

SYNGENTA AG  
Form 20-F  
February 16, 2017

**As filed with the Securities and Exchange Commission on February 16, 2017**

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

**FORM 20-F**

**REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR (g) OF THE  
SECURITIES EXCHANGE ACT OF 1934**

**OR**

**ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF  
THE SECURITIES EXCHANGE ACT OF 1934**

**For the fiscal year ended December 31, 2016**

**OR**

**TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE  
SECURITIES EXCHANGE ACT OF 1934**

**OR**

**SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE  
SECURITIES EXCHANGE ACT OF 1934**

Commission file number: 1-15152

**SYNGENTA AG**

(Exact name of Registrant as specified in its charter)

**Switzerland**

(Jurisdiction of incorporation or organization)

**Schwarzwaldallee 215, 4058 Basel, Switzerland**

(Address of principal executive offices)

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**Syngenta International AG**

**P.O. Box**

**CH-4002 Basel, Switzerland**

(Name, Telephone, E-mail and/or Facsimile number and Address of Company Contact Person)

Securities registered or to be registered pursuant to Section 12(b) of the Act:

**Title of each class**

American Depositary Shares, each representing one-fifth of a common share of Syngenta AG, nominal value CHF 0.10

**Name of each exchange on which registered**

New York Stock Exchange

Securities registered or to be registered pursuant to Section 12(g) of the Act: **None**

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act: **None**

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report.

**92,578,149 Common shares, nominal value CHF 0.10 each**



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Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

Yes     No

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934.

Yes     No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes     No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).

Yes     No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer. See definition of accelerated filer and large accelerated filer in Rule 12b-2 of the Exchange Act.

**Large accelerated filer**  **Accelerated filer**  **Non-accelerated filer**

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:

**U.S. GAAP**  **International Financial Reporting Standards as issued by the International Accounting Standards Board**  **Other**

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes  No

## Introduction

### NATURE OF OPERATIONS

Syngenta AG (“Syngenta” or the “Company”) is a world leading agribusiness operating in the crop protection and seeds business, which is involved in the discovery, development, manufacture and marketing of a range of products designed to improve crop yields and food quality, and in the lawn and garden business, which provides professional growers and consumers with flowers, turf and landscape, and professional pest management products.

Syngenta is headquartered in Basel, Switzerland and was formed by Novartis AG (“Novartis”) and AstraZeneca PLC (“AstraZeneca”) in November 2000 through an agreement to spin off and merge the Novartis crop protection and seeds businesses with the AstraZeneca agrochemicals business to create a dedicated agribusiness company whose shares were then the subject of a global offering (the “Transactions”). The Transactions were completed on November 13, 2000.

### FORWARD-LOOKING STATEMENTS

The statements contained in this annual report that are not historical facts, including, without limitation, statements regarding management’s expectations, targets or intentions, including for sales, earnings and earnings per share, constitute forward-looking statements within the meaning of the safe harbor provisions of the Private Securities Litigation Reform Act of 1995, and are based on the current expectations and estimates of Syngenta’s management. Investors are cautioned that such forward-looking statements involve risks and uncertainties, and that actual results may differ materially.

Syngenta identifies the forward-looking statements in this annual report by using the words “expect”, “would”, “will”, “potential”, “plans”, “prospects”, “anticipates”, “estimated”, “believes”, “intends”, “aiming”, “on track”, or similar expressions negative of these expressions. Syngenta cannot guarantee that any of the events or trends anticipated by the forward-looking statements will actually occur. Important factors that could cause actual results to differ materially from the results anticipated in the forward-looking statements include, among other things:

- the risk that research and development will not yield new products that achieve commercial success;
- the risk that Syngenta will not be able to obtain or maintain the necessary regulatory approvals for its business;

the risk that economic and/or financial market weakness may have a material adverse effect on Syngenta's results and financial position;

- the risks associated with increasing competition in the industry;
- the risk that customers will be unable to pay their debts to Syngenta due to economic conditions;
- the risks associated with potential changes in policies of governments and international organizations;
- the risks associated with exposure to liabilities resulting from environmental and health and safety laws;
- the risk that important patents and other intellectual property rights may be challenged or used by other parties;
- the risk that Syngenta may encounter problems when implementing significant organizational changes;
- the risks associated with the proposal by China National Chemical Corporation ("ChemChina") to acquire Syngenta;

- the risk that the value of Syngenta’s intangible assets may become impaired;
- the risk of substantial product liability or personal injury claims;
- the risk that consumer resistance to genetically modified crops and organisms or crop protection chemicals may negatively impact sales;
- the risks associated with climatic variations;
- the risks associated with exposure to fluctuations in foreign currency exchange rates or commodity prices;
- the risks associated with entering into single-source supply arrangements;
- the risks associated with conducting operations in certain territories that have been identified by the US government as state sponsors of terrorism;
- the risks associated with the vote in the UK to exit the European Union;
- the risks associated with natural disasters;
- the risk that Syngenta’s effective tax rate may increase; and
- the risk of significant breaches of data security or disruptions of information technology systems.

Some of these factors are discussed in more detail herein, including under Item 3 “Key Information”, Item 4 “Information on the Company”, and Item 5 “Operating and Financial Review and Prospects”. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those described herein as anticipated, believed, estimated or expected. Syngenta does not intend or assume any obligation to update these forward-looking statements.



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**PART I**

**Item 1 — Identity of Directors, Senior Management and Advisers**

Not applicable.

**Item 2 — Offer Statistics and Expected Timetable**

Not applicable

## ITEM 3 – KEY INFORMATION

### Selected Financial Data

Syngenta has prepared the consolidated financial statements in US dollars (\$) and in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board (IFRS). Financial figures are presented in millions of dollars (\$m) except where otherwise stated. The basis of preparation of the consolidated financial statements and the key accounting policies are discussed in Note 1 and in Notes 2 and 29, respectively, to the consolidated financial statements in Item 18.

The selected financial highlights information in accordance with IFRS presented below has been extracted from the consolidated financial statements of Syngenta. Investors should read the entire consolidated financial statements and not rely on the summarized information. The information includes the results of operations and the net assets of Pasteuria Bioscience Inc. from November 8, 2012, Sunfield Seeds Inc. from November 29, 2012, Devgen N.V. from December 12, 2012, MRI Seed Zambia Ltd and MRI Agro Zambia Ltd from October 31, 2013, Società Produttori Sementi S.p.A. from April 4, 2014, Lantmännen SW Seed Hadmersleben GmbH, Lantmännen SW Seeds GmbH and SW Winter Oilseed AB from July 21, 2014 and Land.db Enterprises Inc. from October 15, 2015. For further information about 2015 and 2014 acquisitions, see Note 3 to the consolidated financial statements in Item 18.

**Financial highlights**

(\$m, except where otherwise stated) Amounts in accordance with IFRS	Year ended December 31,				
	2016	2015	2014	2013	2012
Income statement data:					
Sales	12,790	13,411	15,134	14,688	14,202
Cost of goods sold	(6,507)	(7,042)	(8,192)	(7,986)	(7,223)
Gross profit	6,283	6,369	6,942	6,702	6,979
Operating expenses	(4,636)	(4,528)	(4,837)	(4,616)	(4,723)
Operating income	1,647	1,841	2,105	2,086	2,256
Income before taxes	1,361	1,592	1,895	1,934	2,116
Net income	1,181	1,344	1,622	1,649	1,850
Net income attributable to Syngenta AG shareholders	1,178	1,339	1,619	1,644	1,847
Number of shares – basic	92,020,494	91,908,128	91,674,127	91,952,222	91,644,190
Number of shares – diluted	92,092,649	92,206,535	92,007,089	92,459,306	92,132,922
Basic earnings per share (\$)	12.80	14.57	17.66	17.88	20.16
Diluted earnings per share (\$)	12.79	14.52	17.60	17.78	20.05
Cash dividends paid:					
Swiss franc (“CHF”) per share	11.00	11.00	10.00	9.50	8.00
\$ per share equivalent	11.32	11.73	11.25	10.01	8.82
Cash flow data:					
Cash flow from operating activities	1,807	1,190	1,931	1,214	1,359
Cash flow used for investing activities	(521)	(462)	(729)	(772)	(1,218)
Cash flow used for financing activities	(1,134)	(1,188)	(420)	(1,114)	(232)
Capital expenditure on tangible fixed assets	(425)	(453)	(600)	(625)	(508)
Balance sheet data:					
Current assets less current liabilities	5,089	5,537	4,858	3,990	4,537
Total assets	19,068	18,977	19,929	20,216	19,438
Total non-current liabilities	(4,830)	(4,896)	(4,317)	(3,356)	(4,226)
Total liabilities	(11,097)	(10,557)	(11,024)	(10,712)	(10,653)
Share capital	(6)	(6)	(6)	(6)	(6)
Total shareholders’ equity	(7,950)	(8,401)	(8,889)	(9,491)	(8,774)
Other supplementary income data:					
Diluted earnings per share from continuing operations, excluding restructuring and impairment (\$)¹	17.03	17.78	19.42	19.30	22.03

All activities were in respect of continuing operations.

**Note**

<sup>1</sup> Diluted earnings per share from continuing operations, excluding restructuring and impairment is a non-GAAP measure.

A non-GAAP measure is a numerical measure of financial performance, financial position or cash flow that either:

includes, or is subject to adjustments that have the effect of including, amounts that are excluded in the most directly comparable measure calculated and presented under IFRS, or

excludes, or is subject to adjustments that have the effect of excluding, amounts that are included in the most directly comparable measure calculated and presented under IFRS.

Restructuring represents the effect on reported performance of initiating and enabling business changes that are considered major and that, in the opinion of management, will have a material effect on the nature and focus of Syngenta's operations, and therefore require separate disclosure to provide a more thorough understanding of business performance. Restructuring includes the incremental costs of closing, restructuring or relocating existing operations, and gains or losses from related asset disposals. Restructuring also includes the effects of analyzing and preparing for potential industry consolidation transactions, including costs associated with the ChemChina Tender Offer, as well as the effects of completing and integrating significant business combinations and divestments, including related transaction costs, gains and losses. Recurring costs of normal business operations and routine asset disposal gains and losses are excluded. Impairment includes impairment losses associated with major restructuring as well as impairment losses and reversals of impairment losses resulting from major changes in the markets in which a reported segment operates.

Further discussion on the reason for including disclosure of this and other non-GAAP measures is included in Appendix A at the end of the Operating and Financial Review and Prospects in Item 5.

Restructuring and impairment charges for 2016, 2015 and 2014 are analyzed in Note 6 to the consolidated financial statements in Item 18. In 2016, Diluted earnings per share from continuing operations, excluding restructuring and impairment also excludes the incremental effect of applying cash-settled share based payment accounting due to the share plan amendments related to the ChemChina Tender Offer described in Note 3 to the consolidated financial statements in Item 18.

Restructuring for 2013 and 2012 partly related to the program announced in 2011 to integrate global commercial operations for Crop Protection and Seeds in order to enable operational synergies from the commercial integration, additional cost savings from procurement and supply chain efficiencies and the presentation of an integrated offer to

growers. Restructuring for 2012 also related to the Operational Efficiency program announced in 2004 representing the costs of closure of certain manufacturing and research and development sites and refocusing of other continuing sites and also to the further phase of the Operational Efficiency program announced in 2007 to drive cost savings to offset increased expenditure in research and technology, marketing and product development in the growth areas of Seeds, professional products and emerging country markets.

A detailed reconciliation of net income and earnings per share before restructuring and impairment to net income and earnings per share according to IFRS is presented in Appendix A at the end of the Operating and Financial Review and Prospects in Item 5.

## **Risk Factors**

Syngenta's business, financial condition, results of operations or cash flows could suffer material adverse effects due to any of the following risks. Risks that are considered to be material are described below.

### **The resources Syngenta devotes to research and development may not result in commercially viable products**

Syngenta's success depends in part on its ability to develop new products. Research and development in the agribusiness industry is expensive and prolonged, and entails considerable uncertainty. The process of developing a novel crop protection product, plant variety or trait typically takes around ten years or more from discovery through testing and registration to initial product launch; this period varies considerably from product to product and country to country. Because of the stringent product performance and safety criteria applied in product development, compounds or biotechnological products currently under development may neither survive the development process nor ultimately receive the requisite regulatory approvals needed to market such products. Even when such approvals are obtained, there can be no assurance that a new product will be commercially successful. In addition speed in discovering, developing and protecting new technologies and bringing related products to market is a significant competitive advantage and research undertaken by competitors may lead to the launch of competing or improved products. Failure to predict and respond effectively to this competition could cause the Company's existing, new or candidate products to become less competitive, adversely affecting sales.

### **Syngenta may not be able to obtain or maintain the necessary regulatory approvals for some of its products, which could restrict its ability to sell those products in some markets**

Syngenta's products must receive regulatory approval before they can be marketed, but Syngenta may not be able to obtain such approvals. In most markets, including the United States and the European Union, crop protection products must be registered after being tested for safety, efficacy and environmental impact. In most of Syngenta's principal markets, after a period of time, Syngenta must also re-register its crop protection products and show that they meet all current standards, which may have become more stringent since the prior registration. For seeds products, in the European Union, a new plant variety will be registered only after it has been shown that it is distinct, uniform, stable and better than existing varieties. Delays in obtaining regulatory approvals to import crops grown from seed containing certain traits may influence the rate of adoption of new genetically modified products in globally traded crops. For further information regarding the impact on Syngenta of delays in obtaining regulatory approvals, see Note 25 to the consolidated financial statements in Item 18.

Legislation encouraging or discouraging the planting of specific crops can also harm Syngenta's sales. For example, concern and claims that increased use of glyphosate-based herbicides or biotechnology traits increases the potential for the development of glyphosate-resistant weeds or pests resistant to Syngenta's traits could result in restrictions on the use of glyphosate-based herbicides or seeds containing Syngenta's traits or otherwise reduce Syngenta's sales.

In addition, Syngenta's regulatory compliance could be affected by the detection of low level presence of biotechnology traits in conventional seed or products produced from such seed. Furthermore, the detection of biotechnology traits or crop protection residue level exceedances in the country of cultivation or import may affect Syngenta's ability to supply product, could affect exports of products produced or result in crop destruction or product recalls.

Regulatory standards and trial procedures are continuously changing. Responding to these changes and meeting existing and new requirements may be costly and burdensome. In addition, changing regulatory standards may affect Syngenta's ability to maintain its products on the market.



**Economic and/or financial market weakness may have a material adverse effect on Syngenta's results and financial position**

Commodity crop prices have historically been volatile and downturns in prices can indirectly affect Syngenta's results by adversely affecting the income and financial position of Syngenta's customers and of the users of Syngenta's products. This may result in reduced sales, competitive price pressure in Syngenta's markets and in slower collection of accounts receivable. A low availability of credit may also limit the amount of business Syngenta's customers and suppliers can transact with Syngenta, most notably customers and suppliers in Brazil and other parts of Latin America, which are experiencing economic problems. These occurrences may negatively impact Syngenta's business, results of operations or cash flows. Because of the high proportion of costs which are fixed in nature, Syngenta may not be able to compensate fully for these effects in the short term through measures such as reducing expenses.

While Syngenta views its current credit facilities and ability to access capital markets as adequate for its needs, difficulties in the banking sector in the future or illiquidity in the credit or capital markets may restrict Syngenta's ability to raise additional funds or increase the cost of such funding. See also "Syngenta will likely incur additional debt in connection with the ChemChina Tender Offer".

Significant declines in asset prices, discount rates or changes to long-term assumptions may cause funding levels in Syngenta's externally funded defined benefit pension plans to fall below stipulated regulatory levels. This may require Syngenta to pay additional contributions to restore funding to required levels. Please see Notes 2 and 22 to the consolidated financial statements in Item 18 for further information about Syngenta's defined benefit pension plans and the assumptions used to measure the related pension liabilities.

**Syngenta participates in an industry that is highly competitive and undergoing consolidation, which could increase competitive pressures**

Syngenta currently faces significant competition in the markets in which it operates. In most segments of the market, the number of products available to the grower is steadily increasing as new products are introduced, although this trend can be partly offset by the withdrawal of some products because they are not re-registered or are subject to voluntary range reduction programs. At the same time, certain products are coming off patent and are thus available to generic manufacturers for production and commercialization. As a result, Syngenta anticipates that it will continue to face significant competitive challenges.

The agribusiness industry has a long history of consolidation, and further consolidation is ongoing and is likely to occur, such as the proposed acquisition of Monsanto Co by Bayer AG and the proposed merger of El du Pont de Nemours & Co and The Dow Chemical Co, which may intensify competition for Syngenta. Syngenta's competitive position could suffer to the extent it is not able to expand its own resources either through consolidations, acquisitions, joint ventures or partnerships. For information on a proposal by ChemChina to acquire 100 percent of the ordinary

shares of Syngenta AG through a tender offer to shareholders, see History and Development of the Company in Item 4 and Note 3 to the consolidated financial statements in Item 18. In the future, Syngenta may not be able to find suitable companies to combine with, assets to purchase or joint venture or partnership opportunities to pursue. Even if Syngenta is able to identify desirable opportunities, it may not be able to enter into transactions on economically acceptable terms. If Syngenta does not successfully participate in continuing industry consolidation, its ability to compete successfully could be adversely affected and result in the loss of customers or an uncompetitive cost structure, which could adversely affect its sales and profitability.

**Syngenta's customers may be unable to pay their debts to Syngenta due to economic conditions**

Normally Syngenta delivers its products against future payment. Syngenta's credit terms vary according to local market practice, with credit terms for customers typically ranging from 30 to 180 days, except for customers in some emerging markets, where credit terms may range from cash on delivery to, in certain cases, 360 days or, in exceptional cases, longer. Syngenta's customers, particularly in developing economies and in economies experiencing an economic downturn, may be exposed to business, political or financial conditions impacting their ability to pay their debts, which could adversely affect Syngenta's results. While Syngenta uses barter and other security arrangements to reduce customer credit exposure in some emerging markets, it may still be exposed to risk of material losses from its credit exposure in these markets. For further information regarding Syngenta's exposure to losses due to economic conditions in certain geographic regions and the measures Syngenta is taking to limit this exposure, see Item 5 – Operating and Financial Review and Prospects – Foreign operations and foreign currency transactions.

**Changes in agricultural and certain other policies of governments and international organizations may prove unfavorable**

In many markets there are various pressures to reduce subsidies to growers, which may inhibit the growth in these markets of products used in agriculture. In addition, changes in governmental policies that impact agriculture may similarly inhibit the growth of markets for products used in agriculture. However, it is difficult to predict accurately whether, and if so when, such changes will occur. Syngenta expects that the policies of governments and international organizations will continue to affect the income available to growers to purchase products used in agriculture and, accordingly, the operating results of the agribusiness industry.

**Syngenta is subject to stringent environmental, health and safety laws, regulations and standards, which can result in compliance costs and remediation efforts that may adversely affect its operational and financial position**

Syngenta is subject to a broad range of increasingly stringent laws, regulations and standards in all of its operational jurisdictions. This results in significant compliance costs and can expose Syngenta to legal liability. These requirements are comprehensive and cover many activities including: air emissions, waste water discharges, the use and handling of hazardous materials, waste disposal practices, the clean-up of existing environmental contamination and the use of chemicals and genetically modified seeds by growers.

Environmental and health and safety laws, regulations and standards expose Syngenta to the risk of substantial costs and liabilities, including liabilities associated with assets that have been sold and activities that have been discontinued. In addition, many of Syngenta's manufacturing sites have a long history of industrial use. As is typical for businesses like Syngenta's, soil and groundwater contamination has occurred in the past at some sites, and may be identified at other sites in the future. Disposal of waste from its business at off-site locations also exposes Syngenta to potential remediation costs. Consistent with past practice, Syngenta is continuing to monitor, investigate and remediate soil and groundwater contamination at a number of these sites. Despite its efforts to comply with environmental laws, Syngenta may face remediation liabilities and legal proceedings concerning environmental matters.

Based on information presently available, Syngenta has budgeted expenditures for environmental improvement projects and has established provisions for known environmental remediation liabilities that are probable and capable of estimation. However, it cannot predict environmental matters with certainty, and the budgeted amounts and established provisions may not be adequate for all purposes. In addition, the development or discovery of new facts, events, circumstances, changes in law or conditions, including future decisions to close plants which may trigger remediation liabilities, could result in increased costs and liabilities or prevent or restrict some of Syngenta's operations. Please see Notes 2, 19 and 25 to the consolidated financial statements in Item 18 for further information

about Syngenta's environmental provisions and the assumptions used to measure the liabilities.

**Efforts by Syngenta to protect its intellectual property rights or defend against claims asserting that Syngenta has infringed the intellectual property rights of others may be unsuccessful**

Scientific and technological innovation is critical to the long-term success of Syngenta's businesses. However, third parties may challenge the measures that Syngenta takes to protect processes, compounds, organisms and methods of use through patents and other intellectual property rights and, as a result, Syngenta's products may not always have the full benefit of intellectual property rights. In addition, while Syngenta takes steps to prevent unauthorized access to and distribution of its intellectual property, it cannot ensure that unauthorized parties do not obtain access to and use such property.

In some countries the enforcement of intellectual property rights could become more challenging. In the area of plant related inventions some governments have signaled considerations to weaken intellectual property rights and related value capture systems. These developments could adversely affect Syngenta's income from genetic technology and seeds.

Third parties may also claim that Syngenta's products violate their intellectual property rights. Defending such claims, even those without merit, could be time-consuming and expensive. In addition, any such claim could also result in Syngenta having to enter into license arrangements, develop non-infringing products or engage in litigation that could be costly.

In addition, because of the rapid pace of technological change, the confidentiality of patent applications in some jurisdictions and/or the uncertainty in predicting the outcome of complex proceedings relating to ownership or protection scope of patents relating to certain emerging technologies, competitors may be issued patents unexpected by Syngenta. These patents could reduce the value of Syngenta's commercial or pipeline products or, to the extent they cover key technologies on which Syngenta has unknowingly relied, require that Syngenta seek to obtain licenses or cease using the technology, no matter how valuable to our business. Syngenta cannot assure it would be able to obtain such a license on acceptable terms.

Legislation and jurisprudence on patent protection in major markets such as the United States and the European Union is evolving and changes in laws could affect Syngenta's ability to obtain or maintain patent protection for its products.

**Problems encountered by Syngenta when implementing significant organizational changes could adversely affect the future performance of the Company**

Syngenta expects to continue to engage in restructuring activities to reduce operating costs, increase sales, or both. In addition, Syngenta may acquire or dispose of significant businesses, which would necessitate restructuring its operations. Syngenta may fail to adequately implement such restructuring activities in the manner contemplated, which could cause the restructuring activities to fail to achieve the desired results. Even if Syngenta does implement the restructuring activities in the manner contemplated, they may not produce the desired results. Accordingly, such restructuring activities may not reduce operating costs or increase sales, or may impact Syngenta's ability to attract and retain key talent. Failure to adequately implement significant restructuring activities could have a material adverse effect on Syngenta's business and consequently impact its financial position, results of operations and cash flows. For information on restructuring activities currently occurring at Syngenta, see Restructuring programs in Item 5 and Note 6 to the consolidated financial statements in Item 18.

**The China National Chemical Corporation tender offer and related matters could cause disruptions to Syngenta’s business or business relationships, or otherwise have an adverse impact on it**

On February 2, 2016, Syngenta entered into a definitive agreement (the “Transaction Agreement”) with ChemChina and China National Agrochemical Corporation, pursuant to which ChemChina agreed to cause a newly-incorporated company that is directly or indirectly controlled by ChemChina (the “Offeror”) to submit a tender offer for all publicly held ordinary shares of Syngenta and American Depositary Shares (“ADSs”) of Syngenta issued by the Bank of New York Mellon as depositary (the “ChemChina Tender Offer”). Under the terms of the Transaction Agreement, which was unanimously approved by Syngenta’s Board of Directors, the Offeror will offer the shareholders of Syngenta \$465 per ordinary share, to be paid in cash, plus allow a special dividend of CHF 5 to be paid by Syngenta once the ChemChina Tender Offer is unconditional and prior to its first settlement. For more details on the ChemChina Tender Offer, see Item 4. Information on the Company—History and Development of the Company—Investments and Divestments, Item 5. Operating and Financial Review and Prospects—Trend and Outlook—ChemChina Tender Offer, and Note 3 to the consolidated financial statements in Item 18. The Transaction Agreement, the ChemChina Tender Offer, and related matters could cause disruptions to Syngenta’s business or business relationships, or otherwise have an adverse impact on it.

For example:

The attention of Syngenta's management may be directed to ChemChina Tender Offer-related considerations and may be diverted from day-to-day operations of Syngenta's business.

Syngenta's employees or potential employees may experience uncertainty about their future roles with Syngenta, which might adversely affect Syngenta's ability to retain and hire key personnel and other employees.

Customers, suppliers or other parties with which Syngenta maintains business relationships may seek alternative relationships with third parties or seek to alter their business relationship with Syngenta.

Syngenta has incurred, and will likely continue to incur, costs, expenses and fees for professional services and other transaction-related costs.

Syngenta may be subject to legal or regulatory proceedings in connection with the ChemChina Tender Offer. Following the announcement of merger proposals, securities class action litigation is often brought against a company and its board of directors. Similar lawsuits may be filed against Syngenta related to the ChemChina Tender Offer and, if successful, could prevent the ChemChina Tender Offer from being completed within the expected timeframe or at all.

Syngenta may experience a downgrade in its credit ratings as a result of the ChemChina Tender Offer, and any such downgrade could limit its ability to access or increase its costs of accessing funds in the debt and capital markets.

Regulatory authorities who are still considering the ChemChina Tender Offer may impose conditions which require Syngenta to divest as yet unspecified parts of its existing business, including property, plant and equipment, inventories and product rights recognized as assets in the consolidated balance sheet at December 31, 2016. The proceeds that Syngenta can obtain from the disposal of any such items may not be sufficient to cover the full future value of the divested business to Syngenta or the carrying amount of the associated assets. This could lead to Syngenta reporting reduced sales in future periods and to recognition of additional asset impairments or divestment losses in future periods. Also, in prior years, Syngenta entered into certain agreements which give the respective counterparties early termination rights on a change of control of Syngenta. Syngenta has recognized payments made under certain of these agreements as intangible assets. Exercise of termination rights on change of control could also result in Syngenta reporting reduced sales, additional asset impairments or amortization expense in future periods. While Syngenta does not currently expect the amounts associated either with regulatory mandated divestments or counterparty termination to have a material impact on its results of operations or financial position, it cannot reasonably determine the assets impacted (if any) or estimate the amounts of such expenses and losses until it is informed of the decisions of the regulatory authorities or its counterparties, respectively.

