>Water usage intensity (liters/\$EBIT)<sup>1</sup></b>	<b>16.2</b>	13.4	13.4
Water usage (million cubic meters)	<b>36.8</b>	33.8	30.8
Cooling (million cubic meters)	<b>19.4</b>	18.0	18.7
Irrigation (million cubic meters) <sup>6</sup>	<b>7.6</b>	6.5	2.9
Processing and washing (million cubic meters)	<b>7.4</b>	7.0	7.0
Product ingredient (million cubic meters)	<b>0.3</b>	0.2	0.2
Sewage and sanitary (million cubic meters)	<b>1.1</b>	1.0	1.0
Other (million cubic meters)	<b>1.0</b>	1.1	1.0
Origin of water:			
Surface fresh water (million cubic meters)	<b>25.6</b>	23.9	22.4
Underground water (million cubic meters)	<b>7.8</b>	7.1	5.9
Drinking water from municipal network (million cubic meters)	<b>3.0</b>	2.7	2.6
Recovered rain water (million cubic meters)	<b>0.1</b>	0.1	0.1
Saline water (million cubic meters)	<b>0.3</b>	0.0	0.0

1 2012 and 2011 intensity values have been restated due to the impact on \$EBIT of the accounting policy change for employee benefits described in Note 2 to the Group Consolidated Financial Statements in the Financial Report 2013. \$EBIT excluding restructuring and impairment

2 2012 value has been restated due to a calculation error in CO<sub>2</sub> reporting from distribution

3 Increase in 2013 value due to inclusion of seeds distribution in Asia Pacific and Latin America

4 2012 value has been restated due to a calculation error in SO<sub>2</sub> reporting at a site in Asia Pacific

5 Increase in 2013 value due to 34% increase in fuel oil consumption in the waste incinerator at a site in Asia Pacific

6 Policy on water reporting was revised: 10 reporting sites were added in 2013 and 12 in 2012

**Corporate Responsibility information** continued

**Environment** continued

	2013	2012	2011
<b>Wastewater effluents</b>			
<b>Industrial wastewater discharge intensity (liters/\$EBIT)<sup>1</sup></b>	<b>4.8</b>	<b>4.0</b>	<b>4.2</b>
Industrial wastewater discharge (million cubic meters)	10.8	10.1	9.6
Total organic carbon (TOC) (tonnes)	879	771	1,033
Chemical oxygen demand (COD) (tonnes)	2,679	2,337	3,119
Biological oxygen demand (BOD) (tonnes)	225	239	308
Total suspended solids (tonnes)	345	363	520
Soluble salts discharged (000s tonnes)	143	133	120
Direct discharge of uncontaminated cooling water (million cubic meters)	19.1	17.8	18.5
<b>Waste</b>			
<b>Hazardous waste intensity (kg/\$EBIT)<sup>1</sup></b>	<b>0.10</b>	<b>0.08</b>	<b>0.09</b>
Hazardous waste (000s tonnes)	235.2	190.0	201.4
Recycled and re-used (000s tonnes)	71.9	60.0	66.9
Incinerated (000s tonnes)	147.8	118.0	121.5
Landfill (000s tonnes)	2.5	1.0	0.4
Other (000s tonnes)	13.0	11.0	12.6
Hazardous waste by type:			
Chemical	66%	65%	59%
Solvents	27%	26%	29%
Other	7%	9%	12%
<b>Non-hazardous waste intensity (kg/\$EBIT)<sup>1</sup></b>	<b>0.06</b>	<b>0.04</b>	<b>0.04</b>
Non-hazardous waste (000s tonnes)	131.7	109.8	94.5
Recycled and re-used (000s tonnes)	100.5	80.0	64.3
Incinerated (000s tonnes)	7.5	4.1	7.1
Landfill (000s tonnes)	16.8	18.5	19.1
Other (000s tonnes)	6.9	7.2	4.0
Non-hazardous waste by type:			
Plant and seed waste from seed sites	66%	60%	56%
Inerts	3%	5%	5%
Packaging materials	7%	7%	9%
Household	5%	5%	5%
Other	19%	23%	25%
Sites with waste reduction programs	14	16	16
<b>Environmental compliance</b>			
Significant unplanned releases <sup>2, 3</sup>	1	0	0