**Syngenta can provide no assurance that the ChemChina Tender Offer will be consummated or consummated in the timeframe or manner currently anticipated**

There are a number of conditions to the ChemChina Tender Offer. In particular, the offer is contingent upon acceptance by shareholders and holders of ADSs owning in aggregate 67 percent of Syngenta's issued shares (including shares represented by ADSs) and the fulfilment of all necessary regulatory approvals, and Syngenta cannot provide assurance that either will occur. If the ChemChina Tender Offer is not completed, the price of Syngenta's ordinary shares may change to the extent that the current market price of Syngenta's ordinary shares may reflect an assumption that the ChemChina Tender Offer will be consummated. Pending the closing of the ChemChina Tender Offer, the Transaction Agreement also restricts Syngenta from engaging in certain actions without ChemChina's consent, which could prevent Syngenta from pursuing opportunities that may arise prior to the closing of the ChemChina Tender Offer. Any delay in closing or a failure to close could have a negative impact on Syngenta's business and stock price as well as its relationships with its customers, vendors or employees, as well as a negative impact on Syngenta's market position and ability to pursue alternative strategic transactions and/or its ability to implement alternative business plans, particularly in light of currently on-going industry consolidation and business combinations. See "Syngenta participates in an industry that is highly competitive and undergoing consolidation, which could increase competitive pressures".



In addition, if the ChemChina Tender Offer is not successful or does not become unconditional under certain circumstances, including, among others, for a reason attributable to (i) a material breach by Syngenta of the Transaction Agreement, (ii) the withdrawal or modification by Syngenta's Board of Directors of its recommendation for the ChemChina Tender Offer contemplated in the Transaction Agreement, (iii) the entry by Syngenta into, or the recommendation by its Board of, an alternative transaction or (iv) the public announcement of an alternative transaction prior to the termination of the Transaction Agreement and Syngenta entering into a definitive agreement relating to such alternative transaction within 12 months of such termination and such alternative transaction being consummated, Syngenta may be required to pay a termination fee of \$848 million. Additionally or alternatively, Syngenta may incur significant legal fees if a claim to payment of such termination fee is made which Syngenta in its reasonable judgment considers to be without merit and disputes, resulting in the claim being litigated and Syngenta requiring to defend its position in the litigation. Syngenta may be unable to recover those legal fees from the claimant regardless of whether or not Syngenta prevails in the litigation.

### **Syngenta will likely incur additional debt in connection with the ChemChina Tender Offer**

In connection with the ChemChina Tender Offer, Syngenta will likely incur additional indebtedness as part of ChemChina's financing of the acquisition, although the amount may be limited as described under "Item 5. Operating and Financial Review and Prospects—Trend and Outlook—ChemChina Tender Offer." Syngenta's ability to pay or to refinance such indebtedness will depend upon its future operating performance, which will be affected by general economic, financial, competitive, legislative, regulatory, business and other factors beyond its control. See "Item 5. Operating and Financial Review and Prospects—Liquidity and capital resources." A higher amount of indebtedness may impair Syngenta's ability to obtain additional financing and pursue business opportunities, weaken Syngenta's short- and long-term credit ratings, increase Syngenta's vulnerability to general economic and industry conditions and place it at a competitive disadvantage to competitors who are not as highly leveraged.

In addition, certain of Syngenta's existing debt could be subject to repayment upon a change of control. If Syngenta is unable to refinance any such debt obligations, it could be in default under the terms of the agreements governing such indebtedness, and the holders of such indebtedness could elect to declare all the funds borrowed thereunder to be due and payable, together with accrued and unpaid interest. For further details of the impact a change of control could have on Syngenta's financial debt see Note 3 to the consolidated financial statements in Item 18.

### **The value of Syngenta's intangible assets, including goodwill arising from acquisitions, may become impaired**

Syngenta has a significant amount of intangible assets, including goodwill, on its consolidated balance sheet and, if it continues to acquire businesses in the future, may record significant additional intangible assets and goodwill. As described in Note 2 and 29 to the consolidated financial statements in Item 18, Syngenta regularly tests its intangible assets for impairment. Upon completing its testing for 2016, which included subjecting the assumptions used in the testing to a sensitivity analysis, Syngenta recorded impairments of intangible assets totaling \$65 million. Otherwise,

Syngenta has concluded that no material intangible assets are impaired at December 31, 2016. However, unforeseen events that occur in the future may result in actual future cash flows for Syngenta's businesses being different from those forecasted. As a consequence, Syngenta's intangible assets could become impaired and the resulting impairment losses could have a material adverse impact on Syngenta's financial position and results of operations.

**Adverse outcomes in legal proceedings could subject Syngenta to substantial damages and adversely affect Syngenta's results of operations and profitability**

From time to time, Syngenta has been involved in lawsuits concerning intellectual property, biotechnology, torts, contracts, antitrust allegations and other matters, as well as governmental inquiries and investigations. Pending and future lawsuits and governmental inquiries and investigations may have outcomes that may be significant to Syngenta's results of operations in the period recognized or limit Syngenta's ability to engage in its business activities.

In addition, product liability and personal injury claims are a commercial risk for Syngenta, particularly as it is involved in the supply of chemical products which can be harmful to humans and the environment. Courts have levied substantial damages in the United States and elsewhere against a number of companies in the agribusiness industry in past years based upon claims for injuries allegedly caused by the use of their products. Syngenta has recorded reserves for potential liabilities where it believes the liability to be probable and reasonably estimable. However, actual costs may be materially different from this estimate. The degree to which Syngenta may ultimately be responsible for the particular matters reflected in the reserve is uncertain. While a global insurance program is in place, a substantial product liability, personal injury claim or other legal proceeding that is not covered fully or at all by insurance could have a material adverse effect on Syngenta's operating results or financial condition. For further information regarding claims against Syngenta, see Note 25 to the consolidated financial statements in Item 18.

**Consumer and government resistance to genetically modified organisms or crop protection chemicals may negatively affect Syngenta's public image and reduce sales**

Syngenta is active in the field of genetically modified organisms in the seeds area and in biotechnology research and development in seeds and crop protection. However, the high public profile of biotechnology and lack of consumer acceptance of products to which Syngenta has devoted substantial resources could negatively affect its public image and results. The current resistance from consumer groups, particularly in Europe, to products based on genetically modified organisms, because of concerns over their effects on food safety and the environment, may spread to and influence the acceptance of products developed through biotechnology in other regions of the world, which could limit the commercial opportunities to exploit biotechnology.

Syngenta also produces and markets crop protection chemical products, some of which are facing increasing resistance from consumer groups because of concerns over their alleged effects on food safety and the environment. These consumer groups frequently attempt to influence and in some cases litigate against governmental regulatory bodies to restrict the use of crop protection chemical products in their jurisdictions.

Actions by consumer groups and others may disrupt research and development or production of genetically modified seeds or crop protection chemicals. In addition, some government authorities have enacted, and others in the future might enact, regulations regarding genetically modified organisms or crop protection chemicals, which may delay and limit or even prohibit the development and sale of such products.

**Syngenta's results may be affected by climatic variations**

The agribusiness industry is subject to seasonal and weather factors, which make its operations relatively unpredictable from period to period. The weather can affect the presence of disease and pests in the short term on a regional basis and, accordingly, can affect the demand for crop protection products and the mix of products used (positively or negatively). The weather also can affect the quality, volume and cost of seeds produced for sale. Seed yields can be higher or lower than planned and significantly higher yields could lead to Syngenta purchasing more seeds from contract growers than can be sold during the limited product life of the seeds, which could lead to inventory provisions and write-offs.

**Currency exchange rate fluctuations or commodity price changes may adversely affect Syngenta's financial results**

Syngenta reports its results in US dollars; however a substantial portion of sales and costs are denominated in currencies other than the US dollar. Fluctuations in the values of these currencies, especially in the US dollar against the Swiss franc, British pound, Euro and Brazilian real, can have a material impact on Syngenta's financial results. Also, an increasing amount of Syngenta's sales are in emerging markets, where currency exchange rates can be volatile and where hedging products are expensive or of limited availability. Fluctuations in these emerging market countries' exchange rates against the US dollar may adversely impact Syngenta's results through recognition of currency losses. In addition, several countries in the Eurozone have been experiencing financial difficulties and/or unstable political environments. If a member state of the Eurozone were to decide to abandon the Euro as its lawful currency and introduce a new national currency, Syngenta could incur losses upon the lawful conversion to the new national currency of amounts receivable from customers in the member state that were originally denominated in Euros.

Syngenta is impacted indirectly, through its purchases of raw materials, by fluctuations in oil prices and directly by fluctuations in crop prices, where Syngenta purchases seeds from contract growers. Syngenta generally seeks to pass through in its sales prices the impact of increases in these commodity prices. However, the risk exists that future commodity price increases may not be able to be passed through in sales prices in this manner, which would reduce profit margin and could have a material adverse effect on Syngenta's results of operations, financial position and cash flows.

Hedging, even where possible at an economic cost, is generally only able to delay the impact of currency exchange rate fluctuations or commodity price changes.

**Syngenta maintains a single supplier for some raw materials, which may affect its ability to obtain sufficient amounts of those materials**

While Syngenta generally maintains multiple sources of supply and obtains supplies of raw materials from a number of countries, there are a number of instances where Syngenta has entered into single-source supply contracts or where Syngenta routinely makes spot purchases from a single supplier in respect of active ingredients, intermediates or raw materials for certain important products. These instances occur where there is sufficient commercial benefit and security of supply can be assured, or where there is no viable alternative source of supply. Such single supplier arrangements accounted for approximately 23 percent of Syngenta's purchases in 2016 of active ingredients, intermediates and raw materials used in Crop Protection products, as determined by cost. Syngenta's ability to obtain sufficient amounts of those materials may be adversely affected by the unforeseen loss of a supplier or from a supplier's inability to meet its supply obligations. The percentage of single supplier arrangements could increase in the future if consolidation were to occur among multiple supply sources.

Syngenta also has contracts with a number of suppliers for services, including information technology, facilities and fleet management, telecommunications and finance transaction processing. Although Syngenta limits major contracts only to large global suppliers providing such services as part of their core business and having a significant portfolio of clients receiving similar services, the sudden failure by one of these service providers to meet its obligations could prove disruptive to normal operations for a protracted period and adversely impact Syngenta's financial results.

**Syngenta conducts business in most countries of the world, including in certain high-risk countries, some of which have been identified by the US government as state sponsors of terrorism**

Syngenta conducts business in most countries of the world, some of which are subject to a high level of political or economic instability that could impact Syngenta's ability to continue to operate there. Acts of terror or war may impede Syngenta's ability to operate in particular countries or regions, and may impede the flow of goods and services between countries. Sanctions could be imposed by the US or other nations on countries deemed to be in violation of international protocols, which could impact Syngenta's business operations in the sanctioned countries.

In addition, Syngenta has minor operations in Iran and Sudan, which currently are identified by the US government as state sponsors of terrorism. Syngenta's operations in these countries are quantitatively immaterial, and it is Syngenta's belief that supporting agriculture in these countries is beneficial to their wider population, for whom food is often in short supply. However, certain investors may choose not to hold investments in companies that have operations of any size in these countries and several US states have enacted, and others may in the future enact, legislation requiring public entities with investments in companies with operations in these countries to disclose this fact or in some cases to divest these investments. Any such divestment is not currently expected to have a material impact on the value of Syngenta shares.

### **The vote in the UK to exit the European Union could adversely affect Syngenta**

Sales in the UK are not a significant percentage of total Syngenta sales, but Syngenta houses large research and manufacturing sites in the UK and accordingly has a large exposure to the British pound sterling. On June 23, 2016, voters in the UK voted in favor of exiting the European Union in a national referendum, following which the British pound sterling depreciated against most major currencies. At this time, Syngenta is not able to predict the impact that this vote will have on the economy in Europe, including in the UK, or on the British pound sterling or other European exchange rates. Weakening of economic conditions or economic uncertainties tend to harm Syngenta's business, and if such conditions emerge in the UK or in the rest of Europe, they may have a material adverse effect on Syngenta's results of operations, financial position and cash flows from the Europe, Africa and Middle East region.

### **Natural disasters could adversely affect Syngenta's business**

Natural disasters could affect Syngenta's or its suppliers' manufacturing and production facilities, which could affect Syngenta's costs or ability to meet supply requirements. Natural disasters could also affect Syngenta's customers, which could affect Syngenta's sales, Cost of goods sold or its ability to collect receivables due from customers. Syngenta's corporate headquarters and other facilities are located near an earthquake fault line in Basel, Switzerland. Additionally, some of Syngenta's other significant facilities are located in areas where earthquakes, hurricanes or flooding are possible. The occurrence of a major earthquake, hurricane or flood at a Syngenta facility could result in loss of life, destruction of facilities and/or business interruption, which could have a material adverse effect on Syngenta's business. In addition, the occurrence of a pandemic in locations where Syngenta has significant operations or sales also could have a material adverse effect on Syngenta's results of operations, financial position and cash flows.

### **An increase in Syngenta's group tax rate could occur, which would adversely affect its financial results**

The effective tax rate on Syngenta's earnings depends largely on the mix of business activities and consequent taxable profit in countries in which Syngenta operates. Syngenta benefits from the fact that a portion of its earnings is taxed at

more favorable rates in some jurisdictions outside Switzerland. Future changes in the mix of business activities, or in tax laws or their application with respect to matters such as transfer pricing, intra-group dividends, controlled companies or a restriction in tax relief allowed on the interest on intra-group debt, could increase Syngenta's effective tax rate and adversely affect its financial results. Governments following the release of OECD catalogue of recommended actions under the BEPS initiative (Base Erosion and Profit Shifting) are expected to increasingly require companies to provide greater transparency on the allocation of taxable profits, including the ongoing development of a new multilateral standard on automatic exchange of information. These developments may lead governments to restrict or disallow currently legitimate and accepted tax planning strategies and may result in an increase in Syngenta's effective tax rate. Also, the Swiss Federal government had proposed changes to align Swiss corporate taxation with international recommendations but voters in Switzerland voted against those proposals in a national referendum on February 12, 2017. As a result, uncertainty will continue about the future level of Swiss corporate income taxes that may apply to Syngenta until revised proposals are put forward and gain acceptance. Syngenta has several open tax years in many jurisdictions, where tax calculations and payments may be subject to adjustment. These matters are discussed in Notes 2 and 25 to the consolidated financial statements in Item 18.



**Significant breaches of data security or disruptions of information technology systems could adversely affect Syngenta's business**

Syngenta's business is increasingly dependent on critical, complex and interdependent information technology systems, including Internet-based systems, to support business processes as well as internal and external communications. The size and complexity of Syngenta's computer systems make them potentially vulnerable to data security breaches, whether by employees or others, which may result in unauthorized persons getting access to sensitive data. Such data security breaches could lead to the loss of trade secrets or other intellectual property. In addition, Syngenta's systems are potentially vulnerable to breakdown, malicious intrusion and computer viruses, which could disrupt production, order processing and shipping, cash receipts and disbursement processes, accounting and reporting processes, or other key business processes. Like most major corporations, Syngenta is the target of cyber-attacks from time to time. To date, Syngenta has not experienced any material financial impact, changes in the competitive environment or business operations that it attributes to these attacks.

Although Syngenta's management does not believe that Syngenta has experienced any material losses to date related to security breaches, including cybersecurity incidents, there can be no assurance that it will not suffer such losses in the future. Syngenta actively manages the risks within its control that could lead to business disruptions and security breaches. As these threats continue to evolve, particularly around cybersecurity, Syngenta may be required to expend significant resources to enhance its control environment, processes, practices and other protective measures. Despite these efforts, such events and a loss of trade secrets or other intellectual property, or systems-related disruption could have a material adverse effect on Syngenta's business, financial position, results of operations or cash flows.

**Syngenta's share price may be volatile and subject to sudden and significant drops**

The trading price of Syngenta shares and American Depositary Shares ("ADSs") has been, and could in the future continue to be, subject to significant fluctuations in response to variations in Syngenta's financial performance, regulatory and business conditions in its industry, general economic trends and other factors, including the ChemChina Tender Offer and related matters, some of which are unrelated to the operating performance of Syngenta.

**If you hold Syngenta ADSs it may be more difficult for you to exercise your rights**

The rights of holders of Syngenta ADSs are governed by the deposit agreement between Syngenta and The Bank of New York Mellon. These rights are different from those of holders of Syngenta shares in several respects, including the receipt of information, the receipt of dividends or other distributions, the exercise of voting rights and attendance at shareholders' meetings. As a result, it may be more difficult for a holder of Syngenta ADSs to exercise those rights.



## **Item 4 — Information on the Company**

### **History and Development of the Company**

#### **The Company**

Syngenta AG, a Swiss “Aktiengesellschaft”, was formed on November 12, 1999 under the laws of Switzerland. Syngenta’s business operations were created in 2000 by Novartis and AstraZeneca through an agreement to spin off and merge the Novartis agribusiness and the AstraZeneca agrochemicals business to create a dedicated agribusiness company whose shares were then the subject of a global offering. Both the Novartis and AstraZeneca agribusinesses had existed since the 1930’s through a variety of legacy companies.

Syngenta is domiciled in and governed by the laws of Switzerland. It has its registered office and principal business office at Schwarzwaldallee 215, 4058 Basel, Switzerland. The telephone number of Syngenta is +41-61-323-1111.

Syngenta became a publicly listed company in 2000. At December 31, 2016, the company was listed on the SIX Swiss Exchange under the symbol SYNN and the New York Stock Exchange under the symbol SYT.

## Investments and Divestments

Information on acquisitions, divestments and other significant transactions completed by Syngenta during each of the years ended December 31, 2016, 2015 and 2014 is included in Item 5 and in Note 3 to the consolidated financial statements in Item 18.

As of March 23, 2016, CNAC Saturn (NL) B.V. (“the Offeror”), a subsidiary of China National Chemical Corporation, a state-owned enterprise of the People’s Republic of China, launched public tender offers in Switzerland and in the United States to acquire all the publicly held Ordinary Shares and, in the U.S. offer, also all American Depositary Shares (ADSs) of Syngenta AG (“the ChemChina Tender Offer”) for \$465 per Ordinary Share in cash. Syngenta and its Board of Directors have agreed to support the ChemChina Tender Offer. ChemChina has announced that, as of 5:00 p.m., New York City time, on December 16, 2016, approximately 19,222,302 Syngenta AG Ordinary Shares (including those represented by ADSs) had been validly tendered in, and not withdrawn from, the ChemChina Tender Offer. The Main Offer Period has been extended until March 2, 2017, with further extension likely to follow until all offer conditions are fulfilled. At such time, the Offeror will extend the ChemChina Tender Offer for the last time by a period of up to 20 trading days. The ChemChina Tender Offer is conditional among other things on acceptance by shareholders owning 67 percent of Syngenta AG issued shares and on regulatory approval by the competent merger control and other authorities. For more details on the ChemChina Tender Offer, see Note 3 to the consolidated financial statements in Item 18.

## Industry Overview

Syngenta is a world leading agribusiness operating in the crop protection, seeds and lawn and garden markets. Crop protection chemicals include herbicides, insecticides, fungicides and seed treatments to control weeds, insects and diseases in crops, and are essential inputs enabling growers around the world to improve agricultural productivity and food quality. In Seeds, Syngenta operates in the high value commercial sectors of field crops (including corn, oilseeds, cereals and sugar beet) and vegetables. The Lawn and Garden business provides professional growers and consumers with flowers, turf and landscape, and professional pest management products.

## Syngenta's Business

Syngenta's business is divided into five reporting segments: the four geographic regions, Europe, Africa and Middle East, North America, Latin America and Asia Pacific, comprising the Crop Protection and Seeds businesses; and the global Lawn and Garden business. These segments are described in greater detail below.

The following information, which appears in other parts of this Form 20-F, is incorporated herein by reference:

- Item 5 – Operating and Financial Review and Prospects – Results of operations, the tabular information regarding:

- sales and operating income for the Crop Protection and Seeds businesses and for each of the four geographic segments therein;

- sales by product line for the Crop Protection and Seeds businesses; and

- sales and operating income for the global Lawn and Garden business.

Sales and operating income for the segments, as presented in Item 5 of this report, are seasonal. Results for the Europe, Africa and Middle East, North America and global Lawn and Garden segments are weighted towards the first half of the calendar year, which largely reflects the northern hemisphere planting and growing cycle. Results for the Latin America segment are weighted towards the second half of the calendar year, which largely reflects the southern hemisphere planting and growing cycle. Results for the Asia Pacific segment are more uniform throughout the year.

References in this document to Syngenta's competitive position, identified by terms such as "world-leading", "leader", "leading", "largest", "broadest", or similar expressions are based where possible on global agrochemical and biotechnology

industry information provided by a third party or on information published by major competitors and are supplemented by Syngenta internal estimates.

## **Regional Business**

Based on the combined strength of its Crop Protection and Seeds businesses, Syngenta regards itself as well positioned to address the increasingly complex challenges facing farmers, including through the development of integrated offers on a crop basis. The Crop Protection and Seeds businesses are structured into 18 territories grouped under the four geographic regions (Europe, Africa and Middle East, North America, Latin America and Asia Pacific). Under this regional business, Syngenta is developing an expanded product pipeline and increasing its reach into new markets with new products, solutions and local go-to-market strategies for the key global crops.

## **Description of Products**

### **Crop Protection**

Syngenta is active in herbicides, especially for corn, cereals, soybean and rice; fungicides mainly for corn, cereals, fruits, grapes, rice, soybean and vegetables; insecticides for fruits, vegetables and field crops; and seed care, primarily in corn, soybean, cereals, oilseeds and cotton. Herbicides are products that eliminate, prevent the growth of, or reduce weeds that compete with the crop for nutrients, light and water. Herbicides can be subdivided into (i) selective herbicides, which are crop-specific and control weeds without harming the crop and (ii) non-selective herbicides, which reduce or halt the growth of all vegetation with which they come into contact. Fungicides are products that prevent and cure fungal plant diseases that affect crop yield and quality. Insecticides are products that control chewing pests such as caterpillars and sucking pests such as aphids, which reduce crop yields and quality. Seed treatment products are fungicides, insecticides and nematicides applied to the seed and used to protect growth during the early stages of a crop's life. To complement traditional crop protection chemistry, Syngenta is also investing in abiotic stress management and biocontrol solutions.

Syngenta has a broad range of crop protection products, making it number one or two in all of its target sectors, underpinned by strong worldwide market coverage. Over 75 percent of Syngenta's annual sales of Crop Protection products come from products marketed in all four regions.

### **Seeds**

Syngenta produces and markets seeds and plants that have been developed using advanced genetics and related technologies. Syngenta sells seed products in all geographic territories.

Syngenta's seed portfolio is one of the broadest in the industry, offering over 200 product lines and over 5,000 varieties of Syngenta's own proprietary genetics. Syngenta divides its seed products into field crops, such as corn, soybean, rice, cereals, oilseeds and sugar beet, and vegetables. Syngenta has a significant market share in vegetables, corn, soybean, cereals, sugar beet and sunflower. Seed products are derived from a germplasm pool and trait portfolio and developed further utilizing sophisticated plant-breeding methods. In addition to income from sales of branded seeds, Syngenta generates income from licensing arrangements.

### **Integrated Offers**

The development of integrated offers involves combining Syngenta's crop protection and seeds products, and in some instances combining Syngenta's products with third party products and services, to provide growers with innovative ways to improve crop yields and quality and help them manage associated risks to their own business. These offers, which are targeted at growers in emerging as well as developed markets, include integrated crop management programs using existing and newly developed crop protection solutions, genetics, innovative genetically modified and native trait packages, growing protocols and, in some cases, mitigate against the effects of weather and changes in commodity prices or foreign currency exchange rates.



## Key Marketed Products and Services

### Crop Protection

#### Selective herbicides

Syngenta has a broad range of Selective herbicides that control grasses and broad-leaved weeds and are applicable to most crops, with a special emphasis on corn, soybean and cereals.

**Atrazine** (AATREX®/GESAPRIM®) acts mainly against broad-leaved weeds. Although Atrazine was introduced in 1957 and has been off patent for a number of years, it remains an important product for broad-leaved weed control in corn, sorghum and sugarcane. Atrazine is marketed in North America, Latin America, Asia Pacific, Africa and the Middle East.

**Clodinafop** (TOPIK®/HORIZON®/ CELIO®/ DISCOVER®) is a grass herbicide which provides a broad spectrum of annual grass control in wheat and barley. To further increase crop safety in cereals, the active substance clodinafop is mixed with the safener cloquintocet, which selectively enhances the degradation of clodinafop in cereals but not in grass weeds. Clodinafop is marketed in all regions.

**Fluazifop-P-Butyl** (FUSILADE®) is one of the leading products for post-emergence control of grass weeds. It is registered for use in over 60 crops with major outlets in cotton and soybeans in the United States and Brazil; and sugar beet and oilseed rape in Europe. The selective action of FUSILADE® allows growers to target applications when grass weeds appear, allowing cost-effective weed control. Fluazifop-P-Butyl is marketed in all regions.

**Fomesafen** (FLEX®) provides pre- and post-emergence control and quick eradication of a wide range of broadleaf weeds to protect yields in soybeans, dry beans and other legume crops and cotton. Fomesafen is marketed in all regions.

**Mesotrione** (CALLISTO® family) is a pre- and post-emergent herbicide with a very broad spectrum against key broad-leaved weeds in corn and sugar cane. Mesotrione is marketed in all regions.

**Pinoxaden** (AXIAL®) is an innovative post-emergent selective grassweed herbicide, for use in both wheat and barley. It offers the grower efficacy, selectivity and flexibility. Pinoxaden is marketed in all regions.

**S-metolachlor** (DUAL GOLD®/ DUAL MAGNUM®) is a lower dose rate replacement for metolachlor for grass weeds control. Its use has not only reduced the amount of product sprayed on fields, thus responding to the pesticide

reduction goals established by many countries, but has also decreased the energy required to produce, transport and store the product, as well as decreasing total packaging material. S-metolachlor is well tolerated and can be safely used on more than 70 different crops. It manages difficult to control glyphosate-resistant weeds and is a key component in Syngenta's Early Season Weed Management portfolio. S-metolachlor is marketed in all regions.

Non-selective herbicides

Syngenta has a series of Non-selective herbicides, which reduce or halt the growth of all vegetation with which they come in contact.

**Diquat** (REGLONE®), a non-selective contact herbicide, is mainly used as a desiccant to allow easier harvesting and reduce drying costs. Diquat is marketed in all regions.

**Glyphosate** (TOUCHDOWN®/TRAXION®/ZAPP®), a non-selective herbicide with systemic activity, is Syngenta's offer in the market for glyphosate-based products. Glyphosate is registered in over 90 countries, including for use on herbicide tolerant corn and soybeans in the United States and Brazil.

**Paraquat** (GRAMOXONE®), first introduced in 1962, is one of the world's largest selling non-selective contact herbicides and a vital tool to manage increasing weed resistance challenges worldwide. It has been a key product in the development of minimum tillage cropping systems, the adoption of which continues to increase because of benefits such as the reduction of soil erosion. Paraquat is marketed in North America, Latin America, Asia Pacific, Africa and the Middle East.

## Fungicides

Syngenta has a broad range of Fungicides that prevent and cure fungal plant diseases that affect crop yield and quality.

**Azoxystrobin** (AMISTAR® Technology), a strobilurin fungicide, is the world's best-selling proprietary fungicide and Syngenta's largest selling product. It is registered for use in approximately 100 countries and for approximately 120 crops. In Brazil, it is used to control Asian rust in soybeans in a mixture branded as PRIORI® Xtra. Mixtures of AMISTAR® Technology with triazoles (cyproconazole, difenoconazole or propiconazole) or chlorothalonil have been developed to combat diseases in cereal crops, primarily in Europe. Mixtures are also used in corn (QUILT®), rice, vegetables and specialty crops (AMISTAR® Top, AMISTAR® Xtra). AMISTAR® Technology is marketed in all regions.

**Chlorothalonil** (BRAVO®) is a world-leading fungicide. With its multi-site mode of action, it is a good partner for most fungicides such as AMISTAR® Technology or isopyrazam, mefenoxam, and mandipropamid and is increasingly being integrated into disease control programs using multiple products. Chlorothalonil is used in all major crops and in lawn and garden, and is marketed in all regions.

**Cyproconazole** (ALTO®) is a systemic fungicide with broad-spectrum activity, especially against rust and leaf spot in cereals, soybean, sugar beet and coffee. Syngenta mainly sells cyproconazole in mixtures with other fungicides principally in Latin America and Europe, Africa and Middle East. Cyproconazole is marketed in all regions.

**Cyprodinil** (UNIX®/STEREO®<sup>1</sup>/SWITCH®/CHORUS®) is a powerful fungicide for use on cereals. It is used to control eyespot, powdery mildew and leaf spot diseases. Because it has a specific mode of action, it is a particularly effective solution where resistance to other fungicides has developed. CHORUS® and SWITCH® are cyprodinil-based formulations which are used on pome fruit such as apples and pears to control leaf spots diseases and on grapes and vegetables to control botrytis. Cyprodinil is marketed in all regions.

**Difenoconazole** (SCORE®, ARMURE®, TASPAs®) is a systemic triazole fungicide with broad-spectrum activity against plant diseases, particularly leaf spots of pome fruit, vegetables, soybeans, rice and plantation crops. Long-lasting protective and strong curative activity make it well suited for threshold based plant disease management whereby the plant is treated only when the development of the disease has passed a certain point. Target crop pathogens include *Cercospora*, *Alternaria*, *Septoria* and other leaf spots, powdery mildews and scabs as well as seed-borne diseases. Difenoconazole is marketed in all regions.

**Fluazinam**<sup>2</sup> (SHIRLAN<sup>®</sup>) is a fungicide for control of potato blight. Fluazinam is marketed in Europe, Africa and Middle East, North America and Latin America.

**Isopyrazam** (BONTIMA<sup>®</sup>, SEGURIS<sup>®</sup>, REFLECT<sup>®</sup>) is a broad-spectrum fungicide for cereals, banana, pome fruit, oilseed rape and vegetables which complements Syngenta's existing product range and provides additional resistance management opportunities. Isopyrazam is marketed in Europe, Africa and Middle East, Latin America and Asia Pacific.

<sup>1</sup> Pursuant to commitments given to the European Commission, Syngenta granted an exclusive right to Makhteshim Agan Industries Ltd. (now Adama Ltd.) to use and sell STEREO<sup>®</sup> formulation for use on cereals for the duration of its registration in Denmark, Finland and Sweden.

<sup>2</sup> Fluazinam is distributed, but not manufactured, by Syngenta.

**Mandipropamid** (REVUS®) is currently registered in almost 100 countries and is used on fruits and vegetables to combat late blight and downy mildew. Mandipropamid is marketed in all regions.

**MEFENOXAM**™ (RIDOMIL GOLD®/FOLIO GOLD®/SUBDUE®) is used for the control of air-borne, seed- and soil-borne diseases caused by fungi such as pythium damping-off, late blight, pink rot and downy mildews. It is used on a wide variety of crops, including field, vegetable, oil and fiber crops. MEFENOXAM™ is marketed in all regions.

**Propiconazole**<sup>3</sup> (TILT®/BANNER®) is a foliar fungicide for broad spectrum disease control in cereals, bananas, rice, corn, peanuts, sugar beet, turf and other food and non-food crops. Propiconazole provides a strong curative and protective activity against a wide range of plant pathogens including powdery mildews, rusts and other leaf spot pathogens. Propiconazole is marketed in all regions.

**SOLATENOL**™ (ELATUS®/APROVIA™) belongs to the carboxamide chemistry with SDHI mode of action and is combined with AMISTAR® Technology to produce ELATUS®, a foliar fungicide for use on soybean Asian Rust disease, which is the largest disease problem faced by farmers in Latin America. ELATUS® was introduced in Paraguay and Bolivia in 2013 and Brazil in 2014. It was also launched in Argentina in 2015 on peanuts. First sales in the USA and France occurred in the 2016 season and sales are expected to start in other key European markets in the 2017 season.

**Trinexapac-ethyl** (MODDUS®) is a plant growth regulator. In cereals it reduces growth so that treated plants stay shorter and have stronger stems, enhancing their ability to withstand storms and remain upright until harvest. In sugar cane it is a yield enhancer and harvest management tool. Trinexapac-ethyl is marketed in all regions.

## Insecticides

Syngenta has a broad range of Insecticides that control chewing pests such as caterpillars and sucking pests such as aphids, which reduce crop yields and quality. These products are applied either to the soil or sprayed onto the foliage.

**Abamectin** (VERTIMEC® or AGRIMEC®/AGRI-MEK®) is produced by fermentation. This potent insecticide and acaricide is used at very low dose rates against mites, leafminers, nematodes and some other insects in fruits, vegetables, cotton and ornamentals. Abamectin rapidly penetrates the plants and is a useful product for integrated pest management. Abamectin is marketed in all regions.

**Chlorantraniliprole mixtures** (DURIVO®/AMPLIGO®/VIRTAKO®/VOLIAM FLEXI®/VOLIAM TARGO®). Chlorantraniliprole, licensed from E.I. DuPont de Nemours and Co (“DuPont”) for sale in mixtures with Syngenta active ingredients, is a chemical of the diamide class characterized by a unique mode of action and outstanding activity on all major lepidoptera pests in soybean, rice, vegetables, corn, fruits and cotton. Chlorantraniliprole

mixtures are marketed in all regions.

***Emamectin Benzoate*** (PROCLAIM® or AFFIRM®) provides control of caterpillars on vegetables, cotton and fruits, combining a unique mode of action with extremely low use rates and is compatible with integrated pest management. It has been launched in major markets such as Japan, Korea, the United States, Mexico, Australia and India and is under registration in a number of other countries. Emamectin Benzoate is marketed in all regions.

<sup>3</sup> Pursuant to commitments given to the European Commission, Syngenta granted an exclusive right to Makhteshim Agan Industries Ltd. (now Adama Ltd.) to use and sell its TILT® 250EC and TILT® 6.25GL formulations for use on cereals in Denmark, Finland and Sweden for the duration of their registrations.

**Lambda-cyhalothrin** (KARATE®/ICON®) is one of the world's most potent pyrethroids and is used on a wide range of crops to control chewing and sucking insects. Lambda-cyhalothrin is marketed in all regions.

**Lufenuron** (MATCH®) is an insect growth regulator that controls caterpillars in corn, potatoes, cotton, vegetables and fruits. It is a leading insecticide in terms of sales in its chemical class. Lufenuron is marketed in Europe, Africa and Middle East, Latin America and Asia Pacific.

**Thiamethoxam** (ACTARA®/ENGEO®) is highly active at low use rates against a broad spectrum of soil and sucking insects. It is highly systemic and well suited for application as a foliar spray, drench or drip irrigation. It is fast acting, works equally well under dry and wet conditions and has a favorable safety and environmental profile. It has been developed for a broad range of crops, including vegetables, potatoes, cotton, soybeans, rice, pome fruits and stone fruits (such as peaches or plums). Thiamethoxam is marketed in all regions<sup>4</sup>.

**Tefluthrin** (FORCE®) is a premium corn granular and liquid insecticide that provides broad-spectrum soil insect control and residue activity. Tefluthrin is marketed in all regions.

### Seed Treatment

Syngenta Seedcare is a global leader in the seed treatment market and differentiates itself by providing comprehensive offers consisting of products, application and services to its customers: seed companies; the distribution channel; and growers.

The use of Syngenta seed treatment products is an effective, efficient, and targeted method to protect seedlings and young plants against diseases, insects and nematodes during the period when they are most vulnerable, the first 30 days after planting. Syngenta's broad range of fungicides, insecticides, nematicides and abiotic stress management seed treatments allows it to provide a modern portfolio of safe and highly effective products. As seeds increase in value, seed protection becomes more important as growers are seeking to obtain one viable plant from each seed.

**Abamectin** (AVICTA®) is a seed treatment for the control of nematodes in cotton, corn and soybeans. Abamectin is currently marketed in North America, Latin America and South Africa.

**Difenoconazole** (DIVIDEND®) is active against a broad range of diseases including bunts, smut and damping-off on cereals and oilseed rape. This product is highly systemic and provides a long lasting, high-level effect. It is safe for seeds and seedlings and provides for a faster germination than other products in the market. Difenoconazole is marketed in all regions.

**Fludioxonil** (MAXIM® or CELEST®) is a contact fungicide with residual activity. Derived from a natural compound, fludioxonil combines excellent crop tolerance with low use rates. Its spectrum of targets includes seed

and soil-borne diseases like damping-off, bunt, smut, fusarium, snow mold and leaf stripe on cereals. Used alone or in mixtures with other active substances, it is also effective on corn, soybean, rice, cotton, potatoes, vegetables and peas. Fludioxonil is marketed in all regions.

**MEFENOXAM**<sup>TM</sup> (APRON<sup>®</sup>XL) is used for the control of seed and soil-borne diseases caused by fungi such as pythium, phytophthora and downy mildews. It is used worldwide on a wide variety of crops, including field crops, vegetables, oil and fiber crops. MEFENOXAM<sup>TM</sup> is also used as a mixing partner for seed protection at low use rates. MEFENOXAM<sup>TM</sup> is marketed in all regions.



*Pasteuria spp* (CLARIVA®) is an endospore-forming bacterium that is a natural control for nematodes offering immediate infection, which stops them from feeding and reproducing and ultimately kills them. CLARIVA® is currently registered for sale and use in the USA for soybeans and sugar beet.

*Sedaxane* (VIBRANCE®) is a proprietary fungicide based on the SDHI mode of action combining excellent control against a broad range of seed- and soil-borne diseases with ideal mobility in the soil. This gives long-lasting protection for the entire root system, resulting in higher crop productivity in a broad range of crops including cereals, soybean, oilseed rape, corn, rice, sugar beet, sunflower, cotton and potatoes. Sedaxane received broad registration in 2014 and is marketed in all regions.

*Thiamethoxam* (CRUISER®) is an insecticide with systemic activity in a wide range of crops including cereals, cotton, soybeans, canola, sugar beet, corn, sunflower and rice. Its properties are such that it provides a consistent performance under a wide range of growing conditions. Thiamethoxam acts against a wide range of early season sucking and chewing, leaf feeding and soil-dwelling insects such as aphids, thrips, jassids, wireworms, flea beetles and leafminers. Thiamethoxam is marketed in all regions<sup>4</sup>.

In addition to its leading product portfolio, Seedcare delivers comprehensive technical and application support services to its customers through its network of 12 Seedcare Institutes, located in key markets around the world, which enables quality seed treatment application onto seeds.

## Seeds

### Field crops

*Cereals* (NK®, AGRIPRO® COKER™, RESOURCE SEEDS INC., C.C. BENOIST™) wheat and barley varieties combine high yield, superior disease resistance and agronomic characteristics coupled with excellent grain quality for the milling, malting and animal feed industries. Cereals are sold mainly in Europe and North America. In wheat, a number of new products have been launched across the spring and winter wheat ranges with high yield, good disease tolerance and high bread making qualities. These new wheat seeds are marketed mainly in Europe and North America.

*Corn* (GOLDEN HARVEST®, NK®, SPS®, INNOTECH™, CATALYST® and PHOENIX®) hybrids are sold by Syngenta via established distribution channels covering a full range of countries and maturities. In addition, hybrids and inbred lines are licensed to other seed companies in the US via Greenleaf Genetics LLC. Syngenta hybrids are characterized by their high yield potential, stability of performance, uniformity and vigor. In approved markets, many of Syngenta's elite hybrids are offered as stacked trait versions that include AGRISURE VIPTERA®, and AGRISURE DURACADE®, which provide built-in insect protection against corn borers and corn rootworms and tolerance to glyphosate herbicide. Syngenta also offers seeds with AGRISURE ARTESIAN® technology, which improves the corn plant's water use efficiency. Competitive hybrids developed through marker assisted breeding, are sold for silage and grain markets. Different hybrids of corn seeds are marketed in all regions.

ENOGEN<sup>®</sup> is a *corn* seed technology incorporating a corn amylase trait that is the first genetically modified output trait in corn for the US ethanol industry. By enabling expression of an optimized alpha-amylase enzyme directly in corn, dry grind ethanol production can be improved in a way that can be easily integrated into existing infrastructure.

*Oilseeds* (SYNGENTA<sup>®</sup>, NK<sup>®</sup>, SPS<sup>®</sup>) include sunflower and oilseed rape. Syngenta sunflower seed hybrids are bred for high yield as well as heat stress tolerance, disease resistance, broomrape tolerance, herbicide tolerance and oil quality. Syngenta's oilseed varieties combine high yield genetic superiority and herbicide tolerance, which give growers flexibility in their weed control. The company's oilseed rape varieties and hybrids offer good oil production and plant health. Sunflower seeds are sold primarily in Russia, Ukraine, Southeast Europe and Argentina while the major markets for oilseed rape are Europe and Canada. Syngenta entered the canola seeds business in Canada in the 2013/2014 growing season and currently is marketing four high yielding hybrids with herbicide tolerance provided by the Genuity<sup>®</sup> Roundup Ready<sup>®5</sup> trait. This new hybrid barterseed portfolio is being commercialized as part of an integrated cross-crop solution across the whole farm targeting canola, cereals and pulses.

<sup>4</sup> The European Commission suspended effective December 1, 2013 the use of neonicotinoid insecticides on bee attractive crops before and during flowering due to the alleged impact of these products on bee populations. The suspension impacts sales of Syngenta's thiamethoxam products in European Union markets, primarily the seed treatment CRUISER<sup>®</sup> in corn, sunflower and oilseed rape crops. Directly impacted annual sales of Syngenta's thiamethoxam products in European Union markets at the time use of the product was suspended were less than \$100 million. On August 27, 2013, Syngenta submitted a legal challenge to the European Commission's decision to suspend the use of thiamethoxam on bee attractive crops, which is on-going. Thiamethoxam continues to be used in European Union markets as CRUISER<sup>®</sup> in sugar beet, a non-bee attractive crop, and in potatoes and vegetable crops in glass houses, and as ACTARA<sup>®</sup>/ENGEO<sup>®</sup> on all crops after flowering.

**Rice** (FRONTLINE®) In 2012, Syngenta acquired Devgen, which significantly broadened its rice portfolio with the addition of the FRONTLINE® brand. Under Rice Seeds global brand FRONTLINE®, new hybrids are introduced with improved yield, seed productivity, grain quality, and tolerance to biotic and abiotic stress factors. Rice is marketed in Asia Pacific.

**Soybean** (SYNGENTA®, NK®, SPS®) varieties combine high yield genetic superiority, insect control and herbicide tolerance, which give growers flexibility in their insect and weed control. The major markets for soybean are in North America and Latin America. Syngenta also licenses varieties of soybean to other seed companies in the USA via Greenleaf Genetics LLC.

**Sugar beet** (SYNGENTA®, HILLESHÖG®, MARIBO®) seeds are bred to develop high yielding varieties with good stress and disease tolerance, high sugar content, low soil tare and improved juice purity. The major markets for sugar beet seeds are in Europe and North America.

**Sugar beet** varieties with the Genuity® Roundup Ready®5 herbicide tolerance trait feature high sugar content and resistance to multiple diseases across a number of geographies. These sugar beet seeds are marketed in the USA and Canada.

### Vegetables

Vegetables brands include ROGERS™, S&G®, ZERAIM GEDERA® and DAEHNFELDT®. Syngenta offers a full range of vegetable seeds with an assortment of more than 20 species and more than 2000 varieties, including beans, broccoli, cabbage, carrots, cauliflower, cucumbers, lettuce, melons, onions, okra, peas, peppers, spinach, squash, sweet corn, tomatoes and watermelons. Syngenta breeds varieties with high-yield potential that can resist and tolerate pests and diseases. Syngenta develops genetics that address the needs of consumers as well as processors, commercial fresh market growers and the entire value chain. Different varieties of vegetable seeds are marketed in all regions.

### **Integrated Offer**

**NUCOFFEE®** is Syngenta's innovative business model operating in Brazil that brings together growers, cooperatives and roasters. Built around Syngenta's crop protection, quality and barter programs, the NUCOFFEE® platform helps Brazilian coffee farmers increase their profitability, with higher yields and better quality for their coffee crop.

**GROMORE™** is a holistic crop protection and agronomy protocol with a targeted go-to-market approach that provides guidance to smallholder growers for crop protection, seed, nutrients and water optimization which helps them overcome challenges resulting from water scarcity, labor shortages and productivity. Growers can realize yield gains

by being better able to choose the right input at the right dose and at the right time for each of the four key growth phases of the crop.

**PLENE**<sup>®</sup> is a revolutionary solution for sugar cane in Brazil, combining chemistry, plant genetics and mechanical planting technology to provide an integrated cane planting solution. PLENE<sup>®</sup> EVOLVE<sup>™</sup> is a young plant that can be mechanically transplanted and accelerates variety renewal through elite genetics. It can be multiplied directly by the customer resulting in increased genetic purity and high productivity. PLENE<sup>®</sup> PB is a pre-germinated seed cane with a simple planting process and offering a superior multiplication rate together with yield, vigor and quality.

<sup>5</sup> Genuity<sup>®</sup> Roundup Ready<sup>®</sup> and Genuity<sup>®</sup> Roundup Ready 2 Yield<sup>®</sup> herbicide tolerance traits are licensed from Monsanto Technology LLC. Genuity<sup>®</sup> Roundup Ready<sup>®</sup> and Roundup Ready 2 Yield<sup>®</sup> are registered trademarks of Monsanto Technology LLC.

**HYVIDO**<sup>®</sup> is a hybrid barley that offers increased yield, consistency of yield and improved resistance to abiotic stresses. In addition, Syngenta currently offers growers who purchase HYVIDO<sup>®</sup> an optional cash-back yield guarantee. It guarantees that farmers who subscribe to the offer and use the agronomy protocol (which includes seeds and Syngenta Crop Protection products to maximize yield) will be reimbursed for part of the cost of the program if the yield from reference fields of HYVIDO<sup>®</sup> is not higher by a specified amount than the yield from conventional fields.

## Recently Launched Products and Services (last 3 years)

### Crop Protection

#### Fungicides

**ADEPIDYN**<sup>™</sup> (MIRAVIS<sup>™</sup>) is a new broad spectrum fungicide belonging to the carboxamide chemistry with SDHI mode of action. It delivers a step change in efficacy against leaf spots and excellent control of powdery mildew across multiple crops. In addition ADEPIDYN<sup>™</sup> is highly active on difficult to control diseases such as Botrytis, Sclerotinia, Corynespora and Fusarium Head Blight, which cause severe damage on key crops. Products containing ADEPIDYN<sup>™</sup> are being developed for canola, cereals, corn, soybean, specialty crops, vegetables and Lawn and Garden across the globe. ADEPIDYN<sup>™</sup> was registered in Argentina in 2016 and will be expanded worldwide in the years to come.

**Oxathiapiprolin**<sup>6</sup> (ORONDIS<sup>™</sup>) is a piperidiny l thiazole isoxazoline class of fungicides. ORONDIS<sup>™</sup> is a step change fungicide for oomycete control in vegetables and specialty crops providing effective long lasting field performance, protection of new growth in plants and consistent disease control. ORONDIS<sup>™</sup> premixes with various active ingredients will be sold worldwide within one global brand family that contains suffixes for differentiation of the mixtures. ORONDIS<sup>™</sup> received registration from the US Environmental Protection Agency in 2015 and was launched in 2016 in Canada and the US.

In addition, Syngenta has recently introduced a range of **biologicals** into its portfolio in different countries including the brands QUANTIS<sup>™</sup>, ISABION<sup>™</sup>, TAEGRO<sup>®7</sup>, SAKALIA<sup>®</sup>, TIMOREX<sup>®8</sup> GOLD and REMEDIER<sup>®9</sup>.

#### Selective herbicides

**Bicyclopyrone** (ACURON<sup>™</sup>) is the leading residual corn herbicide which provides broad spectrum broadleaf and annual grass weeds control. Bicyclopyrone was developed to complement mesotrione. When combined with atrazine

and S-metolachlor in ACURON™, which was launched in the US corn market in 2015, it delivers multi-targeted control of the most problematic broadleaf and grass weeds with built-in resistance management technology with four active ingredients and three modes of action.

### Insecticides

***Cyantraniliprole mixtures*** (MINECTO®) Syngenta acquired from DuPont the exclusive right to use cyantraniliprole in mixtures with Syngenta insect control products. Cyantraniliprole is a broad-spectrum insecticide that also controls sucking pests and is complementary to the chlorantraniliprole insect control product used for Lepidoptera pest control that Syngenta sells in mixtures with its own leading insect control products. MINECTO® is currently marketed in several countries in North America, Latin America and Asia Pacific.

<sup>6</sup> Oxathiapiprolin is licensed from Dupont

<sup>7</sup> TAEGRO® is licensed from, and is a registered trademark of Novozymes A/S.

<sup>8</sup> TIMOREX® GOLD is licensed from, and is a registered trademark of BIOMORE ISRAEL LTD.

<sup>9</sup> REMEDIER® is licensed from, and is a registered trademark of ISAGRO S.p.A.

## Seed treatment

**Cyantraniliprole** (FORTENZA®/FORTENZA® DUO) Syngenta acquired from DuPont in 2008 the rights to access cyantraniliprole, a second generation diamide, for use in different agricultural fields. This new seed treatment insecticide delivers best-in-class early season insect protection both above and below ground. It acts both as a chemical and insect resistance management tool and will be available for a wide range of crops including corn, soybeans, oilseed rape, sunflower and rice. FORTENZA®/FORTENZA® DUO were granted registration in several countries including Canada and Argentina in 2013, China in 2014, Mexico and Turkey in 2015 and Brazil in 2016. Future seed treatment registrations are planned for other Latin American countries, Asian countries, Europe and Africa. FORTENZA®/FORTENZA® DUO have been commercially launched in Argentina, Brazil, Canada, China, Mexico and Turkey.

**EPIVIO™** is Syngenta seed treatment's Abiotic Stress Management brand family. During 2016, EPIVIO™ VIGOR was launched in Brazil on soybean, and EPIVIO™ C was launched on corn in China.

**Sulfoxaflor** (RASCENDO™, VISIVIO™) is an insecticide for which Syngenta obtained rights for seed treatment use from Dow Agrosciences. VISIVIO™, which contains sulfoxaflor and other active ingredients, is a new seed treatment solution that provides canola growers enhanced early-season protection against both striped and crucifer flea beetle feeding and seed- and soil-borne diseases. VISIVIO™ was registered and launched in Canada in 2016 for use in canola.

**Oxathiapiprolin<sup>6</sup>** (PLENARIS™) is a piperidinyl thiazole isoxazoline class of fungicides. PLENARIS™ offers a new mode of action for downy mildew control by seed treatment in crops like sunflower, tropical corn, oilseed rape, field peas and beans and vegetables. It is an effective resistance management tool e.g. for solely by seed treatment controlled downy mildew in sunflower. PLENARIS™ will be registered globally in all crops attacked by downy mildew species and where seed treatment is the most effective technology for prevention. PLENARIS™ received registration from the US Environmental Protection Agency in late 2016 and will be launched for the 2017/18 treatment and planting season in US.

## **Seeds**

### Field crops

Through Syngenta's enhanced corn breeding and trait conversion capabilities, 69 new **corn** hybrids were launched in the branded North American portfolio in 2016. 46 of the 69 new hybrids in North America will be sold in the EZ-Refuge® format, combining grower convenience and compliance with insect resistance management guidelines.

In **corn**, ARTESIAN™ technology continues to expand across North America and Europe, Africa and Middle East. In 2016, 14 new ARTESIAN™ hybrids were launched in North America, while ARTESIAN™ sales in Europe, Africa and

Middle East more than doubled since 2014.

In *corn*, since 2015, Syngenta has been selling genetically modified hybrids in Vietnam, consisting of GM technology that includes herbicide and insect resistance.

In *corn*, AGRISURE VIPTERA® stacked trait hybrids continue to expand in North America, Brazil, Argentina and Colombia. In North America, 18 new AGRISURE VIPTERA® hybrids were launched in 2016.

The combination of CET's CELLERATE™ process technology (formerly known as Adding Cellulosic Ethanol or ACE) with ENOGEN® technology provides synergistic benefits enabling a substantial increase in performance, sustainability and profitability of ethanol plants.



Syngenta continues to deliver a strong portfolio of *soybean*, launching 31 new varieties in North America and Latin America in 2016, having improved diverse genetics bringing new levels of resistance to key diseases.

### Vegetables

In Vegetables, Syngenta continues to launch new and attractive consumer products in all regions. Some examples of recently launched products include:

In *sweet corn*, GSS1453 variety with enhanced disease resistance packaged with high yield potential and deep kernels for high recovery, launched in North America and Europe, Africa and Middle East. GSS41490 is one of the new introductions in the tropical Brazil segment with significantly improved taste and flavor. Milky Way, Remedy, Protector and Thunder are varieties in temperate and tropical segments in North and Latin America, which include the Syngenta Attribute-II GM technology with excellent insect control.

In *beans*, a step change in yield was realized with the introduction of Huntington in North America. Combined with the new introduction of Pismo a new standard was set for the 5-sieve processing segment.

In *tomato*: TREDICY, cherry on the vine tomato for the Italian market combining excellent agronomic performances with improved taste and deep red color; CORVETTE, for fall cycle in Turkey with very good adaptation to high temperature, early and high yield focusing on short cycle; TAI2048, for wet season in India, stronger virus resistance keeping quality and transportability for higher yield; DIONISO, a Tomato Beef Indeterminate for protected segment with a strong package of resistances; SAHARIANA, a Tomato Saladette variety with XL's fruit sizes and resistances that makes this variety the right product for the high radiation and dry environment conditions of northern México.

In *pepper*: KABUKI sweet red blocky pepper, dedicated for winter cycle production in Spain, Almeria area, offering uniform fruit quality, high tolerance to fruits cracking and high yield potential; LAURENTIA sweet yellow blocky pepper for winter cycle production in the Spain, Almeria area offering excellent fruit color, unique to the market.