<sup>1</sup> 2012 and 2011 intensity values have been restated due to the impact on \$EBIT of the accounting policy change for employee benefits described in Note 2 to the Group Consolidated Financial Statements in the Financial Report 2013. \$EBIT excluding restructuring and impairment

<sup>2</sup> Releases that escape beyond the site boundary and cause either environmental impact and/or concern from neighbors, regulators, etc

<sup>3</sup> In 2013, release of ammonia due to temporary reduction on scrubber efficiency at one site in North America. Corrective actions were immediately taken



Read more about "Environment" on  
[www.syngenta.com/ar2013](http://www.syngenta.com/ar2013)

## Corporate Responsibility information continued

### Responsible agriculture

	2013	2012	2011
<b>Resource efficiency programs (soil, water, biodiversity, IPM/ICM, safe use)</b>			
Total investment (\$m)	9.4	10.4	7.5
Europe, Africa and Middle East <sup>1</sup>	55%	37%	48%
North America	1%	4%	20%
Latin America	34%	35%	14%
Asia Pacific	10%	24%	18%
Active programs	253	157	150
<b>Medical stewardship<sup>2</sup></b>			
Countries with established Syngenta product toxicovigilance programs <sup>2</sup>	100	85	85
Crop Protection sales represented	93%	92%	89%
<b>Product safe use training</b>			
Active training programs	160	92	61
Human health <sup>3</sup>	97%	83%	
Environment <sup>3</sup>	2%	2%	
Value chain <sup>3</sup>	1%	15%	
People trained (m)	2.8	3.0	2.9

1 Including headquarters (Switzerland)

2 In 2013 and 2012, reporting year ended September 30. In 2011, reporting year ended December 31

3 2012 first year of reporting



Read more about "Responsible agriculture" on [www.syngenta.com/ar2013](http://www.syngenta.com/ar2013)

### Economic value shared

	2013	2012	2011
Economic value shared (\$m) <sup>1</sup>	14,864	13,257	12,784
Payments to suppliers <sup>2</sup>	9,792	8,550	8,140
Employee wages and benefits	2,828	2,710	2,661
Payments to governments (taxes) <sup>3</sup>	405	345	312
Payments to providers of capital <sup>4,5</sup>	1,139	971	1,078
Capital expenditure	679	662	575
Corporate community investment <sup>6,7</sup>	21	19	18

1 In 2013 and 2012, reporting year ended September 30. In 2011, reporting year ended December 31

2 Increase in Payments to suppliers reflects an increase in seeds production costs and higher inventory levels linked to projected sales growth

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

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

5 Increase in Payments to providers of capital reflects an increased dividend payment in 2013

6 In 2013, \$0.4 million for resource efficiency programs

7 The PwC Independent Assurance Report includes in its scope only the Corporate community investment figure used in the calculation of Economic value shared



Read more about "Economic value shared" on [www.syngenta.com/ar2013](http://www.syngenta.com/ar2013)

### Business integrity

	2013	2012	2011
<b>Corporate conduct<sup>1</sup></b>			
Compliance cases reported through the compliance helpline <sup>2</sup>	110	58	82
<b>Animal testing compliance<sup>1</sup></b>			
Management system audits performed in contract laboratories	13	15	8
Management system non-compliances found	0	1	0
<b>Biotechnology and regulatory compliance<sup>1</sup></b>			
Employees completing trial regulatory compliance training	1,228	1,559	2,044
Trial locations requiring a permit	420	400	406
Trial inspections performed by Syngenta	272	278	155

1 In 2013 and 2012, reporting year ended September 30. In 2011, reporting year ended December 31

2 This does not include cases reported through line management, HR or legal processes



Read more about "Business integrity" on [www.syngenta.com/ar2013](http://www.syngenta.com/ar2013)