In *broccoli*, MONRELLO, a new entry for southern Europe for the Mediterranean area for late autumn and winter production with high yield potential and head firmness.

In *cauliflower*, GOHAN for the processing industry in Poland, Belgium and Australia for its good plant vigor, high processing yield and head firmness.

In *lettuce*, babyleaf Izabita, a red Batavia type and one of several new entries in this segment; and Julian, a new butterhead for central Europe with the complete Bremia resistance pack.

In *cucumber*, HASTAG in pickling Partheno protected in northern Latin America, performing both for fresh and processing markets and MAXWELL in Beith Alpha for protected production in Africa and the Middle East.

In *watermelon*, CRISP DELIGHT, a variety designed specifically for the fresh cut market that offers a firmer, crisper texture and reduced liquid loss after cutting, which leads to a longer shelf life at the grocery store. In large fruit size, seedless, EXCURSION, and SWEET DAWN in the USA and Mexico.

In *melon*, MASSIMO, ARTORIUS and AVALONIA in Europe which offer growers excellent high yield with a broad-spectrum disease resistance.

In *squash*, PATMOS and AMORGOS in Europe, both cylindrical dark green varieties with a higher broad-spectrum disease resistance.

## Integrated Offers

*INTEGRARE*<sup>TM</sup> is Syngenta's High Yield Soybean solution tailored for Brazilian growers to unlock the full yield potential of their crop and increase the confidence on their return on investment. It is a complete offer combining a best in class portfolio (seeds, Seedcare, crop protection chemicals) and customized protocols together with agronomic (e.g. plant nutrition advice) and financial services (e.g. risk management).

*Fruit Quality Contract* enhances growers' market access while reducing complexity and risk through a tailored Crop Protection program with cashback assurance. It enables growers to comply with export and food chain requirements.

*New Customer* in Cereals offers food companies and growers the ability to increase local sourcing of high quality grains in emerging markets. Current relationships include AB InBev in beer and Baronia in pasta.

*Ethanol Grain Quality Solution* is a production system that improves corn quality delivered to ethanol plants, resulting in higher ethanol output.

## Products and Services in Late Stage Development

### Seeds

Syngenta seeks to produce improved hybrid and varietal seeds to meet the agronomical conditions and demands of its customers and to work towards further improvement of traits advantageous to the grower, i.e., input traits, such as resistance to diseases and insects, and greater yield. In vegetable seeds, Syngenta develops new products to provide consumers with consistent high quality, improved appearance, taste and texture. Powerful analytical science has been expanding the knowledge of taste, flavor and post-harvest shelf life. Combined with advanced breeding technology, this is accelerating the introduction of novel varieties.

Below are examples of products in development:

### Field crops

In *barley*, next generation spring malting barley with improved enzyme characteristics and new winter barley hybrids combining high yield with improved production characteristics. Syngenta's first hybrid malting barley variety has started the registration process.

Syngenta continues to work towards developing *corn* seeds across a variety of maturities with high yield, stress tolerance and improved agronomic characteristics, including developing the next generation corn rootworm control trait with a unique mode of action and high efficiency, and stacking multiple modes of action for the same target insects (trait pyramiding) to improve efficacy, combat insect resistance and provide refuge reduction in corn while increasing long-term product sustainability.

- High yield SAFECROSS™ hybrids with improved disease resistance and stress tolerance in winter *oilseed rape*.

In *rice*, Syngenta is developing an enhanced hybrid portfolio by combining its legacy breeding programs with those acquired in the Devgen acquisition.

A wide range of *soybean* varieties in late stage development deliver expanded spectrum control of soybean cyst nematodes through utilization of alternate native trait sources of resistance and combines this control with tolerance to sudden death syndrome, iron deficiency chlorosis and phytophthora root rot. In Latin America the development of a full proprietary portfolio with herbicide tolerance and insect control varieties covering major maturity groups and market segments is well advanced.

*Sugar beet* with second generation nematode tolerance for the European market and with broad-spectrum disease and virus resistance in combination with Genuity® Roundup Ready®<sup>6</sup> herbicide tolerance trait for the North American market.

· *Sunflower* with high stable yields, integrating broomrape, herbicide and disease resistance.

· Healthy oil varieties of *high oleic sunflower* comprising higher heat stability of plant oils for frying.

In *wheat*, Fusarium tolerance, high yield, improved and novel quality, new disease resistance and drought tolerance. In addition, Syngenta is developing a hybrid wheat technology and portfolio, capitalizing on best-in-class breeding expertise and conventional germplasm, some leading commercial positions in conventional wheat in North America and Europe, Africa and Middle East, and prior experience in hybrid barley.

### Vegetables

Focus on increased agronomic quality, fruit quality and shelf life improvements and better plant performance in combination with virus, fungal and insect resistances to provide increased grower performance reliability.

· Advancing abiotic stress tolerant traits for rootstocks for the high value protected production markets.

· Developing new fruit sizes in melons and watermelons tailored to shrinking family sizes in North America and Europe.

· Bringing forward new consumer and value chain traits that improve the quality of fresh fruit for the food industry.

· Vegetable research and development to advance convenience and diversification traits for consumers.

### **Integrated Offers**

Syngenta's integrated business offers in late stage development include:

**PLENE**<sup>®</sup> – In 2014, Syngenta announced plans to broaden and scale up its **PLENE**<sup>®</sup> platform of integrated sugar cane solutions. The **PLENE**<sup>®</sup> platform will have in the future two products: **PLENE**<sup>®</sup> PB for high quality nurseries and gap filling, and **PLENE**<sup>®</sup> Emerald for commercial planting. Through an exclusive licensing agreement with New Energy Farms, Syngenta will access an innovative planting system for sugar cane in Brazil: **CEEDS**<sup>™</sup> (Crop Expansion Encapsulation and Drilling System). The **CEEDS**<sup>™</sup> technology under development will deliver **PLENE**<sup>®</sup> Emerald. Activities in 2017 and 2018 will focus on field trials, research and development and production capacity development with pre-launch expected by the 2018/2019 season and commercial sales beginning in the 2019/2020 season.

## **Marketing and Distribution**

Syngenta has marketing organizations in all its major markets with dedicated sales forces that provide customer and technical service, product promotion and market support. Products are sold to the end user through independent distributors and dealers, most of which also handle other manufacturers' products. Syngenta's products normally are sold through a two-step or three-step distribution chain. In the two-step chain Syngenta sells its products to cooperatives or independent distributors, which then sell to the grower as the end user. In the three-step system, Syngenta sells to distributors or cooperative unions which act as wholesalers and sell the product to independent dealers or primary cooperatives before on-selling to growers. Syngenta also sells directly to large growers in some countries. Syngenta's marketing network enables it to launch its products quickly and effectively and to exploit its range of existing products. Syngenta focuses on key crop opportunities in each territory. In those countries where Syngenta does not have its own marketing organization, it markets and distributes through other distribution channels.

<sup>10</sup> **CEEDS**<sup>™</sup> is a trademark of New Energy Farms Limited

Syngenta's marketing activities are directed towards distributors, agricultural consultants and growers. They consist of a broad range of advertising and promotional tools, such as meetings with growers and distributors, field demonstrations, advertisements in specialized publications, direct marketing activities, or information via the Internet. Syngenta is also in constant contact with the food and feed chain to evaluate current and future needs and expectations.

A key element of Syngenta's marketing is grower support and education. This is particularly important with respect to small growers in developing countries. For many years, Syngenta has held numerous courses around the world for growers as a result of which millions of farmers have been trained in the safe and sustainable use of crop protection products. As part of the Good Growth Plan initiated in 2014, Syngenta targets reaching 20 million smallholder farmers and helping them increase their productivity by 50 percent, while preserving the long-term potential of their land. This is being done with the help of organizations such as USAID to enable access to technology and capacity building for smallholder farming in developing countries. Syngenta also trains agricultural extension workers and distributors so that they can further disseminate good practice and reach an even wider audience.

Products must obtain governmental regulatory approval prior to marketing. The regulatory framework for agribusiness products is designed to ensure the protection of the consumer, the grower and the environment.

Syngenta's products are marketed throughout the world through brands, many of which are well known by growers and some of which have been established for many years. Brand names for Syngenta's key products are listed above in "Regional Business – Key Marketed Products". Syngenta's sales force markets the majority of Syngenta's brands, either to customers directly, in partnership with distributors, or through a network of dealers.

Syngenta has developed and utilizes a number of innovative ways to attract and retain customers in different parts of the world. In an effort to manage some foreign exchange and commodity price volatility in some countries, including Brazil and Argentina, Syngenta sells via barter. In Brazil and Argentina, a recognized agricultural barter trading method allows growers to pre-arrange sale of their soybean, cotton and cereals crops to commodity traders. Under such pre-arrangements, traders pay Syngenta for its crop protection products on growers' behalf when growers deliver crops to the traders. Syngenta generally does not take ownership or delivery of the crops and retains only insignificant commodity price risk in barter transactions. Syngenta also directly barter with Brazilian coffee farmers by accepting their crop as payment for its crop protection products. Syngenta has developed a coffee trading network which sells the coffee to roasters and cooperatives internationally. These barter programs also help Syngenta and its customers mitigate the cash flow and financing risks inherent in the Brazilian agricultural market. Approximately 16 percent of Syngenta's sales in Brazil and 50 percent of sales in Argentina are transacted under one of these barter programs. Syngenta has introduced similar barter programs in Ukraine to secure collection of receivables from customers or to encourage growers to prepay for crop protection or seed products. Approximately 19 percent of Syngenta's Ukraine sales are transacted under such barter programs.

Syngenta also operates non-barter commodity price mitigation programs in certain countries, including South Africa, the Czech Republic and Slovakia. Certain of these programs assist growers by allowing those who purchase Syngenta products within the program to hedge, at no cost or risk to the grower, the price of an equivalent value of their crop via the commodity futures market. Participating growers are protected against crop price declines that may occur before harvest, which helps ensure their ability to pay Syngenta for its products, and retain their ability to profit from crop price increases. Syngenta does not retain any commodity price risk under these programs.



## Production and Supply

Syngenta's combined Crop Protection and Seeds Production and Supply function plays an integral role in implementing Syngenta's strategy in a sustainable manner by assuring product delivery, facilitating delivery of integrated crop solutions, supporting growth plans, reducing costs and promoting efficient use of capital. Through the effective procurement, production and distribution of products, the function ensures that Syngenta meets its commitments to customers around the world. Production and Supply supports Syngenta's growth plans (particularly in emerging markets) and accelerates the building of expertise for scalability and efficiency.

The manufacture of chemical crop protection products and the production of seeds for sale to growers involve different processes.

Active ingredients used for Crop Protection products are manufactured at a limited number of sites located in Switzerland, the United States, the United Kingdom and China. Syngenta announced in December 2015 its intention to divest its active ingredient plant in Goa, India and the divestment was completed in June 2016. Syngenta also operates a number of chemical formulation and packing sites strategically located close to the principal markets in which those products are sold. Syngenta operates major formulation and packing plants in Belgium, Brazil, China, France, South Korea, the United Kingdom, the United States and Switzerland. The formulation, fill and packaging operations in Switzerland will be closed in the early part of 2017. Both the aforementioned site closures are part of the Accelerating Operational Leverage restructuring program, described further in Item 5.

Syngenta manages its Crop Protection supply chain globally and on a product-by-product basis, from raw materials through delivery to the customer, in order to maximize both cost and capital efficiency and responsiveness. Syngenta outsources the manufacture of a wide range of raw materials, from commodities through fine chemicals to dedicated intermediates and active ingredients. Sourcing decisions are based on a combination of logistical, geographical and commercial factors. Syngenta has a strategy of maintaining, when available, multiple sources of supply. Most purchases of supply chain materials are directly or indirectly influenced by commodity price volatility, due to price dependence on gas and oil. Total raw material spending was approximately 31 percent of Crop Protection sales in 2016.

Approximately 28 percent of Syngenta's raw material purchases for Crop Protection products are fine chemicals. Syngenta has entered into short- to medium-term contracts with many suppliers to provide consistent supply.

Approximately 10 percent of Syngenta's raw material purchases for Crop Protection products are readily available base chemicals that are subject to commodity chemical price volatility. Approximately another 7 percent of raw material purchases for crop protection products have an indirect exposure to commodity oil price volatility.

Approximately 15 percent of raw materials for Crop Protection products are sourced from China and India in local currencies and therefore are subject to cost fluctuations from movements in currency exchange rates. Exchange rate movements on Swiss Franc, Pound Sterling and Euro may also impact Syngenta's reported raw material costs; approximately 6 percent, 3 percent and 28 percent, respectively, of raw materials for Crop Protection products are purchased in those currencies. Syngenta engages in currency hedging activities to mitigate the impact of currency fluctuations on the cost of its raw material purchases.

Seeds for sale by Syngenta to growers are grown (multiplied) and harvested by independent contract farmers throughout the world. After the harvest, the raw seed is cleaned, calibrated, treated and packaged in Syngenta or third party processing plants, which are located as close to the intended markets as possible so as to achieve cost effectiveness and match the seeds with the growing conditions that are optimal for the variety. This also eases logistics for seed products that require secure storage and timely delivery for the growing season. The largest facilities are located in Argentina, Brazil, France, Hungary, India, Morocco, Spain, Denmark, Thailand, the United States and the Netherlands.

Due to Syngenta's global presence, it can engage in seed production year-round with a goal of mitigating weather-related seed production risk. In addition, because its facilities are located in both the northern and southern hemispheres, Syngenta can shorten the time required to multiply seeds from breeding to commercial production. This enables it to produce marketable quantities more quickly than if it was dependent on only one growing season.

Operating in the agribusiness sector, changes in commodity crop prices affect Syngenta's raw material costs for seed. The contracts with growers who multiply seed for Syngenta to sell as finished product typically contain terms allowing the multipliers to benefit from commodity seed price increases that may occur during the growing season and that the growers would have received had they been able to sell their crop in the market rather than to Syngenta as supply. Syngenta engages in hedging activities to mitigate the impact of this commodity price volatility on corn and soybean product costs.

## **Research and Development**

Syngenta's research and development ("R&D") organization is dedicated to developing quality crop protection and seeds products, as well as crop-focused solutions which integrate multiple technologies. R&D focuses on taking a holistic approach to help customers grow their specific crop using the best technology to address their needs, be it a single technology, a combination of technologies, or technologies and services.

An open and collaborative culture is essential to foster interaction and innovation, both within the R&D organization and across Syngenta, as well as with collaborators and partners. During 2014, 2015 and 2016, a number of changes were made in R&D to simplify the organization with the goal of delivering an innovative pipeline more productively through improved ways of working and leveraging Syngenta's scale. Syngenta believes that R&D is now well placed to effectively and efficiently innovate across crops and regions, resulting in faster and more efficient development and registration of new products.

R&D has three principal units:

**Research** leverages the breadth of Syngenta's research expertise to innovate more productively;

**Development** comprises product-centric development units to drive pipeline delivery to meet grower and business needs; and

**Platforms** underpin the organization, including operations to drive effective implementation as well as the product safety & regulatory function to drive Syngenta's license to operate agenda.

Syngenta performs an extensive investigation of all safety aspects relating to its products. The human safety assessments address potential risks to both the users of the products and the consumers of food and feed, while in environmental safety Syngenta seeks assurance that the products will not adversely affect soil, water, air, flora or fauna.

To complement in-house expertise and bring in novel technologies, Syngenta actively seeks value-adding partnerships and collaborations to bring new offers to growers. It currently has over 400 R&D collaborations with universities, research institutes and commercial organizations around the world.

Syngenta is an R&D based company with total spending, excluding the Lawn and Garden business, on research and development of \$1,247 million in 2016, \$1,310 million in 2015 and \$1,376 million in 2014.

Researching and developing crop protection products

R&D provides Syngenta with innovative new chemical solutions, biologicals and intellectual property with the potential to be combined with other technologies and create maximum value to growers and differentiation. New research areas are guided by the advancement of new technologies in partnership with the commercial crop teams based on customer need, technology, regulatory requirements and socio-political trends.

Syngenta has major research centers focused on identifying new active ingredients in Stein, Switzerland and Jealott's Hill, United Kingdom. Scientists work on the research and development of a portfolio of herbicides, fungicides, insecticides, nematocides and crop enhancing chemicals and biologicals, with broad applicability as foliar, soil and seed treatments for agriculture and Lawn and Garden customers.

Syngenta is continuously improving its research process. State-of-the-art synthetic chemistry and high-speed automated synthesis are used in concert to effectively prepare the quantity and quality of compounds for both high throughput and highly targeted biological screening. A crucial feature is the structured design approach to chemistry, which ensures that the chemical entities possess properties most likely to relate to the desired product profile, including potency, spectrum and safety parameters.

Once an active ingredient is ready for testing, the development team, supported by the global expertise of the trialing function, ensures that the work is efficiently and effectively completed to turn promising molecules into products that are safe to users and the environment, pass all registration requirements and meet customers' needs. Such development typically takes six to eight years. The active ingredient's efficacy and safety is assessed as early as possible in the development process and all data is compiled for registration and safe product use.

Syngenta tests compounds on target crops globally under different climatic conditions and in varying soils. In parallel, an industrial scale manufacturing process is identified and optimized, and appropriate formulations and packages are developed. In addition, R&D works to improve Syngenta's current chemical products by supporting the development of new mixtures, formulations and programs that bring new effects and opportunities to growers. Refreshing the existing product range is key to continued success in the face of competition, even after patent expiry.

#### Researching and developing seeds products

R&D is dedicated to creating new varieties of major crops having improved quality and productivity. This includes improving tolerance to pests and other environmental stresses as well as quality characteristics such as nutritional composition, consumer appeal and shelf life.

Syngenta's biotechnology activities primarily take place at Research Triangle Park, NC, USA, for both research and development of key native and genetically modified traits. Activities at this site are supported by smaller laboratories around the world. In addition, Syngenta operates approximately 100 breeding and germplasm enhancement centers strategically located around the world.

Syngenta expects that end users such as livestock producers, grain processors, food processors and other partners in the food chain will continue to demand specific qualities in the crops they use as inputs. Syngenta has therefore built

up and continues to develop an extensive germplasm library.

In addition to general research and development agreements with other companies and academic institutions around the world, Syngenta has entered into a number of targeted alliances with other enterprises in order to further broaden its germplasm and trait base with the goal of creating more valuable products.

Syngenta develops plants with desirable characteristics using both native traits breeding approaches, resulting in either conventional inbred lines or hybrids, and genetic engineering.

Conventional plant breeding involves crossing carefully chosen parent plants, then selecting the best plants from the resulting offspring to be grown on for further selection. Once the best lines have been selected, they are purified to create 'inbred' lines, in which every plant has the same characteristics, and the process of multiplying seeds begins.

For many crop varieties, including corn, rice, barley, sunflower, sugar beet, oilseed rape and many vegetables, Syngenta produces hybrid seeds, which means that the seed supplied to the grower is the result of the first cross between selected parents; these seeds are unique in expressing 'hybrid vigor', which enables improved yield, performance stability and better quality.

For certain crops, Syngenta also develops transgenic plants where one or more genes of interest have been introduced to a plant via recombinant DNA technology instead of the plant acquiring them through conventional breeding.

Modern technologies such as marker-assisted selection, production of doubled haploids (genetically pure plant lines that offer a quick route to new gene combinations for specific, desirable improvements) for accelerated breeding and crop modeling allow breeders to develop new varieties much more rapidly and accurately than in the past. However this is still a lengthy process; today it can take five to seven years from first cross to market, and even longer if there is the need for a government approved market authorization.

Biofuels are an important market for corn and sugar cane growers. Syngenta is involved in research and development on crops that make biofuel production more efficient and sustainable. In particular, Syngenta supports current biofuels development to get to the next phase of efficient transformation of plant material into transportation fuel.

## **Intellectual Property**

Syngenta protects its investments in R&D, manufacturing and marketing through patents, design rights, trademarks, trade secrets, plant variety protection certificates, plant breeders' rights and contractual language placed on packaging. The level and type of protection varies from country to country according to local laws and international agreements. Syngenta has one of the broadest patent and trademark portfolios in the industry and enforces its intellectual property rights, including through litigation if necessary.

In addition to patent protection for a specific active substance or for seeds (inbreds and varieties) and genomic-related products, patent protection may be obtained for processes of manufacture, formulations, assays, mixtures, and intermediates. These patent applications may be filed to cover continuing research throughout the life of a product and may remain in force after the expiry of a product's per se patents in order to provide ongoing protection. The territorial coverage of patent filings and the scope of protection obtained vary depending on the circumstances and the country concerned.

Patents in respect of plant-related inventions may cover (i) transgenic plants and seeds gene effects, (ii) genetic constructs and individual components thereof and enabling technology for producing transgenic plants and seeds, and (iii) new breeding technologies such as marker-assisted breeding and products obtained thereby. The territorial

coverage of patent filings and the scope of protection obtained vary depending on the circumstances and the country concerned.

Trademark protection may be obtained to cover a trademark for a specific active substance or seed variety and there may be more than one trademark covering the same active substance or seed variety. Other trademarks may cover formulations, mixtures, intermediates and a variety of ancillary services. The trademarks may remain in force after the expiry of a product's patents in order to provide ongoing protection. The territorial cover of trademark filings and the scope of protection obtained vary depending on the circumstances and the country concerned.

Syngenta licenses certain of its intellectual property rights to third parties and also holds licenses from other parties relating to certain of Syngenta's products and processes. Syngenta respects the intellectual property rights of others.



## **Competitive Environment**

Syngenta's key competitors are dedicated agribusinesses or large chemical companies headquartered in Western Europe and North America and comprise BASF, Bayer, Dow, DuPont and its Pioneer subsidiary, and Monsanto. Syngenta and these companies in 2016 accounted for about 65 percent of the worldwide market for crop protection and seeds products.

Companies in the crop protection business compete on the basis of strength and breadth of product range, product development and differentiation, geographical coverage, price and customer service. In many countries, generic producers of off-patent crop protection compounds are additional competitors to the research-based companies in the commodity segment of the market.

The main competitive factor in the seeds industry remains the quality of genetics and the increasing importance of traits. Historically, competition in the seeds industry has been fragmented, with small producers competing in local markets. With the emergence of biotechnology, the seeds industry has become research intensive. The majority of the transgenic products commercialized to date are traits that improve performance and farming efficiency in major world crops such as corn, soybean, cotton and canola (input traits). As a result, companies having access to a broad genetic range of germplasm as a platform for trait commercialization have a key competitive advantage. In addition to Monsanto, Pioneer, Bayer and Dow, other significant competitors in the seeds business are: Vilmorin, KWS, and Takii.

In the future, Syngenta expects that increased emphasis will continue to be placed on developing products that provide benefits to food and feed processors, fuel production, retail trade and consumers (output traits). One future competitive advantage is expected to be the ability to develop partnerships to allow delivery of biotechnology traits to the target market sectors.

## **Lawn and Garden**

Lawn and Garden leverages Syngenta's agricultural chemical technologies into the adjacent markets of (i) consumer home and garden, (ii) turf, landscape and professional pest management and (iii) ornamental flower growers, where it is also a major supplier of flower seeds, cuttings and young plants.

Lawn and Garden is a global business active in all major regions and sales are made primarily via distributors through to its professional customer base.

**Consumer home and garden** products are primarily based on Syngenta's fungicide, herbicide and insecticide range and mostly sold in bulk to wholesale companies for repackaging and sale to retailers.

**Turf, landscape and professional pest management** provides pesticides products in four markets: turf (primarily golf courses), sold through specialized distributors, dealers and professional applicators; pest management, sold primarily through distributors and directly to some large customers; vector control (control of disease spreading insects and pests), where sales are made to governments or NGOs, with some sales through distributors; and vegetation management (trees, forestry and aquatics), where the primary customers are distributors or local governments.

In the turf market specifically, Syngenta provides disease, insect and weed control and turf grass growth regulators to clients including professional golf superintendents, green keepers, sports turf managers and professional lawn care operators working on recreational sites and residential and commercial landscapes.

**Ornamental flowers** provides growers of ornamentals and pot and bedding plants, bulbs and cut flowers with a range of chemical and biological crop protection solutions. In addition, it supplies seeds, cuttings and young plants to distributors, growers and retailers serving the pot and bedding plant markets. Syngenta's flowers business (Syngenta Flowers) has a heritage dating back over 140 years and is active in all major regions. As the global leader in seeds and cuttings, Syngenta Flowers offers a wide range of pot and bedding plant genetics.

Focusing on the pot and bedding plant markets, Syngenta Flowers engages in breeding, producing and distributing flower seeds, cuttings and young plants. It has customers in over 80 countries with key markets comprising the US, Germany, France, UK, Netherlands and Japan. Sales are made primarily via distributors and brokers in North America and through distributors and directly to growers in Europe.

### Key Marketed Products

Lawn and Garden offers a range of specialized products for use in the consumer home and garden, turf and landscape, ornamental controls and flower genetics markets. A large number of these products include active ingredients that are also used in Syngenta's Regional Business described above.

Ornamental controls, consumer home and garden, and turf and landscape brands include:

*Abamectin* (VERTIMEC®) is a leading ornamental insecticide.

*Azoxystrobin* (HERITAGE®/ORTIVA®/AMISTAR®) is a leading fungicide for use on turf, primarily golf courses, and in ornamentals.

*BRISKWAY*® – Fungicide (azoxystrobin and difenoconazole) – broad-spectrum fungicide for prevention and control of certain diseases in golf course turf grasses.

*HICURE*™ – amino acids – a biostimulant used in cut flowers for mitigating climatic stress and enabling the rose plant to build a higher number of stems.

*NEMATHORIN*® 150 EC – fosthiazate<sup>1</sup> – controls soil nematodes in cut flower production.

*Prodiamine* (BARRICADE®) is a leading pre-emergence grass and broad-leaved weed herbicide in turf.

*SUNJET*® Flora (*isopyrazam and azoxystrobin*) for foliar application and *PLENTRIX*® (*azoxystrobin and mefenoxam*) for soil drench are the first Lawn and Garden fungicide brands specifically for ornamentals.

*Thiamethoxam* (ACTARA®) is an insecticide highly active at low use rates against a broad spectrum of soil and sucking insects.

*Trinexapac-Ethyl* (PRIMO MAXX®) is a herbicide on turf that prohibits vertical growth.

Professional pest management products for use in controlling insect and rodent pests include.

*Primiphos-methyl* (ACTELLIC®) is an insecticide used for indoor residual spray programs to control the spread of malaria and other vector-borne diseases. Recently re-launched as an encapsulated formulation for longer residual activity, ACTELLIC® CS has gained World Health Organization approval and is increasingly used to eradicate mosquitoes which are resistant to the pyrethroid insecticide class.

*Brodifacoum* (KLERAT®) is a rodenticide for both professional applicators and consumer use in homes and gardens.

*Chlorantraniliprole* (ALTRISSET®/ACELEPRYN®) is a new class of insecticide for the control of termites in building structures and also white grubs and other pests in turf.

*Indoxacarb* (ADVION®/ARILON®) is an insecticide for application by professional pest control operators for the control of ants, cockroaches and other general insect pests.

<sup>11</sup> Fosthiazate is licensed from ISK Biosciences Corporation.

Flower genetics brands include GOLDFISCH<sup>®</sup>, GOLDSMITH<sup>®</sup> SEEDS, YODER<sup>®</sup> and SYNGENTA<sup>®</sup> FLOWERS. Products include a full range of flower seeds, cuttings and young plants which Syngenta sells to professional flower growers. Syngenta focuses on breeding a full range of innovative flower varieties, including popular bedding plants such as viola, begonia, New Guinea impatiens, pelargonium and petunia; pot plants, such as cyclamen and poinsettia; cuttings for, amongst others, the growing market of hanging baskets, such as impatiens and verbena; and a wide range of attractive perennials.

### **Recently Launched Products** (*last three years*)

Recently launched products for use in ornamentals controls are:

- **MAINSRING<sup>®</sup>** – cyantraniliprole – a broad spectrum insecticide to control a wide range of ornamental pests.
- **MURAL<sup>™</sup>** – solatenol and azoxystrobin – for treatment of powdery mildew disease.

Recently launched products for use in Turf, landscape and professional pest management are:

**ZYROX<sup>®</sup> Fly Bait** – granular fly control insecticide based on cyantraniliprole which offers a new mode of action resistance management tool for controlling nuisance flies in urban, rural and commercial markets.

**FERENCE<sup>®</sup>** – insecticide for professional turf applications. Based on cyantraniliprole, FERENCE<sup>®</sup> helps golf course superintendents systemically control annual bluegrass weevil at all larval stages.

**VELISTA<sup>®</sup>** – novel penthiopyrad SDHI class fungicide providing protection against a wide range of fungal diseases on turf grasses.

**HERITAGE<sup>®</sup> ACTION** – azoxystrobin and acibenzolar-s-methyl - providing both broad spectrum protection against fungi and plant health benefits.

**APPEAR<sup>®</sup>** – potassium phosphite - systemic pigmented fungicide for the control of diseases caused by pythium and other pathogens on golf courses.

In Flowers, Syngenta introduces over 100 new and improved varieties and series every year. Some of the more unique introductions during the last three years were:

**BIG KISS™** – F1 Seed Gazania - series with uniquely super-sized flowers up to 12 cm diameter.

**CARTWHEEL®** Strawberry Twist – F1 Seed Gerbera - first double flowered bi-color Gerbera from seed which achieved the Fleurostar Award 2014.

**CALIENTE®** – vegetative Pelargonium - color additions which strengthen this interspecific geranium series with superior garden performance

**SANGUNA®** – vegetative Petunia – early and continuous flowering.

## **Products in Late Stage Development**

Syngenta's pipeline of products under development that have potential application in Turf, landscape and professional pest management, Ornamentals, and Home and garden also have application in its Regional Business. For further information on this pipeline, see Products in Late Stage Development for Syngenta's Regional Business above.

Syngenta Flowers has a rich pipeline of products under development, which extends beyond 2020 and involves projects covering all product lines.

## **Production**

Syngenta's crop protection production process and facilities are leveraged to produce and source the range of Turf, landscape and professional pest management, Ornamentals and Home and garden chemical products marketed by Lawn and Garden. For a description of the manufacturing process for these products, see Production for Syngenta's Regional Business above.

Syngenta Flowers uses its own seed production facilities in Guatemala, Turkey and the Netherlands to produce, clean, pellet, coat and package seed. In addition, independent contract growers in Turkey and Indonesia are used to supplement capacity and capability.

Due to Syngenta's global presence, it can engage in seed production year-round with a goal of mitigating weather-related seed production risk. In addition, because its facilities are located in both the northern and southern hemispheres, Syngenta can shorten the time required to multiply seeds from breeding to commercial production. This enables it to produce marketable quantities more quickly than if it was dependent on only one growing season.

Syngenta Flowers sources vegetative cuttings from its own cutting production facilities in Kenya, Ethiopia, Guatemala and the USA, and from contract growers, notably in Mexico.

## **Marketing and Distribution**

Lawn and Garden has marketing organizations in all its major markets with dedicated sales forces that provide customer and technical service, product promotion and market support. In cases where the crop protection market is

not segmented into professional turf, landscape and professional pest management, ornamental or home and garden markets, the Syngenta regional business organization is used to market Lawn and Garden products to customers.

The Turf, landscape and professional pest management business of Syngenta operates a business-to-business model supplying chemical controls to professional customers. Products are sold to the end user through independent distributors and dealers, most of which also handle other manufacturers' products. Syngenta's products normally are sold through a two-step or three-step distribution chain as described in Marketing and Distribution for Syngenta's Regional Business above.

Syngenta Flowers seed and vegetative products are marketed throughout the world through well-known brands, some of which have been established for over 100 years. The Syngenta Flowers brand is an umbrella brand representing the entirety of Syngenta's offer in flower seeds, cuttings and young plants. Syngenta Flowers uses the GOLDFISCH® brand and the GOLDSMITH® and YODER® brands as portfolio brands. Syngenta's sales force markets the majority of Syngenta's brands, either to customers directly, in partnership with distributors, or through a network of dealers. In addition, Syngenta Flowers distributes and brokers its products and product forms through FLORIPRO SERVICES® in Europe. The product range of Flower seeds covers 200 seeds series in 70 classes, while the vegetative range covers 120 series in 81 crops.

Syngenta's marketing activities are directed towards distributors, consultants and growers. They consist of a broad range of advertising and promotional tools, such as meetings with growers and distributors, field demonstrations, advertisements in specialized publications, direct marketing activities, or information via the Internet.



## **Research and Development**

Research and development to provide Syngenta with innovative new chemical solutions and intellectual property for its Turf, landscape and professional pest management, Ornamentals, and Home and garden business is conducted at research centers used for crop protection product research and development in its Regional Business. For further information, see Research and Development for Syngenta's Regional Business above.

Flowers genetics research and development is dedicated to creating new varieties of major flower genetics having improved quality and productivity, either alone or in combination with other technologies. Syngenta's research and innovation provide the grower and retail markets with a choice of new genetics, shapes and colors of continuously improved longevity, stress tolerance and drought and disease resistance. Syngenta has major Flowers research centers in Andijk, Netherlands and Gilroy, California, USA, each of which is focused on identifying new or improved varieties of genetics with unique traits.

The total spent on research and development in Lawn and Garden was \$52 million in 2016, \$52 million in 2015 and \$54 million in 2014.

## **Intellectual Property**

Syngenta's Turf, landscape and professional pest management, Ornamentals, and Home and garden products are largely derived from the same products produced for crop protection in its Regional Business. For further information regarding how Syngenta protects its intellectual property related to these products, see Intellectual Property for Syngenta's Regional Business above.

Syngenta Flowers maintains the ownership and controls the use of its seeds and genomic-related products and processes by means of intellectual property rights, including but not limited to the use of patents, trademarks, licenses, trade secrets, plant variety protection certificates and contractual language placed on packaging. The level of protection varies from country to country according to local laws. Syngenta Flowers licenses certain of its intellectual property rights to third parties and also holds licenses from other parties relating to certain of Syngenta's products and processes.

## **Competitive Environment**

The home and garden chemical controls market is impacted by the shift of business through mega retail channels and crowded shelf space. Syngenta's main competitors in this market include Bayer and regional private labels.

The key competitors in the turf, landscape and professional pest management markets are the leading agribusiness companies based in Western Europe and North America supplying crop protection chemicals which are generally specifically branded and tailored to these specialized markets. These companies compete primarily on the basis of product innovation and portfolio breadth. Additional competition comes from generic manufacturers in the off-patent segments. Increasingly, customer service, integrated programs and more holistic solution offers are being introduced to address broader unmet customer needs and further differentiate the major innovation companies from generics. Syngenta's main competitors in these markets are Bayer, BASF and Dow.

The main competitive factors in the flowers industry remain the quality of genetics and the increasing importance of unique traits to enhance growers' ability to produce as well as improving garden performance for consumers. Historically, and still to a large degree, flowers competition in the seeds industry has been fragmented, with small producers competing in local markets. The traditional grower market has evolved into a mass market of commodity products distinguished by low differentiation and overcapacity increasingly supplying a rapidly consolidating and competitive retail sector. The market opportunities are in increasing presence along the value chain towards retail and delivering to the consumer unique, higher quality plants with improved garden performance. At present, Syngenta Flowers' main competitors in the seeds business are Ball and Sakata and in the vegetative business are Dummer Orange and Florensis.

## **Government Regulations**

The field-testing, production, import, marketing and use of Syngenta's products are subject to extensive regulation and numerous government approvals. Registration procedures apply in all major markets.

Products must obtain governmental regulatory approval prior to marketing. The regulatory framework for such products is designed to ensure the protection of the consumer, the grower and the environment. Examples of some of the regulatory bodies governing Syngenta's products include the US Environmental Protection Agency, the US Department of Agriculture and the US Food and Drug Administration.

All biotechnology products are subject to intense regulatory scrutiny and Syngenta conducts extensive studies to ensure products are safe for both consumers and the environment. An extensive Syngenta network of regulatory experts around the world ensures compliance and continued dialogue with the authorities regarding regulatory submissions, insect resistance management programs and participation in further development of the biotech regulatory framework.

Governmental regulatory authorities perform risk assessments on genetically modified ("GM") seed products to ensure the safety of the resulting plants and the food and feed derived from them. Syngenta obtains regulatory approvals for both cultivation and for import of products thereof into key importing countries that have functioning regulatory systems. Cultivation countries for Syngenta's GM seed currently include the US, Canada, Brazil, Argentina, Vietnam, Paraguay, Uruguay and the Philippines. Key import countries are defined based on the product and cultivation market. "Stacked" products developed through breeding to contain multiple GM traits are also subject to regulation in certain countries. Approvals in some countries are time limited and must be renewed on a periodic basis to ensure that each product adheres to current regulatory standards. Some countries also require safety monitoring and insect resistance management after product commercialization. Additionally, registration of new plant varieties, whether transgenic or not, is required in most countries, but not in the USA.

Government regulations, regulatory systems, and the politics that influence them vary widely among jurisdictions and change often. Obtaining necessary regulatory approvals is time consuming and costly, and data requirements for approvals continue to increase. There can be no guarantee of the timing or success in obtaining approvals.

## **Environment**

Syngenta designed its environmental management program with the aim of ensuring that its products and their manufacture pose minimal risks to the environment and humans. The crop protection industry is subject to environmental risks in three main areas: manufacturing, distribution and use of product. Syngenta aims to minimize or

eliminate environmental risks by using appropriate equipment, adopting best industry practice and providing grower training and education.

The entire chain of business activities, from research and development to end use, operates according to the principles of product stewardship. Syngenta is strongly committed to the responsible and ethical management of its products from invention through ultimate use. Syngenta employs environmental scientists around the world who study all aspects of a product's environmental behavior.

Specially designed transportation and storage containers are used for the distribution of hazardous products and efficient inventory control procedures minimize the creation of obsolete stocks.

Syngenta has developed a rigorous screening and development process in order to mitigate risks relating to the use of its products. All active substances and products must meet both Syngenta's internal standards and regulatory requirements.

Syngenta provides support to growers on a local level such as training in application techniques and assistance in calibrating spray equipment in order to promote safe handling of its products. Syngenta extends product stewardship long after sales in several ways, for example, by collecting and safely destroying outdated products, and providing returnable containers to reduce waste.

Crop protection products are subject to rigorous registration procedures, which are aimed at ensuring safe product usage in the field. In addition to complying with these regulatory requirements, Syngenta has adopted its own Health, Safety and Environment (“HSE”) management system. This provides a clear framework of management processes applicable at all sites, whatever the regulatory requirements in the country in which the site is situated.

Syngenta maintains a register of sites to identify manufacturing and distribution sites and locations that may have been contaminated in the past. The register is the basis for the allocation of appropriate provisions and action programs regarding measures to be taken. A risk portfolio is prepared for each site and reviewed annually. The risk portfolio is also applied to third-party manufacturers in order to identify and exclude poorly performing companies.

See Notes 2, 19 and 25 to Syngenta’s consolidated financial statements in Item 18 for a further discussion of environmental matters.

## Organizational Structure

The following are the significant legal entities in the Syngenta group of companies (the “Group”). The disclosure criteria are as follows:

–Companies directly owned by Syngenta AG

–Companies indirectly owned by Syngenta AG with annual sales in excess of \$100 million or equivalent or total assets in excess of one percent of total Group assets

–Companies with a financing function

None of the significant legal entities are listed. Please refer to Note 29 in the consolidated financial statements in Item 18 for the appropriate consolidation method applied to each type of entity.

Country	Municipality	Capital and voting rights owned by Syngenta <sup>1</sup>	Local currency	Share capital in local currency	Function of company
<b>Argentina</b>					
Syngenta Agro S.A.	Buenos Aires	100%	ARS	2,801,002,218	Sales/Production
<b>Australia</b>					
Syngenta Australia Pty Limited	North Ryde	100%	AUD	83,942,909	Sales/Production/Development
<b>Brazil</b>					
Syngenta Proteção de Cultivos Ltda.	São Paulo	100%	BRL	2,522,624,609	Sales/Production/Research
<b>Canada</b>					
Syngenta Canada Inc.	Guelph	100%	CAD	–	Sales/Research
<b>China</b>					
Syngenta (China) Investment Company Limited	Shanghai	100%	USD	46,660,810	Holding/Sales
<b>France</b>					
Syngenta France S.A.S.	Saint-Sauveur	100%	EUR	50,745,240	Sales/Production/Development
Syngenta Holding France SA <sup>2</sup>	Guyancourt	100%	EUR	99,965,085	Holding/Finance
<b>Germany</b>					
	Maintal	100%	EUR	2,100,000	Sales

<b>Syngenta Agro GmbH</b>						
<b>Hungary</b>						
Syngenta Hungary Kft.	Budapest	100%	HUF	280,490,000	Sales/Production/Development	
<b>India</b>						
Syngenta India Limited	Pune	96%	INR	164,718,540	Sales/Production	
<b>Indonesia</b>						
PT Syngenta Indonesia	Jakarta	100%	IDR	58,122,874,000	Sales/Production/Development	
<b>Italy</b>						
Syngenta Italia S.p.A.	Milano	100%	EUR	5,200,000	Sales/Production/Development	
<b>Japan</b>						
Syngenta Japan K.K.	Tokyo	100%	JPY	–	Sales/Production/Research	
<b>Mexico</b>						
Syngenta Agro, S.A. de C.V.	México City, D.F.	100%	MXN	157,580,000	Sales/Production/Development	
<b>Netherlands</b>						
Syngenta Seeds B.V.	Enkhuizen	100%	EUR	488,721	Holding/Sales/Production/Research	
Syngenta Finance N.V.	Enkhuizen	100%	EUR	45,000	Finance	
Syngenta Treasury N.V.	Enkhuizen	100%	EUR	90,001	Holding/Finance	
<b>Panama</b>						
Syngenta Crop Protection S.A.	Panama City	100%	USD	101,000	Sales/Distribution	
<b>Poland</b>						
Syngenta Polska Sp.z.o.o.	Warsaw	100%	PLN	22,264,000	Sales	
<b>Russian Federation</b>						
OOO Syngenta	Moscow	100%	RUB	895,619,000	Sales/Distribution	

Country	Municipality	Capital and voting rights owned by Syngenta <sup>1</sup>	Local currency	Share capital in local currency	Function of company
<b>Spain</b>					
Syngenta España S.A.	Madrid	100%	EUR	7,544,828	Distribution/Development/Production
<b>Switzerland</b>					
Syngenta Supply AG	Basel	100%	CHF	250,000	Sales
Syngenta Crop Protection AG <sup>2</sup>	Basel	100%	CHF	257,000	Holding/Sales/Production/Research
Syngenta Crop Protection	Monthey	100%	CHF	70,000,000	Production
Monthey SA <sup>2</sup>					
Syngenta Agro AG	Dielsdorf	100%	CHF	2,100,000	Sales/Production/Research
Syngenta Agroservices Asia AG <sup>2</sup>	Basel	100%	CHF	650,000	Distribution/Consulting
Syngenta Finance AG <sup>2</sup>	Basel	100%	CHF	10,000,000	Finance
Syngenta International AG <sup>2</sup>	Basel	100%	CHF	100,000	Management Services
Syngenta Participations AG <sup>2</sup>	Basel	100%	CHF	25,000,020	Holding
Syngenta South Asia AG <sup>2</sup>	Basel	100%	CHF	9,000,000	Holding/Finance
<b>Ukraine</b>					
TOV Syngenta	Kiev	100%	UAH	3,540,391,580	Sales/Research
<b>United Kingdom</b>					
Syngenta Limited	Bracknell	100%	GBP	85,000,000	Holding/Production/Research
Syngenta UK Limited	Fulbourn	100%	GBP	500	Sales/Research
<b>USA</b>					
Syngenta Crop Protection, LLC	Greensboro	100%	USD	100	Sales/Production/Research
Syngenta Seeds, LLC	Minnetonka	100%	USD	–	Sales/Production/Research
Syngenta Corporation	Wilmington	100%	USD	100	Holding/Finance
GreenLeaf Genetics LLC	Minnetonka	100%	USD	–	For Liquidation
<b>Vietnam</b>					
Syngenta Vietnam Ltd.	Bien Hoa City	100%	USD	45,000,000	Sales/Production

<sup>1</sup>The capital and voting rights in 2016 have not changed compared with 2015

<sup>2</sup>Direct holding of Syngenta AG





**Property, Plants and Equipment**

Syngenta's principal executive offices are located in Basel, Switzerland. Syngenta's businesses operate through a number of offices, research facilities and production sites. The following is a summary of Syngenta's principal properties:

Locations	Freehold/ Leasehold	Approx. area (thou. sq. ft.)	Principal use
Rosental, Basel, Switzerland	Freehold	300	Headquarters, global functions
Monthey, Switzerland	Freehold	10,400	Production
Stein, Switzerland	Freehold	4,000	Research
Dielsdorf, Switzerland	Freehold	200	Administration, marketing, production
Kaisten, Switzerland	Freehold	100 <sup>1</sup>	Production
Münchwilen, Switzerland	Freehold	600	Research, production
Seneffe, Belgium	Freehold	2,500	Production
Ghent, Belgium	Leasehold	100	Administration, research
Aigues-Vives, France	Freehold	1,500 <sup>2</sup>	Production
Nérac, France	Freehold	600	Production
St Pierre, France	Freehold	1,500	Production
Saint-Sauveur, France	Freehold	200	Research, production
Sarrians, France	Freehold	3,200	Research
Bad Salzuflen, Germany	Leasehold	34,400	Research, production
Mezotur, Hungary	Freehold	1,300	Production
Enkhuizen, The Netherlands	Freehold	3,500	Administration, research, marketing, production
Landskrona, Sweden	Freehold	8,700	Research, production, marketing
Jealott's Hill, Berkshire, UK	Freehold	28,300	Research
Huddersfield, West Yorkshire, UK	Freehold	10,800	Production
Grangemouth, Falkirk, UK	Freehold	900	Production
Greensboro, North Carolina, USA	Freehold	3,000	US headquarters, research
Minnetonka, Minnesota, USA	Freehold	100	Administration
St. Gabriel, Louisiana, USA	Freehold	54,700	Production
Greens Bayou, Texas, USA	Freehold	10,900 <sup>3</sup>	Production
Research Triangle Park, North Carolina, USA	Freehold	3,400	Research
Gilroy, California, USA	Freehold	2,500	Production, research, marketing
Lone Tree, Iowa, USA	Freehold	1,300	Production
Omaha, Nebraska, USA	Freehold	1,800	Production
Phillips, Nebraska, USA	Freehold	2,600 <sup>4</sup>	Production
Waterloo, Nebraska, USA	Freehold	1,700 <sup>5</sup>	Production
Pasco, Washington, USA	Freehold	1,700	Production
Clinton, Illinois, USA	Freehold	1,400	Research
Stanton, Minnesota, USA	Freehold	18,000	Research
Slater, Iowa, USA	Freehold	13,700	Research
Woodland, California, USA	Freehold	6,400	Production, research
Venado Tuerto, Argentina	Freehold	1,000	Production

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Formosa, Brazil	Freehold	2,200	Production
Itápolis, Brazil	Freehold	500	Production
Ituiutaba, Brazil	Freehold	2,200	Production
Matão, Brazil	Freehold	500	Production
Paulinia, Brazil	Freehold	6,800	Production
Uberlandia, Brazil	Freehold	27,000	Research
Amatitlan, Guatemala	Freehold	3,100	Production
Kapok, Guatemala	Freehold	2,000	Production, research
Nantong, China	Leasehold	1,900	Production
Beijing, China	Leasehold	300	Research
Goa, India	Freehold	70	Research
Iksan, South Korea	Freehold	900	Production
Koka, Ethiopia	Leasehold	9,700	Production
Pollen, Kenya	Freehold	4,800	Production
Thika, Kenya	Freehold	3,000	Production

1 Surface area of building/factory that Syngenta owns; land (143 thousand square feet) is owned by a third party

2 Only approximately 900 thousand square feet are currently used and developed

3 Only approximately 5,900 thousand square feet are currently used and developed

4 Only approximately 1,700 thousand square feet are currently used and developed

5 Only approximately 1,200 thousand square feet are currently used and developed

Please also see “Business Overview” above for a description of the products produced at the various properties listed above.

In 2013, Syngenta announced plans to invest approximately \$90 million by the end of 2018 on the expansion of its research and development operations on Syngenta’s research campus in Research Triangle Park, North Carolina, USA, including further capacity expansion, and upgraded laboratory and other facilities. Research at the expanded site will focus on traits that can better tolerate climate variability, combat plant stresses such as drought, and enhance crop productivity and plant performance. In addition to the current focus on corn and soybean, research will be expanded to incorporate other crops such as cereals, rice, vegetables and sugar cane. Spending on the project in 2016 was approximately \$7 million and cumulative spending totals approximately \$95 million.

In 2014, Syngenta started work at its Monthey, Switzerland site to increase the production capacity of SDHI fungicides by 900 metric tons per year by 2017 at an estimated cost of \$65 million. Spending on the project in 2016 was approximately \$22 million and cumulative spending totals approximately \$64 million.

In 2016, Syngenta completed the project to invest an additional approximately \$100 million at its Kaisten, Switzerland site to increase production capacity of an intermediate to one of its major Selective herbicide products by an additional approximately 30 percent to meet increasing demand. Spending on the project in 2016 was approximately \$21 million and cumulative spending totals approximately \$87 million.

Syngenta is refurbishing and modernizing its Basel headquarters under a program that will run over the period through 2017 and is estimated to cost approximately \$200 million, with approximately 90 percent spent as of December 31, 2016.

In 2015, Syngenta announced plans to invest \$20 million at its Seedcare Institute facility located in Stanton, Minnesota, USA to expand existing infrastructure to meet long-term business objectives. Spending on the project during 2016 was approximately \$15 million and cumulative spending totals approximately \$20 million.

In 2016, Syngenta announced plans to invest approximately \$20 million at its Enkhuizen site located in The Netherlands, to expand the existing research and production facilities to meet long-term business objectives. Spending on the project will commence in 2017.

**Item 4A — Unresolved Staff Comments**

None.

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## **ITEM 5 — OPERATING AND FINANCIAL REVIEW AND PROSPECTS**

### **Introduction**

The following discussion includes forward-looking statements subject to risks and uncertainty. See “Forward-looking statements” at the beginning of this document. This discussion also includes non-GAAP financial data in addition to GAAP results. See Appendix A to this section and Note 1 to the financial highlights for a reconciliation of this data and explanation of the reasons for presenting such data.

### **Constant exchange rates**

Approximately 48 percent of Syngenta’s sales and 65 percent of Syngenta’s costs in 2016 were denominated in currencies other than US dollars. Therefore, Syngenta’s results for the period covered by the review were significantly impacted by movements in exchange rates. Sales in 2016 were 5 percent lower than 2015 on a reported basis, but were 2 percent lower when calculated at constant rates of exchange. The Company therefore provides analysis of results calculated at constant exchange rates (“CER”) and also actual results to allow an assessment of performance before and after taking account of currency fluctuations. To present CER information, current period results for entities reporting in currencies other than US dollars are converted into US dollars at the prior period’s exchange rates, rather than the exchange rates for this year. An example of this calculation is included in Appendix A of this section.

### **Overview**

Syngenta is a world leading agribusiness operating in the crop protection, seeds and lawn and garden markets. Crop protection chemicals include herbicides, insecticides, fungicides and seed treatments to control weeds, insects and diseases in crops, and are essential inputs enabling growers around the world to improve agricultural productivity and food quality. In Seeds, Syngenta operates in the high value commercial sectors of field crops (including corn, oilseeds, cereals and sugar beet) and vegetables. The Lawn and Garden business provides professional growers and consumers with flowers, turf and landscape, and professional pest management products.

Syngenta’s results are affected, both positively and negatively, by, among other factors: general economic conditions; weather conditions, which can influence the demand for certain products over the course of a season and the quantity and cost of seeds supply; commodity crop prices; and exchange rate fluctuations. Government measures, such as subsidies or rules regulating the use of agricultural products, genetically modified seeds, or areas allowed to be planted with certain crops, also can have an impact on Syngenta’s industry. Syngenta’s results are also affected by the growing importance of biotechnology to agriculture and the use of genetically modified crops. In future years, climate

change may have both positive and negative impacts on Syngenta's results. Climate change may make growing certain crops more or less viable in different geographic areas, but is not likely to reduce overall demand for food and feed. Syngenta currently sells and is developing products to improve the water productivity of plants and increase tolerance to drought and heat. Legislation may be enacted in the future that limits carbon dioxide emissions in the manufacture of Syngenta's products or increases the costs associated with such emissions. Syngenta works actively to make its production operations more energy efficient and to reduce the rate of carbon dioxide emissions per unit of sales revenue.

Syngenta operates globally to capitalize on its technology and marketing base. Syngenta's largest market in 2016 was Europe, Africa and the Middle East, which represented approximately 31 percent of consolidated sales (2015: 31 percent) followed by North America at 28 percent (2015: 27 percent), Latin America at 26 percent (2015: 27 percent) and Asia Pacific at 15 percent (2015: 15 percent). Markets for agricultural products in Europe, Africa and the Middle East and North America are seasonal resulting in both sales and operating profit for Syngenta in these markets being weighted towards the first half of the calendar year, which largely reflects the northern hemisphere planting and growing cycle. Latin America has its main selling season in the second half of the year due to its location in the southern hemisphere. Asia Pacific sales and operating profit are more uniform throughout the year.

Syngenta's most significant manufacturing and research and development sites are located in Switzerland, the United Kingdom ("UK"), the United States of America ("USA" or "US"), China and India. Syngenta has major research centers focused on identifying new active ingredients in Stein, Switzerland and Jealott's Hill, UK. Syngenta's primary center for agricultural genomics and biotechnology research is in the USA.

References in this document to market share estimates are based where possible on global agrochemical and biotechnology industry information provided by a third party or on information published by major competitors and are supplemented by Syngenta marketing staff estimates.

The consolidated financial statements are presented in US dollars, as this is the major currency in which revenues are denominated. However, significant, but differing proportions of Syngenta's revenues, costs, assets and liabilities are denominated in currencies other than US dollars. Approximately 16 percent of sales in 2016 were denominated in Euros, while a significant proportion of costs for research and development, administration, general overhead and manufacturing were denominated in Swiss francs and British pounds sterling (approximately 19 percent in total). Sales in Swiss francs and British pounds sterling together made up approximately 2 percent of total sales. Marketing and distribution costs are more closely linked to the currency split of the sales. As a result, operating profit in US dollars can be significantly affected by movements in exchange rates, in particular movements of the Swiss franc, British pound sterling, Euro and Brazilian real, relative to the US dollar, and the relative impact on operating profit may differ from that on sales. Sales in emerging markets are over 50 percent of Syngenta's total sales. Where it is not commercially disadvantageous, Syngenta sets sales prices in these markets in US dollars, particularly in parts of Latin America and the CIS. However, in many emerging territories Syngenta sells in the local currency of the countries in the territory and as a result has a long exposure to multiple emerging market currencies. The effects of currency fluctuations within any one year have been reduced by risk management strategies such as hedging and the aforementioned US dollar sales pricing. For further information on these strategies please refer to Note 27 of the consolidated financial statements in Item 18.

The consolidated financial statements in Item 18 are based upon Syngenta's accounting policies and, where necessary, the results of management estimations. Syngenta believes that the critical accounting policies and estimations underpinning the financial statements are in the areas of (i) royalty and license income, (ii) impairment, (iii) classification of assets and liabilities to be divested, (iv) share based payment, (v) foreign currency translation, (vi) adjustments to revenue and trade receivables, (vii) deferred tax assets (viii) uncertain tax positions (ix) seeds inventory valuation and allowances, (x) environmental provisions and (xi) defined benefit post-employment benefits. These policies are described in more detail in Notes 2 and 29 to the consolidated financial statements in Item 18.



## Summary of results

Net income in 2016 was 12 percent lower than 2015 as cost savings from the ongoing restructuring and local currency sales price increases were more than offset by the inclusion in 2015 of the favorable impact of a change in selling terms in Brazil that brought forward the recognition of sales and \$200 million royalty income from the signing of a trait license agreement with KWS and Limagrain, together with the impact of generally weaker currencies relative to the US dollar and increased charges to restructuring and impairment.

Sales in 2016 were 5 percent lower, 2 percent at constant exchange rates, with a 4 percent reduction in sales volumes offset by 2 percent higher local currency sales prices, driven by increases to offset declines in emerging market currencies. The adverse impact on sales of generally weaker currencies relative to the US dollar was approximately \$0.3 billion. The lower sales volume reflected the inclusion in 2015 of the favorable impact of a change in selling terms in Brazil that brought forward the recognition of sales and \$200 million royalty income from the signing of a trait license agreement with KWS and Limagrain together with the final year of deliberate reduction in sales of low margin solo glyphosate and a stop on sales into Venezuela due to non-payment. Excluding these factors, sales volumes were marginally higher in a market that continued to be challenging. Local currency sales price increases included price increases in Russia and the Ukraine, significantly offsetting currency weakness in those countries, partially offset by lower prices in solo glyphosate, which reflected lower purchase prices for the active ingredient; otherwise, local currency sales prices overall increased by approximately 2 percent, with increases particularly in Brazil to mitigate exchange rate weakness seen in 2015.

Operating costs as a percentage of sales increased by 0.8 percentage points in 2016. Excluding restructuring costs and the incremental share based payment costs associated with the ChemChina Tender Offer, described below, operating costs as a percentage of sales were flat in 2016 compared with 2015 and were 0.7 percentage points lower at constant exchange rates. Restructuring and impairment costs, combined with the incremental effect of applying cash-settled share based payment accounting due to share plan amendments related to the ChemChina Tender Offer, were \$89 million higher than in 2015 due to the costs associated with the ChemChina Tender Offer and increased impairments of non-current assets. Currency exchange rate impacts from the general strength of the US dollar reduced operating income by approximately \$153 million, including losses on related hedges in 2016 compared to gains in 2015, with a further negative impact from the significantly weaker Russian ruble and Ukrainian hryvnia that was offset significantly by increased local currency sales prices; excluding these price increases, the net adverse impact of currency movements on operating income, including hedging, was approximately \$45 million adverse.

Cash flow from operating activities was \$617 million higher due to a continued decrease in inventories and a lower build in trade receivables in Brazil than in 2015. Income before taxes, adjusted for the reversal of non-cash items was \$134 million lower than 2015, reflecting the lower level of income before taxes. Taxes paid were lower following the settlement in 2015 of several outstanding tax years for an entity in Switzerland, and cash paid against restructuring provisions decreased due to a lower level of severance and pension charges under the Accelerating Operational Leverage (“AOL”) program. Cash flow used for investing activities in 2016 was \$59 million higher than in 2015, with the purchases of \$53 million of marketable securities and lower proceeds from the disposal of non-current assets more than offsetting a \$57 million increase in proceeds from business divestments. Cash flow used for financing activities was \$54 million lower than in 2015 due to a lower dividend payment when translated into US dollars; no bonds were

repaid in 2016, and in 2015 bond repayments were broadly matched by a new bond issue. Subject to the ChemChina Tender Offer to acquire Syngenta shares becoming unconditional, Syngenta will pay a special dividend of CHF 5.00 per share immediately before the first settlement of the ChemChina Tender Offer. No regular dividend is proposed.

Regional sales of Crop Protection and Seeds products were 5 percent lower, 2 percent lower at constant exchange rates. As noted above, 2015 Seeds sales included \$200 million royalty income from the license agreement with KWS and Limagrain, while Crop Protection sales included \$239 million additional sales related to the change in sales terms in Brazil, which brought forward the sales recognition to the point of delivery to distributors. Crop Protection product sales were 4 percent lower, 2 percent at constant exchange rates, with 4 percent lower sales volumes from the 2015 Brazil revenue recognition change noted above, the impact of adverse weather conditions in parts of Western Europe in the second quarter of the year and of a stop in sales to Venezuela due to overdue receivables, partly offset by increased sales volumes in Russia, the Ukraine and India. Local currency sales prices were 2 percent higher, with price increases particularly in Russia, the Ukraine and Brazil to offset currency weakness in 2015 and 2016 more than offsetting a further decline in glyphosate sales prices as product costs reduced. Seeds sales declined in 2016 by 6 percent, 3 percent at constant exchange rates as a 1 percent increase in local currency sales prices, with local currency price increases in Russia and the Ukraine but reduced prices in the US, was more than offset by a 4 percent decrease in sales volume, where growth in sunflower sales in Russia and the Ukraine and corn seed sales in Latin America was more than offset by the aforementioned 2015 royalty.

Sales of Crop Protection and Seeds products were 2 percent lower in Europe, Africa and Middle East, but were 5 percent higher at constant exchange rates. Sales in Russia and the Ukraine benefited from both significant local currency price increases to offset currency declines and sales volume growth and in US dollar terms were more than 10 percent higher than 2015; excluding these countries, sales in the region were lower at constant exchange rates due to the adverse weather conditions seen in Western Europe. Sales in North America were 6 percent lower, 6 percent at constant exchange rates, with 5 percent lower sales volumes and sales prices 1 percent lower. The \$145 million income from the KWS and Limagrain license increased 2015 volumes by 4 percent; otherwise, growth in sales of new products, particularly ACURON™ and SOLATENOL™ was offset by the deliberate reduction in glyphosate volumes and weaker sales of Seedcare and soybean seeds. Latin America sales were 9 percent lower, 9 percent at constant exchange rates. 2015 revenue in the region included \$55 million from the KWS and Limagrain agreement and an additional \$239 million from the change in sales terms noted above, which together increased reported sales volumes by 8 percent; sales volumes otherwise reflected continued difficult market conditions and a stop in sales to Venezuela, with some offset from a strong performance in Seeds. Sales in Asia Pacific were flat, but 2 percent higher at constant exchange rates, with flat local currency sales prices and a 2 percent increase in sales volumes driven by growth in India and a strong second half recovery from El Niño in the Association of Southeast Asian Nations (ASEAN).

Lawn and Garden sales were 2 percent above the 2015 level, 4 percent higher at constant exchange rates with growth driven by increased vector control sales.

Gross profit margin increased by 1.6 percentage points, 1.7 percentage points excluding restructuring and impairment. The license agreement signed with KWS and Limagrain increased 2015 gross profit margin by 0.8 percentage points; excluding this, gross profit margin was approximately 2.5 percentage points higher, with improved margins in both Crop Protection and Seeds products, but particularly Crop Protection as a result of higher sales prices and lower

product costs from savings under the AOL program and lower oil related costs.

Marketing and distribution expenses decreased by 4 percent; expenses excluding restructuring and impairment decreased by 5 percent, 2 percent at constant exchange rates, with savings under the AOL restructuring program and reduced charges for doubtful receivables in Eastern Europe and Brazil.

Research and development expense decreased by 5 percent, 2 percent at constant exchange rates, due to cost savings and productivity improvements delivered under the AOL restructuring program.

General and administrative, including restructuring and impairment, the components of which are described under the Restructuring and impairment heading within this section, increased by \$264 million compared with 2015. General and administrative excluding restructuring and impairment was 38 percent higher, including foreign exchange hedging losses of \$73 million compared with gains of \$21 million in 2015. Excluding currency effects, General and administrative excluding restructuring and impairment was 30 percent higher. General and administrative costs in global support functions, including Business Services, are charged out to the segments and to the global Research and development and Production and Supply operations in US dollars at amounts fixed at the start of the year. As a result of general currency weakness relative to the US dollar, an excess recharge was recorded in 2015 compared to gross costs incurred, which was not repeated in 2016. 2015 also included higher gains on the disposal of non-current assets, in particular land in Switzerland, than were recorded in 2016 and litigation expenses in 2016 increased from the level of 2015, particularly in the US.

Restructuring and impairment expenses in 2016, including the \$70 million incremental effect of applying cash-settled share based payment accounting due to the share plan amendments related to the ChemChina Tender Offer described below, increased by \$89 million over 2015. The AOL program, announced in February 2014, continued to progress, with charges of \$223 million in 2016 compared with \$240 million in 2015. Charges in 2016 increased due to transaction costs associated with the ChemChina Tender Offer, as well as incremental share based payments as noted above, and an increased level of impairment of non-current assets in 2016.

Financial expense, net was \$35 million higher than 2015 mainly due to increased exposures in emerging markets, particularly in Latin America and some currency losses where hedging is not available. The tax rate, excluding taxes related to restructuring and impairment, reduced by 2 percentage points to 15 percent, partly from the settlement of a tax case in India with a more favorable outcome than anticipated.

Together, these factors resulted in 2016 net income attributable to Syngenta AG shareholders and diluted earnings per share decreasing by 12 percent, compared with 2015.

Net income in 2015 was 17 percent lower than 2014 as cost savings from the ongoing restructuring and local currency sales price increases were more than offset by the impacts of generally weaker currencies relative to the US dollar, increased charges to restructuring and impairment and the favorable impact in 2014 of amendments to the defined benefit pension plans in the UK and the Netherlands.

Sales in 2015 were 11 percent lower, but 1 percent higher at constant exchange rates, with 2 percent lower sales volumes offset by 3 percent higher local currency sales prices, driven by increases to offset declines in emerging market currencies. The adverse impact on sales of generally weaker currencies relative to the US dollar was approximately \$1.8 billion. The lower sales volume reflected a deliberate reduction in sales of low margin glyphosate, weaker seeds volumes in Russia and the Ukraine after the sales price increases to offset the impact of currency weakness and generally challenging markets, partly offset by the favorable impact of the change in selling terms in Brazil that brought forward the recognition of sales and the royalty income from the trait license agreement with KWS and Limagrain. Local currency sales price increases included price increases in Russia and the Ukraine, offsetting currency weakness in those countries, partially offset by lower prices in solo glyphosate, which reflected lower purchase prices for the active ingredient; otherwise, local currency sales prices overall were broadly flat.

Operating costs as a percentage of sales increased slightly in 2015 compared with 2014, but excluding restructuring and impairment were approximately 1.4 percentage points lower. Operating costs in 2015 were reduced by approximately \$1.2 billion due to weaker currency exchange rates relative to the US dollar, and also reflected savings under the ongoing restructuring programs and benefits from the lower oil price, which together more than offset cost inflation. In addition, operating costs compared with prior year were impacted by an increase in charges to provisions for doubtful receivables and the gains of approximately \$170 million recorded in 2014 from amendments to defined benefit pension plans in the UK and the Netherlands. Restructuring and impairment costs excluding those in Cost of goods sold were \$195 million higher as the AOL program announced in February 2014 gained momentum in 2015; increased charges also reflected advisor costs associated with industry consolidation transactions and the impairment of assets related to a seeds crop, where expectations of future operating profitability had declined. Currency exchange rate impacts from the general strength of the US dollar reduced operating income by approximately \$571 million, including higher gains on related hedges in 2015 than 2014, with a significant negative impact from the significantly weaker Russian ruble and Ukrainian hryvnia that was offset by increased local currency sales prices; excluding these currencies, the net adverse impact on operating income, including hedging, was approximately \$100 million.

Cash flow from operating activities was \$741 million lower than 2014 including an increased build-up of trade receivables in Latin America due largely to delayed collections in Brazil; inflows from reduced inventories were lower following the significant reduction in the inventory to sales ratio in 2014. Income before taxes, adjusted for the reversal of non-cash items was \$92 million higher than 2014, including a higher add-back for charges to provisions. Taxes paid were higher following the settlement of outstanding tax years for an entity in Switzerland, and cash paid for restructuring costs increased as the AOL program progressed. Cash flow used for investing activities in 2015 was \$267 million lower than in 2014, including a \$147 million reduction in additions to property, plant and equipment; net cash spent on acquisitions and disposals was also lower. Cash flow used for financing activities was \$768 million higher than in 2014; both years included bond repayments, but in 2015 bond repayments were broadly matched by a new bond issue, while in 2014 Eurobond and domestic CHF bonds were issued at a higher level than that of bonds repaid in the year.

## Acquisitions, divestments and other significant transactions

### 2016

On March 15, 2016, Syngenta divested Syngenta Bioline Ltd. (“Bioline”), its beneficial insect breeding business. On June 1, 2016, Syngenta divested its manufacturing operations in Goa, India to Deccan Fine Chemicals India Private Ltd. Neither transaction had individually material proceeds nor led to a material gain or loss.

As of March 23, 2016, CNAC Saturn (NL) B.V. (“the Offeror”), a subsidiary of China National Chemical Corporation (ChemChina), a state-owned enterprise of the People’s Republic of China, launched public tender offers in Switzerland and in the United States to acquire all the publicly held Ordinary Shares and, in the U.S. offer, also all American Depositary Shares (ADSs) of Syngenta AG (“the ChemChina Tender Offer”) for \$465 per Ordinary Share in cash. Syngenta and its Board of Directors have agreed to support the ChemChina Tender Offer. The Main Offer Period has been extended until March 2, 2017, with further extension likely to follow until all offer conditions are fulfilled. At such time, the Offeror will extend the ChemChina Tender Offer for the last time by a period of up to 20 trading days. The ChemChina Tender Offer is conditional among other things on acceptance by shareholders owning 67 percent of Syngenta AG issued shares and on regulatory approval by the competent merger control and other authorities. For detailed discussion of the ChemChina Tender Offer, see Note 3 to the consolidated financial statements in Item 18.

### 2015

On October 15, 2015, Syngenta acquired 100 percent of the shares of Land.db Enterprises Inc. in exchange for cash, including contingent consideration. The primary reason for the acquisition was to gain exclusive control of the AgriEdge Excelsior® farm management software program, which integrates products, services, risk management and technology for growers.

### 2014

In April 2014, Syngenta acquired 100 percent of the shares of Società Produttori Sementi S.p.A. (“PSB”) in exchange for cash. PSB is one of Italy’s oldest seed companies and a leader in durum wheat breeding and production. The primary reasons for the acquisition were to gain access to PSB’s durum wheat breeding expertise and its links to the food industry, which will be complemented by Syngenta’s cereals Research and Development and global presence.

In July 2014, Syngenta acquired the German and Polish winter wheat and winter oilseed rape (“WOSR”) breeding and business operations of Lantmännen, the Swedish food, energy and agriculture group, in exchange for cash. The acquired business consists of 100 percent of the shares of Lantmännen SW Seed Hadmersleben GmbH, Lantmännen SW Seed GmbH, SW Winter Oilseed AB and certain sites in Germany. The primary reasons for the acquisition were to give Syngenta access to high-quality germplasm, a seeds pipeline and commercial varieties which complement

Syngenta's portfolio and will support the continued development of hybrid cereals for growers worldwide.

### **Restructuring programs**

In February 2014, Syngenta announced a restructuring program, the AOL program to drive further improvement in operating income margins and accelerate delivery of operational leverage. The program targets an improvement in profitability as a percentage of sales over the period up to 2018 from a reduction in the ratios of cost of goods sold, marketing and distribution, research and development and general and administrative expenses to sales. The program includes plans to further improve efficiency in customer facing operations, research and development and production and to enable an improvement in the ratio of trade working capital to sales. The cash cost of the restructuring program is estimated at approximately \$900 million, including the costs of implementing new systems, but excluding related capital expenditures, and significant benefits began to be realized in 2015 and 2016. During 2016, cash costs of \$214 million were charged under the program (2015: \$228 million) and cash spent was \$229 million (2015: \$168 million). Non-cash charges of \$9 million were incurred to write down assets whose values were reduced by programs improving production and supply and research and development efficiencies (2015: asset impairments of \$33 million and a pension curtailment gain of \$21 million relating to employees impacted by restructuring). Cumulative costs incurred for the program through December 31, 2016 total \$491 million and cumulative spending totals \$440 million.

The program announced in 2011 to integrate global commercial operations for Crop Protection and Seeds is substantially complete. The program has enabled operational synergies from the commercial integration, additional cost savings from procurement and supply chain efficiencies and the presentation of an integrated product offer to grower customers. During 2016, costs of \$1 million were charged under the program relating to the completion of projects initiated before the end of 2015 (2015: \$27 million) and cash spent was \$4 million (2015: \$29 million). Cumulative costs incurred for the program through December 31, 2016 total \$400 million, in line with the \$400 million of cash costs estimated in the 2015 report, and cumulative spending totals \$379 million.

The operational efficiency cost saving programs announced in 2004 and 2007 are now complete. Cash spent under the programs in 2016 and 2015 totaled \$3 million and \$7 million, respectively. Cumulative spending on the programs to the end of 2016 totals \$1,063 million and non-cash charges total \$371 million, broadly in line with the projected \$1,050 million cash costs and \$380 million of non-cash charges previously indicated.

## Results of operations

### 2016 compared with 2015

#### Sales commentary

Syngenta's consolidated sales for 2016 were \$12,790 million, compared with \$13,411 million in 2015, a 5 percent decrease year on year. At constant exchange rates sales decreased by 2 percent. The analysis by segment is as follows:

(\$m, except change %)			Change				
Segment	2016	2015	Volume	% Local price	% CER	% Currency	% Actual
Europe, Africa and Middle East	3,793	3,884	+1	+4	+5	-7	-2
North America	3,202	3,410	-5	-1	-6	-	-6
Latin America	3,293	3,632	-13	+4	-9	-	-9
Asia Pacific	1,839	1,837	+2	-	+2	-2	-
<b>Total regional</b>	12,127	12,763	-4	+2	-2	-3	-5
Lawn and Garden	663	648	+4	-	+4	-2	+2
<b>Group sales</b>	12,790	13,411	-4	+2	-2	-3	-5

#### Europe, Africa and Middle East

Sales decreased by 2 percent, but increased 5 percent at constant exchange rates with volume and local currency price increases of 1 percent and 4 percent respectively. Full year sales growth was achieved despite exceptionally difficult weather conditions affecting north-west Europe in the second quarter. The main growth driver was an excellent performance in the CIS, with an expansion of strong market positions in both crop protection and seeds. Volumes increased in both Russia and Ukraine, with further price increases implemented to offset the impact of currency depreciation. In the fourth quarter, Ukraine made a major contribution with an early start to the season and sales recovered strongly in Africa and Middle East in the final quarter as drought conditions eased.

#### North America

Sales in North America declined by 6 percent with volume decreases of 5 percent and local currency price declines of 1 percent. Crop protection sales were unchanged despite challenging grower economics and the deliberate reduction in glyphosate. A total of 16 new products were introduced, including the launch of the fungicides TRIVAPRO™ and ORONDIS™. In the corn herbicide market, ACURON™ continued to win recognition for its control of resistant weeds,



and full year sales exceeded \$200 million. Seeds sales were lower, largely due to the non-recurrence of the corn trait royalty.

### **Latin America**

Sales decreased by 9 percent, also at constant exchange rates. Reported volumes declined by 13 percent, but local currency prices increased by 4 percent. Excluding the impact of the change in sales terms, sales were 3 percent lower. While sales were curtailed in Venezuela, business improved significantly in Argentina as the new government implemented reforms to support agriculture. In Brazil, conditions improved in the Cerrados in the second half but worsened in other growing areas as dry weather moved south. Insecticides sales continue to be constrained by a high level of channel inventories and by soybean trait adoption. Corn seed sales progressed strongly, underpinned by the success of the VIPTERA™ trait.

### **Asia Pacific**

Sales in Asia Pacific were flat year on year with volume increases of 2 percent offset by currency impacts. El Niño receded towards the end of the second quarter and the business recovered strongly in the second half. Channel inventory in ASEAN was reduced, contributing to a rebound in demand, particularly for fungicides and insecticides. Sales in South Asia also saw a strong second half, benefiting from new launches in crop protection and expansion of vegetables and corn seeds.

### **Lawn and Garden: major brands ICON®, GOLDFISCH®, GOLDSMITH SEEDS, YODER®, SYNGENTA FLOWERS**

Sales increased by 2 percent with volume increases of 4 percent partially offset by currency impacts. At constant exchange rates, sales increased by 4 percent. Sales growth was driven by high demand for vector controls, including ACTELLIC CS, a longer-lasting, more effective product to prevent the spread of malaria. Growth in turf was mainly driven by golf course sales in North America.

Sales by product line are set out below:

Product line	(\$m, except change %)		Change				
	2016	2015	Volume %	Local price %	CER %	Currency %	Actual %
Selective herbicides	2,853	2,894	-1	+3	+2	-3	-1
Non-selective herbicides	773	913	-5	-8	-13	-2	-15
Fungicides	3,157	3,357	-8	+4	-4	-2	-6
Insecticides	1,643	1,705	-4	+2	-2	-2	-4
Seedcare	1,003	994	+3	+2	+5	-4	+1
Other crop protection	142	142	+1	-1	-	-	-
<b>Total Crop Protection</b>	<b>9,571</b>	<b>10,005</b>	<b>-4</b>	<b>+2</b>	<b>-2</b>	<b>-2</b>	<b>-4</b>
Corn and soybean	1,375	1,564	-10	-1	-11	-1	-12
Diverse field crops	666	658	+9	+2	+11	-10	+1
Vegetables	616	616	-1	+4	+3	-3	-
<b>Total Seeds</b>	<b>2,657</b>	<b>2,838</b>	<b>-4</b>	<b>+1</b>	<b>-3</b>	<b>-3</b>	<b>-6</b>
Elimination*	(101)	(80)	n/a	n/a	n/a	n/a	n/a
<b>Total regional</b>	<b>12,127</b>	<b>12,763</b>	<b>-4</b>	<b>+2</b>	<b>-2</b>	<b>-3</b>	<b>-5</b>
Lawn and Garden	663	648	+4	-	+4	-2	+2
<b>Group sales</b>	<b>12,790</b>	<b>13,411</b>	<b>-4</b>	<b>+2</b>	<b>-2</b>	<b>-3</b>	<b>-5</b>

\*Crop Protection sales to Seeds

## Crop Protection

Selective herbicides: major brands ACURON™, AXIAL®, CALLISTO® family, DUAL MAGNUM®, BICEP® II MAGNUM, FUSILADE® Max, FLEX®, TOPIK®

Sales decreased by 1 percent, but increased by 2 percent at constant exchange rates with a volume decline of 1 percent offset by local currency price increases of 3 percent. Sales growth was driven by EAME and North America. In Europe, AXIAL® continued its success on cereals and CALLISTO® expanded on corn in Africa and the CIS. In North America the main growth driver was the continued adoption by US growers of the novel corn herbicide ACURON™, combining three modes of action and four active ingredients.

Non-selective herbicides: major brands GRAMOXONE®, TOUCHDOWN®

Sales decreased by 15 percent, 13 percent at constant exchange rates. Volumes declined by 5 percent and local currency prices decreased by 8 percent. Performance reflected the deliberate reduction in solo glyphosate, now

complete, undertaken in order to improve profitability. At the same time glyphosate prices continue to decline. Sales of GRAMOXONE® were also lower, with volumes in the first half affected by dry weather in ASEAN, and some price pressure from generics in North America.

Fungicides: major brands ALTO®, AMISTAR®, BONTIMA®, BRAVO®, ELATUS®, MIRAVIS™ (based on ADEPIDYN™), MODDUS®, REVUS®, RIDOMIL GOLD®, SCORE®, SEGURIS®, UNIX®

Fungicide sales decreased by 6 percent, 4 percent at constant exchange rates. Volume declines of 8 percent were partially offset by local currency price increases of 4 percent. North America saw good growth as new products ORONDIS™ and TRIVAPRO™ (based on SOLATENOL™) gained momentum. EAME sales were higher at constant exchange rates despite a difficult first half, when wet weather resulted in missed sprays; the second half saw a strong recovery, with late season demand in cereals and good demand on specialty crops. Innovation continued to expand the portfolio with the launch in the fourth quarter of ELATUS® PLUS in France and MIRAVIS™ Duo (based on ADEPIDYN™) in Argentina.

Insecticides: major brands ACTARA®, DURIVO®, FORCE®, KARATE®, PROCLAIM®, VERTIMEC®

Sales fell by 4 percent and were 2 percent lower at constant exchange rates with volumes declining by 4 percent and local currency prices 2 percent higher. Insecticides saw growth across the northern hemisphere, with particularly good performances by ACTARA®, DURIVO® and KARATE®. In Brazil, sales were affected by low insect pressure and soybean trait penetration, with channel inventories remaining high. Sales in Asia Pacific, which were affected by drought in the first half of the year, rebounded strongly in the second half.

Seedcare: major brands AVICTA®, CRUISER®, DIVIDEND®, CELEST®/MAXIM®, VIBRANCE®

Seedcare sales were 1 percent higher, 5 percent higher at constant exchange rates. Volumes grew by 3 percent and local currency prices were 2 percent higher. CRUISER® showed good growth in a number of European markets despite limitations on its use for certain crops. Sales in Canada staged a strong recovery, led by the fungicide VIBRANCE®, which was more than offset in North America by lower treatment intensity and higher inventory in the USA.

## Seeds

Corn and soybean: major brands AGRISURE®, GOLDEN HARVEST®, NK®

Sales declined by 12 percent and were down 11 percent at constant exchange rates. Volumes were 10 percent lower and local currency prices were 1 percent lower. Sales in the fourth quarter were affected by the non-recurrence of the \$200 million corn trait royalty received from KWS/Limagrain in the fourth quarter of 2015. This revenue was recorded in North America (\$145 million) and Latin America (\$55 million). Full year branded corn seed sales were slightly higher in the USA but lower in Europe due to reduced acreage. In Latin America there was strong underlying growth in both Brazil and Argentina supported by the adoption of VIPTERA™ trait technology. Soybean sales were lower in a competitive environment.

Diverse field crops: major brands NK<sup>®</sup> oilseeds, HILLESHÖG<sup>®</sup> sugar beet

Sales increased by 1 percent and were 11 percent higher at constant exchange rates with volumes increasing by 9 percent and local currency prices 2 percent. Sunflower sales grew strongly in Russia and Ukraine. In addition to increased acreage, growers continue to adopt superior genetics with a proven track record on the field. Sugar beet sales also increased.

Vegetables: major brands ROGERS<sup>™</sup>, S&G<sup>®</sup>

Vegetables sales were flat year on year, but 3 percent higher at constant exchange rates with local currency price increases of 4 percent partially offset by a volume decline of 1 percent. Demand was strong in Latin America, notably in Brazil and Mexico, as favorable currency rates improved growers' profitability in export markets. South Asia sales also performed well in crops such as cabbage, cauliflower and okra. Price increases were achieved in all regions, reflecting the ability to capture value from a high quality portfolio of hybrids.

## Operating income

Variances in the tables below reflect the profit impact of changes year on year. For example, an increase of sales or a decrease in costs is a positive variance and a decrease in sales or increase in costs is a negative variance.

Group Operating Income	Total as reported		Change		Restructuring and impairment		Before restructuring and impairment <sup>1</sup>		Change before restructuring and impairment <sup>1</sup>	
	2016	2015	Actual	% CER	2016	2015	2016	2015	Actual	% CER
(\$m, except change %)	2016	2015	Actual	% CER	2016	2015	2016	2015	Actual	% CER
Sales	12,790	13,411	-5%	-2%	-	-	12,790	13,411	-5%	-2%
Cost of goods sold	(6,507)	(7,042)	8%	6%	(6)	-	(6,501)	(7,042)	8%	6%
<b>Gross profit</b>	<b>6,283</b>	<b>6,369</b>	<b>-1%</b>	<b>2%</b>	<b>(6)</b>	<b>-</b>	<b>6,289</b>	<b>6,369</b>	<b>-1%</b>	<b>2%</b>
as a percentage of sales	49%	48%					49%	48%		
Marketing and distribution	(2,117)	(2,210)	4%	1%	(26)	-	(2,091)	(2,210)	5%	2%
Research and development	(1,299)	(1,362)	5%	1%	(8)	-	(1,291)	(1,362)	5%	2%
General and administrative	(1,220)	(956)	-28%	-24%	(437)	(388)	(783)	(568)	-38%	-30%
<b>Operating income</b>	<b>1,647</b>	<b>1,841</b>	<b>-11%</b>	<b>-3%</b>	<b>(477)</b>	<b>(388)</b>	<b>2,124</b>	<b>2,229</b>	<b>-5%</b>	<b>2%</b>
as a percentage of sales	13%	14%					17%	17%		

## Operating Income/(Loss)

(\$m, except change %)	2016	2015	Change %
Europe, Africa and Middle East	1,204	1,155	4%
North America	793	973	-18%
Latin America	933	890	5%
Asia Pacific	508	484	5%
Unallocated	(1,908)	(1,781)	-7%
<b>Total regional</b>	<b>1,530</b>	<b>1,721</b>	<b>-11%</b>
Lawn and Garden	117	120	-2%
<b>Group</b>	<b>1,647</b>	<b>1,841</b>	<b>-11%</b>

The two tables above do not represent income statements prepared under IFRS. Please refer to the information reported in the consolidated financial statements in Item 18.

<sup>1</sup> Amounts before restructuring and impairment are non-GAAP measures. Please refer to Appendix A of the Operating and Financial Review for a more detailed description.

### Overall Group operating income

Operating income decreased by 11 percent to \$1,647 million as the inclusion in 2015 of \$200 million of license income received from KWS and Limagrain and the impact of the change in sales terms in Brazil, together with the adverse impact of generally weaker currencies versus the US dollar and increased charges to Restructuring more than offset cost savings and local currency sales price increases. Overall, weaker currencies reduced operating income by approximately \$153 million, including a significant adverse impact from the Russian ruble and Ukrainian hryvnia. The ruble and hryvnia currency impact was significantly offset by local currency sales price increases in Russia and the Ukraine. Excluding these currencies in the CIS, the adverse impact on operating income of exchange rate movements, including the net hedging result from the hedging program for forecast foreign currency transactions ("EBITDA hedging program"), is estimated at approximately \$45 million. Excluding restructuring and impairment, the ratio of operating income to sales was broadly flat.

Sales declined by 5 percent, 2 percent at constant exchange rates with sales volumes 4 percent lower; license income received from KWS and Limagrain and the impact of the change in selling terms in Brazil in 2015 increased reported 2015 volumes by 3 percent. Volumes were reduced in 2016 by the stop in sales to Venezuela due to delayed payment from the previous season and the final year of deliberate reduction in sales of low margin solo glyphosate, which together reduced sales volumes by 1 percent. Overall local currency sales prices were 2 percent higher, driven by price increases in Russia and the Ukraine to significantly offset currency weakness in those countries and after absorbing lower prices for solo glyphosate; prices otherwise were approximately 1 percent higher, with price increases in Brazil to mitigate the currency weakness in 2015. Exchange rate movements reduced sales by \$344 million, or 3 percent. Gross profit margin increased by 1.6 percentage points, 1.7 percentage points excluding restructuring and impairment. The license agreement signed with KWS and Limagrain increased 2015 gross profit margin by 0.8 percentage points; excluding this, gross profit margin was approximately 2.5 percentage points higher, with higher margins in both Crop Protection and Seeds products, but particularly Crop Protection as a result of higher sales prices and lower product costs from savings under the AOL program and lower oil related costs.

Marketing and distribution costs were 4 percent lower; costs were 5 percent lower excluding restructuring and impairment, 2 percent at constant exchange rates, with lower charges for doubtful receivables, particularly in Eastern Europe and Brazil, and marketing and distribution cost savings from restructuring activities. Research and development expense decreased by 5 percent and excluding restructuring and impairment was 2 percent lower at constant exchange rates with cost savings and productivity increases from ongoing AOL restructuring. Research and development expense remained broadly flat as a percentage of sales.

General and administrative including restructuring and impairment was 28 percent higher than 2015, 38 percent higher excluding restructuring and impairment. General and administrative is reported net of the result of currency hedging programs, which in 2016 was a net expense of \$73 million compared with a net income of \$21 million in 2015. At constant exchange rates, taking into account both variances in underlying costs and the change in the net hedging result from year to year, General and administrative excluding restructuring and impairment was 30 percent higher than 2015. General and administrative costs in global support functions, including Business Services, are charged out to the segments and to the global Research and Development and Production and Supply operations in US dollars at amounts fixed at the start of the year and are then reported in Cost of goods sold, Research and development expense and Marketing, sales and distribution expense; as a result, the impact of currency movements on reported General and administrative is calculated based on the gross expenditure before these recharges. As a result of general currency weakness relative to the US dollar, an excess recharge was recorded in 2015 compared to gross costs incurred, which was not repeated in 2016. 2015 also included higher gains on the disposal of non-current assets, in particular land in Switzerland, than were recorded in 2016 and litigation expenses in 2016 increased from the level of 2015, particularly in the US.

Restructuring and impairment, together with the incremental effect of applying cash-settled share based payment accounting due to the share plan amendments related to the ChemChina Tender Offer, is described in the Restructuring and impairment section in this Operating and Financial Review and increased by \$89 million in 2016 to \$477 million due to the advisory and share based payment costs related to the ChemChina Tender Offer and increased impairments of non-current assets.

### Operating income by segment

Europe, Africa and Middle East	Total as reported under IFRS				Restructuring and impairment		Before restructuring and impairment <sup>1</sup>		Change before restructuring and impairment <sup>1</sup>	
	2016	2015	Actual %	% CER	2016	2015	2016	2015	Actual %	% CER
(\$m, except change %)										
Sales	3,793	3,884	-2%	5%	-	-	3,793	3,884	-2%	5%
Cost of goods sold	(1,801)	(1,889)	5%	2%	-	-	(1,801)	(1,889)	5%	2%
<b>Gross profit</b>	1,992	1,995	-	11%	-	-	1,992	1,995	-	11%
as a percentage of sales	53%	51%					53%	51%		
Marketing and distribution	(554)	(586)	6%	2%	(9)	-	(545)	(586)	7%	4%

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General and administrative	(234)	(254)	8%	5%	(98)	(128)	(136)	(126)	-8%	-10%
<b>Operating income</b>	1,204	1,155	4%	21%	(107)	(128)	1,311	1,283	2%	17%
as a percentage of sales	32%	30%					35%	33%		

This table does not represent an income statement prepared under IFRS. Please refer to the segmental information reported in Note 4 to the consolidated financial statements in Item 18.

<sup>1</sup> Amounts before restructuring and impairment are non-GAAP measures. Please refer to Appendix A of the Operating and Financial Review for a more detailed description.

Reported sales in Europe, Africa and Middle East were 2 percent below 2015, but had been reduced by approximately 7 percent due to generally weaker exchange rates relative to the US dollar, particularly the Russian ruble and Ukrainian hryvnia. At constant exchange rates, sales were 5 percent above 2015, with local currency price increases of 4 percent, principally in the CIS to compensate the currency weakness, and 1 percent higher sales volumes. See the Sales commentary section above for further information on sales in the region.

Gross profit margin was 1.1 percentage points higher, 2.9 percentage points at constant exchange rates. The local currency price increases in Russia and the Ukraine offset the adverse impact of exchange rate weakness and together with product cost savings drove an improved gross profit margin.

Marketing and distribution costs, excluding restructuring and impairment, were 7 percent lower, 4 percent at constant exchange rates, with lower charges for doubtful receivables in Eastern Europe and cost savings realized under the AOL restructuring program.

General and administrative was 8 percent lower including decreased restructuring charges. Excluding restructuring and impairment, General and administrative was 8 percent higher, 10 percent at constant exchange rates due to a gain recorded in 2015 on the disposal of land in Switzerland.

Restructuring and impairment charges were \$107 million in 2016 compared with \$128 million in 2015. Charges in 2016 include \$100 million related to progressing the AOL restructuring program, including restructuring the marketing organization, the relocation of certain support activities to lower cost countries and associated tangible asset write-downs, \$9 million of share-based payment charges related to the ChemChina Tender Offer and \$7 million for integration projects, including costs related to the divestment of the Bioline beneficial insects breeding business. The gain from the divestment is also reported in restructuring and impairment. Charges in 2015 include \$107 million related to progressing the AOL restructuring program, and \$7 million for the integration of acquisitions completed in previous years.

Operating income as a percentage of sales was 2 percentage points higher in 2016, approximately 4 percentage points higher at constant exchange rates excluding restructuring and impairment, driven by the improved gross profit margin.





North America	Total as reported under IFRS				Change		Restructuring and impairment		Before restructuring and impairment <sup>1</sup>		Change before restructuring and impairment <sup>1</sup>	
	2016	2015	Actual %	% CER	% 2016	2015	2016	2015	Actual %	% CER		
(\$m, except change %)												
Sales	3,202	3,410	-6%	-6%	-	-	3,202	3,410	-6%	-6%		
Cost of goods sold	(1,720)	(1,779)	3%	3%	(2)	-	(1,718)	(1,779)	3%	3%		
<b>Gross profit</b>	1,482	1,631	-9%	-8%	(2)	-	1,484	1,631	-9%	-8%		
as a percentage of sales	46%	48%					46%	48%				
Marketing and distribution	(528)	(537)	2%	1%	(8)	-	(520)	(537)	3%	3%		
General and administrative	(161)	(121)	-33%	-34%	(58)	(37)	(103)	(84)	-23%	-23%		
<b>Operating income</b>	793	973	-18%	-17%	(68)	(37)	861	1,010	-15%	-14%		
as a percentage of sales	25%	29%					27%	30%				

This table does not represent an income statement prepared under IFRS. Please refer to the segmental information reported in Note 4 to the consolidated financial statements in Item 18.

<sup>1</sup> Amounts before restructuring and impairment are non-GAAP measures. Please refer to Appendix A of the Operating and Financial Review for a more detailed description.

Reported sales decreased by 6 percent, 6 percent at constant exchange rates, with sales volumes 5 percent lower and 1 percent lower local currency sales prices. See the Sales commentary section above for further information on sales in the region. Sales in 2015 included \$145 million from the license agreement with KWS and Limagrain, which increased the gross profit margin by approximately 2.3 percentage points; excluding this, gross profit margin was approximately 0.8 percentage points higher in 2016, approximately 1.3 percentage points at constant exchange rates, with higher margins in Crop Protection, partly due to the further reduction in sales volumes of lower margin solo glyphosate sales and improved margins in Corn Seeds.

Marketing and distribution costs excluding restructuring and impairment were 3 percent lower, 3 percent at constant exchange rates, with savings from restructuring within both the marketing and distribution functions.

General and administrative excluding restructuring and impairment was 23 percent higher than 2015, 23 percent at constant exchange rates, due to increased litigation expenses in 2016, a settlement gain in 2015 relating to the US defined benefit pension plan and the realization of insurance proceeds relating to claims made in prior years, where recovery had not previously been assumed.

Restructuring and impairment costs were \$31 million higher than 2015 and in 2016 included \$26 million from AOL projects, \$13 million of share based payment charges related to the ChemChina Tender Offer and \$25 million of impairments related to two sites now classified as held-for-sale. Charges in 2015 included \$23 million under the AOL program, including a minor impairment related to the closure of a seeds plant in the US, and \$7 million of impairment of exclusive distribution rights where an agreement was terminated.

Operating income as a percentage of sales decreased by 4 percentage points, 3 percentage points excluding restructuring and impairment largely from the favorable impact in 2015 of the \$145 million license income from the agreement with KWS and Limagrain and increased litigation expenses in 2016.

<b>Latin America</b>	Total as reported under IFRS				Change		Restructuring and impairment		Before restructuring and impairment <sup>1</sup>		Change before restructuring and impairment <sup>1</sup>	
	2016	2015	Actual %	% CER	2016	2015	2016	2015	2016	2015	Actual %	% CER
(\$m, except change %)												
Sales	3,293	3,632	-9%	-9%	-	-	3,293	3,632	-9%	-9%		
Cost of goods sold	(1,766)	(2,118)	17%	14%	(1)	-	(1,765)	(2,118)	17%	14%		
<b>Gross profit</b>	1,527	1,514	1%	-3%	(1)	-	1,528	1,514	1%	-3%		
as a percentage of sales	46%	42%					46%	42%				
Marketing and distribution	(492)	(557)	12%	4%	(4)	-	(488)	(557)	12%	5%		
General and administrative	(102)	(67)	-53%	-12%	(45)	(28)	(57)	(39)	-47%	41%		
<b>Operating income</b>	933	890	5%	-3%	(50)	(28)	983	918	7%	-		
as a percentage of sales	28%	25%					30%	25%				

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<sup>1</sup> Amounts before restructuring and impairment are non-GAAP measures. Please refer to Appendix A of the Operating and Financial Review for a more detailed description.

Sales decreased by 9 percent, 9 percent at constant exchange rates with 13 percent lower sales volumes partially offset by 4 percent higher local currency sales prices. See the Sales commentary section above for further information on sales in the region. Gross profit margin increased by approximately 4.7 percentage points, approximately 2.9 percentage points at constant exchange rates. Sales in 2015 included \$55 million from the license agreement with KWS and Limagrain, which increased the gross profit margin by approximately 0.9 percentage points. Gross profit margin was higher in 2016 due to the increased sales prices, reduced inventory provisions in seeds and lower product costs, more than offsetting the impact of the stop in higher margin sales to Venezuela.

Marketing and distribution costs excluding restructuring and impairment were 12 percent lower than 2015, 5 percent at constant exchange rates, with lower charges to provisions for doubtful receivables in Brazil than recorded in 2015.

General and administrative excluding restructuring and impairment was 47 percent higher than 2015, but 41 percent lower at constant exchange rates largely due to cost reductions in the support functions. General and administrative in 2016 was net of currency hedging losses of \$8 million, compared with gains of \$27 million in 2015.

Restructuring and impairment costs increased by \$22 million to \$50 million in 2016. The 2016 amount includes \$37 million for AOL restructuring projects, mainly related to improving efficiencies in local processes and effectiveness of back office support services, including the establishment of an integrated system platform in Brazil, and \$7 million of share based payment charges related to the ChemChina Tender Offer. Charges in 2015 included \$22 million related to the AOL restructuring program, including restructuring of marketing operations and initial costs to establish an integrated system and support platform in Brazil.

Operating income was \$43 million higher, \$65 million excluding restructuring and impairment, due to the improved gross margin and reduction in charges to provisions for doubtful receivables. Operating income as a percentage of sales increased by nearly 4 percentage points. Excluding restructuring and impairment, operating income as a percentage of sales increased by 5 percentage points and by 3 percentage points at constant exchange rates.

Asia Pacific	Total as reported under IFRS		Change	Actual %	CER%	Restructuring and impairment		Before restructuring and impairment <sup>1</sup>		Change before restructuring and impairment <sup>1</sup>	
	2016	2015				2016	2015	2016	2015	Actual %	CER%
(\$m, except change %)	2016	2015									
Sales	1,839	1,837	-	2%	-	-	1,839	1,837	-	2%	
Cost of goods sold	(986)	(1,012)	3%	2%	-	-	(986)	(1,012)	3%	2%	
<b>Gross profit</b>	853	825	3%	6%	-	-	853	825	3%	6%	
as a percentage of sales	46%	45%					46%	45%			
Marketing and distribution	(279)	(286)	2%	1%	(2)	-	(277)	(286)	3%	2%	
General and administrative	(66)	(55)	-19%	-21%	(25)	(20)	(41)	(35)	-15%	-16%	
<b>Operating income</b>	508	484	5%	9%	(27)	(20)	535	504	6%	10%	
as a percentage of sales	28%	26%					29%	28%			

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<sup>1</sup> Amounts before restructuring and impairment are non-GAAP measures. Please refer to Appendix A of the Operating and Financial Review for a more detailed description.

Reported sales were flat, but 2 percent higher at constant exchange rates, with 2 percent higher sales volumes and flat local currency sales prices. See the Sales commentary section above for further information regarding sales in the region. Gross profit margin improved by 1.5 percentage points, 1.9 percentage points at constant exchange rates, with increased volumes of higher margin fungicides, insecticides and seedcare, combined with product cost savings.

Marketing and distribution costs excluding restructuring and impairment were 3 percent lower, 2 percent at constant exchange rates, with savings from restructuring in the marketing function.

General and administrative excluding restructuring and impairment increased by \$6 million, due to a lower level of government grants received and gains from an intangible asset disposal recorded in 2015.

Restructuring and impairment charges in 2016 increased by \$7 million to \$27 million. The 2016 amount includes \$17 million for AOL restructuring projects including projects to improve effectiveness of back office support services and the net result on the sale of the Goa manufacturing site together with associated costs. Charges in 2015 included \$16 million for implementation of AOL programs and \$3 million final charges under a previous restructuring program.

Operating income margin increased by 2 percentage points to 28 percent, and excluding restructuring and impairment improved by 1 percentage point to 29 percent, a 2 percentage point improvement at constant exchange rates, driven by the improved gross profit margin.

### **Unallocated**

Income and expense transactions in the Regional business have been attributed to the geographic regions based on the market destination to which they relate, rather than on the region in which they originated. Some costs of the Regional organization do not relate to a geographic destination and are reported as unallocated. These include global marketing teams, research and development and corporate headquarter functions. In addition, regions' gross profit performance is based on standard product costs, with variances from the standard reported as unallocated in order to align the reported results with organizational responsibility. Unallocated also includes results of centrally managed currency and commodity hedging programs.

Unallocated costs increased by \$127 million, or 7 percent from 2015, to \$1,908 million. Restructuring and impairment charges increased by \$46 million; excluding this, unallocated costs increased by \$81 million, or 5 percent. Research and development expense was 5 percent lower, 2 percent at constant exchange rates as cost savings and productivity improvements under the AOL program were delivered. General and administrative is reported including currency hedging losses of \$62 million compared with losses of \$30 million in 2015. Excluding restructuring and impairment, General and administrative increased by \$132 million. At constant exchange rates, taking into the account the net hedging result, these costs were approximately \$146 million higher. Total gross costs of the global support function functions were lower than 2015 at constant exchange rates. However, a significant portion of service costs are recharged to the regional and Lawn and Garden segments at amounts fixed in US dollars at the start of the year. In 2015, general dollar strength reduced actual costs below the level of the recharge, with a surplus recorded in Unallocated. This surplus was not repeated in 2016. Restructuring and impairment charges reported within Unallocated increased by \$46 million to \$214 million. The 2016 amount includes \$61 million for the impairment of product rights where production challenges have increased the uncertainties of commercializing a product profitably, \$16 million for the write-down of a building now classified as held-for-sale, \$10 million to impair the assets of a seeds crop where expectations of future operating profitability have reduced and \$33 million from AOL projects, mainly related to research and development productivity. In addition, 2016 restructuring charges include \$50 million of transaction costs and \$36 million of costs for the incremental effect of applying cash-settled share based payment accounting due to share plan amendments related to the ChemChina Tender Offer; both these items are discussed in detail in Note 3 to the consolidated financial statements in Item 18. Charges in 2015 included \$66 million related to the AOL program, including impairments at two manufacturing sites, a further impairment related to a seeds crop where expectations of future profitability have reduced and approximately \$77 million of acquisition, divestment and related costs, including advisory costs associated with possible corporate transactions. Details of restructuring and impairment for 2016 and 2015 are shown further below.

<b>Lawn and Garden</b>	Total as reported under IFRS		Change		Restructuring and impairment		Before restructuring and impairment <sup>1</sup>		Change before restructuring and impairment <sup>1</sup>	
	2016	2015	Actual	% CER	2016	2015	2016	2015	Actual	% CER
(\$m, except change %)										
Sales	663	648	2%	4%	-	-	663	648	2%	4%
Cost of goods sold	(282)	(298)	5%	3%	-	-	(282)	(298)	6%	3%
<b>Gross profit</b>	381	350	9%	10%	-	-	381	350	9%	10%
as a percentage of sales	57%	54%					58%	54%		
Marketing and distribution	(162)	(161)	-1%	-2%	(1)	-	(161)	(161)	-	-1%
Research and development	(52)	(52)	1%	1%	-	-	(52)	(52)	1%	1%
General and administrative	(50)	(17)	-191%	-47%	(10)	(7)	(40)	(10)	-316%	-60%
<b>Operating income</b>	117	120	-2%	21%	(11)	(7)	128	127	1%	22%
as a percentage of sales	18%	19%					19%	20%		

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<sup>1</sup> Amounts before restructuring and impairment are non-GAAP measures. Please refer to Appendix A of the Operating and Financial Review for a more detailed description.

Lawn and Garden sales were 2 percent higher, 4 percent at constant exchange rates, with flat local currency sales prices and a 4 percent increase in sales volumes. See the Sales commentary section above for further information on sales in the segment. Gross profit margin increased by 3.5 percentage points, 3.5 percentage points at constant exchange rates, from increased volumes of higher margin Vector Control products.

Marketing and distribution costs, excluding restructuring and impairment were flat, but increased by 1 percent at constant exchange rates. Research and development expense was 1 percent lower, 1 percent at constant exchange rates, with restructuring activities at the Netherlands site having started in the final quarter of 2015. General and administrative is reported net of a \$3 million currency hedging loss under the EBITDA hedging program compared with a \$24 million gain in 2015. General and administrative excluding restructuring and impairment was significantly higher than 2015 including the hedging result; at constant exchange rates costs were 60 percent higher due to increased charges for support services.

Restructuring costs in 2016 increased by \$4 million compared with 2015 and in both years related largely to the AOL program.

Operating income as a percentage of sales decreased by approximately 1 percentage point to 18 percent. Excluding restructuring and impairment, operating income as a percentage of sales decreased by approximately 1 percentage points to 19 percent due to the adverse relative hedging result in 2016 compared to 2015; at constant exchange rates, operating income excluding restructuring and impairment as a percentage of sales increased by 4 percentage points.

### **Defined Benefit Pensions**

Defined benefit pension expense was a charge of \$145 million in 2016 compared with a charge of \$165 million in 2015. 2016 expense was lower because of non-recurrence of \$11 million of early retirement costs incurred in 2015 in implementing the AOL restructuring program in Switzerland, and reduced pension expense in the UK resulting from the 2014 plan amendment to freeze pensionable pay at January 1, 2016 levels. Syngenta expects 2017 defined benefit pension expense, excluding costs associated with restructuring, to be similar to 2016 expense at constant exchange rates, with the impact of a further reduction in the real discount rate in the UK from 0.67 percent to minus 0.76 percent offset by reduced expenses from the Swiss pension plan due to impact of the AOL restructuring actions and to the full impact of the benefit changes introduced in 2014.

Syngenta contributions to defined benefit pension plans were \$161 million in 2016 compared with \$168 million in 2015. These included early retirement contributions of \$11 million in 2016 and \$12 million in 2015. In 2017, Syngenta expects contributions to defined benefit pension plans, excluding early retirement contributions associated with restructuring actions, to be approximately \$150 million.





**Restructuring and impairment**

Restructuring and impairment charges for the years ended December 31, 2016 and 2015, broken down into the main restructuring initiatives, consist of the following:

For the years ended December 31, (\$m)	2016	2015
Accelerating operational leverage programs:		
Cash costs	214	228
Non-cash costs	9	12
Integrated crop strategy programs:		
Cash costs	1	27
Acquisition, divestment and related costs:		
Cash costs		
Associated with industry consolidation, including ChemChina	50	62
Other acquisition and related costs	24	29
Non-cash items	(12)	1
Other non-cash restructuring and impairment:		
Other non-current asset impairments	121	29
<b>Total</b>	<b>407</b>	<b>388</b>

The above costs are presented within Restructuring in the consolidated income statement.

In addition to the above, of the \$141 million share based payment expense charged to the 2016 consolidated income statement, \$70 million (2015: \$ nil) is the incremental effect of applying cash-settled share based payment accounting due to the share plan amendments related to the ChemChina Tender Offer, as described in Note 3. The \$70 million is presented as costs of the following functions: Cost of goods sold \$6 million, Marketing and distribution \$26 million, Research and development \$8 million, Other general and administrative \$30 million.

The total of the above material items is presented within the consolidated income statement as follows:

(\$m)	2016	2015
Cost of goods sold	6	-
Marketing and distribution	26	-

Research and development	8	-
Other general and administrative	30	-
Restructuring	407	388
<b>Total</b>	<b>477</b>	<b>388</b>

Restructuring represents the effect on reported performance of initiating and enabling business changes that are considered major and that, in the opinion of management, will have a material effect on the nature and focus of Syngenta's operations, and therefore require separate disclosure to provide a more thorough understanding of business performance. Restructuring includes the incremental costs of closing, restructuring or relocating existing operations, and gains or losses from related asset disposals. Restructuring also includes the costs of analyzing and preparing for potential industry consolidation transactions, including costs associated with the ChemChina Tender Offer, as well as the effects of completing and integrating significant business combinations and divestments, including related transaction costs, gains and losses. Recurring costs of normal business operations and routine asset disposal gains and losses are excluded.

Impairment includes impairment losses associated with major restructuring as well as impairment losses and reversals of impairment losses resulting from major changes in the markets in which a reported segment operates.

The incidence of these business changes may be periodic and the effect on reported performance of initiating them will vary from period to period. Because each such business change is different in nature and scope, there will be little continuity in the detailed composition and size of the reported amounts which affect performance in successive periods. Separate disclosure of these amounts facilitates the understanding of performance including and excluding items affecting comparability. Syngenta's definition of restructuring and impairment may not be comparable to similarly titled line items in financial statements of other companies.

### **Analysis of restructuring costs**

#### **2016**

##### Accelerating operational leverage programs

Cash costs of \$214 million, including \$36 million of severance and pension charges and \$35 million of information systems projects, consist of \$95 million for initiatives to restructure marketing and commercial operations, \$61 million for projects to improve the effectiveness of back office support, \$30 million for Research and Development productivity projects, \$23 million for activity to optimize production and supply and \$5 million for project management. Non-cash costs include tangible asset write-downs associated with the above projects.



#### Integrated crop strategy programs

The integrated crop strategy programs announced in 2011 are substantially complete and final costs in 2016 relate to the completion of certain projects initiated before the end of 2015.

#### Acquisition, divestment and related costs

Cash costs include \$50 million of transaction costs related to the ChemChina Tender Offer. Other cash costs include \$13 million of transaction costs and \$11 million incurred for integration projects, including the divestments of the Goa manufacturing site and the Bioline beneficial insects breeding business and the subsequently canceled projects to divest the Flowers and Vegetables businesses. Non-cash items consist of aggregate gains of \$12 million on sale of the Bioline beneficial insects breeding business and the manufacturing site in Goa.

#### Other non-cash restructuring

Other non-current asset impairments include \$61 million for the impairment of product rights where production challenges have increased the uncertainties of commercializing a product profitably, \$31 million for the impairment of two sites and \$16 million for the write-down of a building, both in the US and now classified as held-for-sale, \$10 million to impair the assets of a seeds crop where expectations of future operating profitability have reduced and various other individually small write-downs.

### **2015**

#### Accelerating operational leverage programs

Cash costs of \$228 million, including \$127 million of severance and pension charges, consisted of \$77 million for initiatives to restructure marketing and commercial operations, \$43 million for projects to drive efficiencies in territory commercial operations, \$48 million to rationalize logistical operations and optimize production capacity, \$36 million for Research and Development productivity projects, \$17 million for projects to increase the effectiveness of back office support services and \$7 million for project management.

Non-cash costs of \$12 million included \$33 million of tangible asset write-downs at three sites resulting from projects to rationalize logistical operations and optimize production capacity and a \$21 million pension curtailment gain related to the Swiss defined benefit pension plan. The pension curtailment gain represents the difference between the cash costs for early retirements and the calculation of net pension curtailment costs according to IFRS. Cash costs for early retirements are included in the cash costs of various projects described above.

#### Integrated crop strategy programs

Cash costs of \$27 million included \$20 million of charges for the transfer of certain system and process management activities to the internal service center in India, including \$11 million for information system projects, \$1 million to restructure the integrated Research and Development function, \$1 million to restructure the Human Resource organization and \$5 million of corporate headquarter and other costs.

#### Acquisition, divestment and related costs

Costs associated with industry consolidation represented transaction charges related to potential transactions, such as the proposals received from Monsanto Company and ChemChina. Further cash costs included \$21 million of transaction costs and \$8 million incurred to integrate previous acquisitions, mainly the German and Polish winter wheat and winter oilseed rape breeding and business operations of Lantmännen, PSB and MRI, as well as costs associated with the separation and planned divestments of the Flowers and Vegetables Seeds businesses announced during 2015, which were subsequently canceled. The non-cash item was an impairment related to fixed assets acquired with the German and Polish winter wheat and winter oilseed rape breeding and business operations of Lantmännen.

#### Other non-cash restructuring

Other non-current asset impairments of \$29 million included \$20 million to impair the assets of a seeds crop where expectations of future operating profitability had reduced, \$7 million of impairment of exclusive distribution rights where the distribution agreement was terminated and \$2 million for two other intangible asset impairments.

#### **Financial expense, net**

Financial expense, net increased to \$291 million in 2016 from \$256 million in 2015. Currency related financial expenses in 2016 of \$253 million were \$38 million higher than 2015 due to increased exposures in Latin American countries from the higher average trade working capital and currency losses in certain emerging market countries

where hedging is not available. Net interest expense was flat at \$19 million in 2016 with average net debt broadly stable over the two years.

## Taxes

Syngenta's effective tax rate in 2016 was 13 percent, 3 percent lower than the 16 percent effective tax rate for 2015. Syngenta's Swiss statutory tax rate was 22 percent in both years. Income taxed at different rates increased the effective tax rate by 2 percent in 2016, compared with an 8 percent reduction in 2015 due to differences in the mix of jurisdictions in which estimated taxable profits arose in the respective years, and to the impact of the changes made to require cash settlement of share awards contingent on completion of the ChemChina Tender Offer. The percentage of income before taxes recorded in Switzerland reduced from 53 percent in 2015 to 40 percent in 2016. The tax deduction for amortization and impairments not recognized for IFRS reduced the tax rate by 1 percent (2 percent in 2015) from the impairment of shares held by several group companies in subsidiaries resulting from a decrease in the value of those subsidiaries as determined under local GAAP, due in part to weaker exchange rates of the functional currency of the subsidiaries. An improvement in profitability in operations in Argentina, Brazil and Philippines contributed to a 4 percent reduction in the tax rate from recognition of previously unrecognized deferred tax assets (2 percent in 2015). Changes in prior year estimates and other items reduced the tax rate by 6 percent in 2016, compared with a 4 percent increase in 2015, due to the release of several prior year related tax risk provisions as further disclosed in Note 2 to the consolidated financial statements in Item 18. Non-recognition of deferred tax assets was not material and did not impact the tax rate in 2016, but increased the tax rate by 5 percent in 2015 mainly due to deferred tax assets in parts of Latin America and Africa where the criteria for recognizing deferred tax assets was not met because of local currency weakness and weak economic conditions.

The tax rate on restructuring and impairment was 18 percent in 2016, compared with 23 percent for 2015 due to the different mix of gains and losses included in the net charge over the period and the varying tax treatments applied in different countries. Future rates applicable to restructuring and impairment will be dependent on the nature and size of the charges and may vary from year to year.

**Net income for the period and other supplementary income data**

Net income attributable to Syngenta shareholders in 2016 was \$1,178 million, 12 percent lower than the 2015 amount of \$1,339 million. Sales were 5 percent lower, 2 percent lower at constant exchange rates, with 3 percent due to weaker foreign currency exchange rates relative to the US dollar. Operating income margin was 0.8 percentage points lower in 2016 than 2015, with increased restructuring and impairment charges and the incremental effect of applying cash-settled share based payment accounting following the ChemChina Tender Offer; excluding these factors, operating income margin was broadly flat in 2016 and 2015. Following higher financial expense, income before taxes was 15 percent lower in 2016. With a lower effective tax rate, net income was 12 percent below 2015.

After related taxation, restructuring and impairment charges (including the incremental share based payment charges noted above) were \$390 million in 2016 compared with \$300 million in 2015 largely due to costs associated with the ChemChina Tender Offer and increased impairments of non-current assets.

**2015 compared with 2014****Sales commentary**

Syngenta's consolidated sales for 2015 were \$13,411 million, compared with \$15,134 million in 2014, an 11 percent decrease year on year. At constant exchange rates sales grew by 1 percent. The analysis by segment is as follows:

(\$m, except change %)			Change						
Segment	2015	2014	Volume %	Local price %	CER %	Currency %	Actual %		
Europe, Africa and Middle East	3,884	4,547	-2%	12%	10%	-25%	-15%		
North America	3,410	3,582	-1%	-3%	-4%	-1%	-5%		
Latin America	3,632	4,279	-1%	-4%	-5%	-10%	-15%		
Asia Pacific	1,837	2,033	-7%	4%	-3%	-7%	-10%		
<b>Total regional</b>	<b>12,763</b>	<b>14,441</b>	<b>-2%</b>	<b>2%</b>	<b>-</b>	<b>-12%</b>	<b>-12%</b>		
Lawn and Garden	648	693	2%	1%	3%	-10%	-7%		
<b>Group sales</b>	<b>13,411</b>	<b>15,134</b>	<b>-2%</b>	<b>3%</b>	<b>1%</b>	<b>-12%</b>	<b>-11%</b>		

**Europe, Africa and Middle East**

Sales decreased by 15 percent, but increased by 10 percent at constant exchange rates as sales price increases of 12 percent partially were offset by 2 percent lower volumes. The price increases were largely realized in the CIS and substantially offset the significant currency depreciation in those countries. The adverse impact on sales volume of crop protection products from dry weather conditions, low crop disease pressure and depressed cereals prices was offset by strong performance in Fungicides, particularly the cereal fungicides SEGURIS® and MODDUS®, as well as Seedcare. This offset the reduction of seeds volumes in the region, particularly in the CIS as a result of the aforementioned price increases. However, seeds volumes in the CIS grew significantly in the fourth quarter as the result of a successful campaign for corn and sunflower seeds.

### **North America**

Sales decreased by 5 percent, 4 percent at constant exchange rates as sales prices decreased by 3 percent and volumes were 1 percent lower. A planned reduction in sales of glyphosate and lower glyphosate sales prices reduced regional sales by 4 percent. In the USA, ongoing low crop commodity prices negatively affected the demand for crop enhancement applications. In Canada, sales were lower due to dry weather conditions and high channel inventories of Seedcare products at the start of the year. Sales in the fourth quarter increased significantly, helped by trait revenues of \$145 million from the licensing agreement with KWS and Limagrain and volume growth driven by ACURON™.

### **Latin America**

Sales decreased by 15 percent, 5 percent at constant exchange rates as sales prices decreased by 4 percent and volumes were 1 percent lower. Market conditions deteriorated in the second half of the year, with the sharp depreciation of the Brazilian real as well as tight credit conditions for growers in both Brazil and Argentina. The deliberate reduction in glyphosate volumes, together with lower local currency sales prices, reduced sales by \$224 million. Higher sales of ELATUS®, in its second year in Brazil, partially offset the impact of lower sales of Insecticides. In 2015, Syngenta implemented a change in contractual sales terms for crop protection products in Brazil, which caused a timing change in sales recognition and increased reported sales by \$239 million. In addition, 2015 seeds sales in the region included \$55 million in trait revenue from the KWS and Limagrain agreement.



## Asia Pacific

Sales decreased by 10 percent, 3 percent at constant exchange rates as volumes decreased by 7 percent and sales prices were 4 percent higher. Sales volumes decreased in ASEAN, which experienced extended drought conditions, and China, where sales of paraquat were phased out due to a regulatory change. These decreases partially were offset by higher volumes in Australasia and where increased cotton acreage drove higher Seedcare sales. Sales price increases were achieved across most territories in the region, most notably in South Asia and with higher seed prices in ASEAN reflecting the increased adoption of genetically modified seed technology.

## Lawn and Garden: major brands ICON®, GOLDFISCH®, GOLDSMITH SEEDS, YODER®, SYNGENTA FLOWERS

Sales decreased by 7 percent, but increased by 3 percent at constant exchange rates as volumes increased by 2 percent and sales prices were increased by 1 percent. Volume growth was driven by the introduction of the new SDHI fungicide VELISTA™ in North America and higher vector control sales in Africa and the Middle East. Sales volumes in Flowers were lower as a consequence of a strategy focusing on larger customers in order to improve profitability.

Sales by product line are set out below:

(\$m, except change %)			Change				
	2015	2014	Volume %	Local price %	CER %	Currency %	Actual %
<b>Product line</b>							
Selective herbicides	2,894	3,083	2%	4%	6%	-12%	-6%
Non-selective herbicides	913	1,445	-21%	-10%	-31%	-6%	-37%
Fungicides	3,357	3,518	6%	3%	9%	-14%	-5%
Insecticides	1,705	2,066	-7%	-1%	-8%	-9%	-17%
Seedcare	994	1,115	-1%	1%	–	-11%	-11%
Other crop protection	142	154	-10%	9%	-1%	-7%	-8%
<b>Total Crop Protection</b>	<b>10,005</b>	<b>11,381</b>	<b>-2%</b>	<b>1%</b>	<b>-1%</b>	<b>-11%</b>	<b>-12%</b>
Corn and soybean	1,564	1,665	1%	3%	4%	-10%	-6%
Diverse field crops	658	827	-13%	21%	8%	-28%	-20%
Vegetables	616	663	-2%	7%	5%	-12%	-7%
<b>Total Seeds</b>	<b>2,838</b>	<b>3,155</b>	<b>-3%</b>	<b>8%</b>	<b>5%</b>	<b>-15%</b>	<b>-10%</b>
Elimination*	(80)	(95)	n/a	n/a	n/a	n/a	n/a
<b>Total regional</b>	<b>12,763</b>	<b>14,441</b>	<b>-2%</b>	<b>2%</b>	<b>–</b>	<b>-12%</b>	<b>-12%</b>
Lawn and Garden	648	693	2%	1%	3%	-10%	-7%
<b>Group sales</b>	<b>13,411</b>	<b>15,134</b>	<b>-2%</b>	<b>3%</b>	<b>1%</b>	<b>-12%</b>	<b>-11%</b>

\*Crop Protection sales to Seeds

## Crop Protection

**Selective herbicides:** major brands ACURON™, AXIAL®, CALLISTO® family, DUAL MAGNUM®, BICEP® II MAGNUM, FUSILADE®MAX, FLEX®, TOPIK®

Sales decreased by 6 percent, but increased by 6 percent at constant exchange rates as local currency sales prices were increased by 4 percent and volumes grew by 2 percent. The price increase was substantially in the CIS, where it compensated for currency depreciation. Sales volume growth was led by sales in the US of ACURON™, which achieved its target of \$100 million sales in its launch year. This combined with higher sales in Latin America from the change in sales terms in Brazil more than offset decreased volumes elsewhere, particularly in Canada due to dry weather conditions.

**Non-selective herbicides:** major brands GRAMOXONE®, TOUCHDOWN®

Sales decreased by 37 percent, 31 percent at constant exchange rates as volumes decreased by 21 percent and local currency sales prices decreased by 10 percent. The sales decline reflected the decision by Syngenta to reduce volumes of low gross profit margin solo glyphosate in order to improve overall profitability. Volumes were also impacted by the phase out of sales in China of GRAMOXONE® following a regulatory change affecting paraquat liquid formulations. The sales price decrease was due to the lower price of TOUCHDOWN® and reflected a lower purchase price for the active ingredient.

**Fungicides:** major brands ALTO®, AMISTAR®, BONTIMA®, BRAVO®, ELATUS®, MODDUS®, REVUS®, RIDOMIL GOLD®, SCORE®, SEGURIS®, TILT®, UNIX®

Sales decreased by 5 percent, but increased by 9 percent at constant exchange rates as volumes grew by 6 percent and local currency sales prices were increased by 3 percent. Sales volume growth was achieved in all regions except Asia Pacific, where dry weather conditions reduced demand. Growth in Latin America included strong second-year sales of ELATUS®, which exceeded \$400 million. Sales volume also grew widely in Europe, led by strong sales of the cereals fungicides ALTO®, MODDUS® and SEGURIS®. Sales price increases in Latin America, Asia Pacific and Europe, which were driven by price rises in the CIS to offset currency weakness, more than offset lower prices in North America.

**Insecticides:** major brands ACTARA<sup>®</sup>, DURIVO<sup>®</sup>, FORCE<sup>®</sup>, KARATE<sup>®</sup>, PROCLAIM<sup>®</sup>, VERTIMEC<sup>®</sup>

Sales decreased by 17 percent, 8 percent at constant exchange rates as volumes decreased by 7 percent and local currency sales prices decreased by 1 percent. Volume growth in Asia Pacific from new product introductions in China and India was more than offset by a reduction in Latin America, caused by dry weather and low insect pressure in Argentina and high channel inventories in Brazil, though with higher ACTARA<sup>®</sup> sales in the fourth quarter from an improvement in the sugarcane market. Sales price increases in Europe, mainly in the CIS, and in Asia Pacific were offset by declines particularly in Latin America.

**Seedcare:** major brands AVICTA<sup>®</sup>, CRUISER<sup>®</sup>, DIVIDEND<sup>®</sup>, CELEST<sup>®</sup>/MAXIM<sup>®</sup>, VIBRANCE<sup>®</sup>

Sales decreased by 11 percent and were unchanged at constant exchange rates as a 1 percent local currency sales price increase was offset by a 1 percent volume decrease. Sales price increases in Europe, mainly in the CIS to offset currency weakness, more than offset lower prices in North America and Latin America. Sales volumes in Europe were strong in the cereals markets in the CIS and Central Europe, and in Asia Pacific sales benefitted from a focus on key accounts and broad based growth in Australasia. This largely offset lower volumes in North America, caused by high channel inventories in the Canadian cereals market and lower cotton acres in southern US states.

## Seeds

**Corn and soybean:** major brands AGRISURE<sup>®</sup>, GOLDEN HARVEST<sup>®</sup>, NK<sup>®</sup>

Sales decreased by 6 percent, but increased by 4 percent at constant exchange rates as local currency sales prices were increased by 3 percent and volumes grew by 1 percent. Corn sales volumes increased due to a combined \$200 million recognized in North America and Latin America in the fourth quarter from the licensing agreement with KWS and Limagrain. This was partially offset by lower branded product sales in the US, caused by the acreage shift from corn to soybean, and lower corn volumes in Europe due to reduced acreage. Soybean volumes in Latin America decreased as sales were shifted to distributors as part of the implementation of the Integrated Business Partner model in Brazil. Corn prices were increased significantly in the CIS and also increased in Asia Pacific, driven by increased adoption of genetically modified seed technology there.

**Diverse field crops:** major brands NK<sup>®</sup> oilseeds, HILLESHÖG<sup>®</sup> sugar beet

Sales decreased by 20 percent, but increased by 8 percent at constant exchange rates as local currency sales prices were increased by 21 percent and volumes decreased by 13 percent. The strong price growth was due to substantial price increases on sunflower in the CIS, which fully offset the impact of currency depreciation, though with some adverse impact on sales volume as some growers switched from high value hybrids to lower quality local seeds. Sugar beet volumes were lower due to oversupply in the sugar market, which led to significant acreage shifts in Europe.

**Vegetables:** major brands ROGERS™, S&G®

Sales decreased by 7 percent, but increased by 5 percent at constant exchange rates as local currency sales prices were increased by 7 percent and volumes decreased by 2 percent. Sales prices were increased in all regions with a focus on capturing value for high quality hybrids across the portfolio and in particular in Asia Pacific where Syngenta captured a share of the strong return on investments being achieved by growers in South Asia. Sweetcorn sales in the USA decreased due to high processor inventories.

**Operating income**

Variances in the tables below reflect the profit impact of changes year on year. For example, an increase of sales or a decrease in costs is a positive variance and a decrease in sales or increase in costs is a negative variance.

<b>Group Operating Income</b>	Total as reported under IFRS		Change		Restructuring and impairment		Before restructuring and impairment <sup>1</sup>		Change before restructuring and impairment <sup>1</sup>	
	2015	2014	Actual	% CER%	2015	2014	2015	2014	Actual	% CER%
(\$m, except change %)										
Sales	13,411	15,134	-11%	1%	–	–	13,411	15,134	-11%	1%
Cost of goods sold	(7,042)	(8,192)	14%	5%	–	(13)	(7,042)	(8,179)	14%	5%
<b>Gross profit</b>	6,369	6,942	-8%	8%	–	(13)	6,369	6,955	-8%	7%
as a percentage of sales	48%	46%			–	–	48%	46%		
Marketing and distribution	(2,210)	(2,497)	11%	–	–	–	(2,210)	(2,497)	11%	–
Research and development	(1,362)	(1,430)	5%	-3%	–	–	(1,362)	(1,430)	5%	-3%
General and administrative	(956)	(910)	-5%	-22%	(388)	(193)	(568)	(717)	21%	3%
<b>Operating income</b>	1,841	2,105	-13%	13%	(388)	(206)	2,229	2,311	-4%	21%
as a percentage of sales	14%	14%					17%	15%		
<b>Operating Income/(Loss)</b>										
(\$m, except change %)							2015	2014		Change %
Europe, Africa and Middle East							1,155	1,456		-21%
North America							973	901		8%
Latin America							890	1,069		-17%
Asia Pacific							484	560		-14%
Unallocated							(1,781)	(1,981)		10%
<b>Total regional</b>							1,721	2,005		-14%
Lawn and Garden							120	100		20%
<b>Group</b>							1,841	2,105		-13%

The two tables above do not represent income statements prepared under IFRS. Please refer to the information reported in the consolidated financial statements in Item 18.

<sup>1</sup> Amounts before restructuring and impairment are non-GAAP measures. Please refer to Appendix A of the Operating

**Overall Group operating income**

Operating income decreased by 13 percent to \$1,841 million as the adverse impact of generally weaker currencies versus the US dollar and increased charges to Restructuring more than offset cost savings and local currency sales price increases. Overall, weaker currencies reduced operating income by approximately \$571 million, including a significant adverse impact from the Russian ruble and Ukrainian hryvnia. The ruble and hryvnia currency impact was substantially offset by local currency sales price increases in Russia and the Ukraine. Excluding these currencies, the adverse impact on operating income of exchange rate movements, including the net hedging result from the EBITDA hedging program, was estimated at approximately \$100 million. The ratio of operating income to sales was broadly flat, but improved by approximately 1.4 percentage points excluding restructuring and impairment.

Sales declined by 11 percent, but were 1 percent higher at constant exchange rates with sales volumes 2 percent lower with the deliberate reduction in sales of solo glyphosate and challenging market conditions in all regions more than offsetting the license income received from KWS and Limagrain and the impact of the change in selling terms in Brazil. Overall local currency sales prices were 3 percent higher, driven by price increases in Russia and the Ukraine to substantially maintain equivalent US dollar price levels and after absorbing lower prices for solo glyphosate; prices otherwise were broadly flat. Exchange rate movements reduced sales by \$1.8 billion, or 12 percent. Gross profit margin increased by 1.6 percentage points, 1.5 percentage points excluding restructuring and impairment. The favorable impact of the license agreement signed with KWS and Limagrain and restructuring savings, combined with reduced oil prices and the smaller share in the product mix of lower margin solo glyphosate, more than offset lower US dollar sales prices and the inclusion in 2014 of gains from the amendments to defined benefit pension plans in the UK and the Netherlands.

Marketing and distribution costs were 11 percent lower, but remained flat at constant exchange rates, with emerging market cost inflation and an increase to charges for doubtful receivables, particularly in Brazil, more than offsetting marketing and distribution cost savings from restructuring activities. Research and development expense decreased by 5 percent, but was 3 percent higher at constant exchange rates, with cost savings from ongoing restructuring more than offset by the impact of the \$49 million gain reported in 2014 from the amendments to defined benefit pension plans in the UK and the Netherlands noted above. Research and development expense increased to 10.2 percent of sales, compared with 9.4 percent in 2014, also due to the different currency mix in Research and development costs compared with that of sales.

General and administrative including restructuring and impairment was 5 percent higher than 2014, but 21 percent lower excluding restructuring and impairment. General and administrative is reported net of the result of currency hedging programs, which in 2015 was a net income of \$21 million compared with a net income of \$15 million in 2014. At constant exchange rates, taking into account both variances in underlying costs and the change in the net hedging result from year to year, General and administrative excluding restructuring and impairment was 3 percent lower than 2014. General and administrative costs in global support functions, including Business Services, are charged out to the segments and to the global Research and development and Production and Supply operations in US dollars at amounts fixed at the start of the year and are then reported in Cost of goods sold, Research and development expense and Marketing, sales and distribution expense; as a result, the impact of currency movements on reported General and administrative is calculated based on the gross expenditure before these recharges. Lower costs in 2015 at constant exchange rates reflected savings under the ongoing restructuring programs, including headcount reductions and the transfer of support function roles to lower cost countries, as well as tight constraint of variable costs; increased gains on the disposal of non-current assets in 2015 offset the \$22 million recorded gain on changes to the UK and Netherlands pension plans in 2014. Restructuring and impairment, including the portion recorded in Cost of goods sold, is described in Note 6 to the consolidated financial statements in Item 18 and increased by \$182 million in 2015 to \$388 million due to the progression of the AOL restructuring program and advisory costs related to industry consolidation corporate transactions.

### Operating income by segment

Europe, Africa and Middle East	Total as reported under IFRS				Restructuring and impairment		Before restructuring and impairment <sup>1</sup>		Change before restructuring and impairment <sup>1</sup>	
	2015	2014	Actual %	% CER	% 2015	2014	2015	2014	Actual %	% CER
(\$m, except change %)	2015	2014	Actual %	% CER	% 2015	2014	2015	2014	Actual %	% CER
Sales	3,884	4,547	-15%	10%	–	–	3,884	4,547	-15%	10%
Cost of goods sold	(1,889)	(2,180)	13%	3%	–	(13)	(1,889)	(2,167)	13%	2%
<b>Gross profit</b>	1,995	2,367	-16%	22%	–	(13)	1,995	2,380	-16%	21%
as a percentage of sales	51%	52%					51%	52%		
Marketing and distribution	(586)	(720)	19%	4%	–	–	(586)	(720)	19%	4%
General and administrative	(254)	(191)	-33%	-44%	(128)	(30)	(126)	(161)	22%	17%
<b>Operating income</b>	1,155	1,456	-21%	32%	(128)	(43)	1,283	1,499	-14%	37%
as a percentage of sales	30%	32%					33%	33%		

This table does not represent an income statement prepared under IFRS. Please refer to the segmental information reported in Note 4 to the consolidated financial statements in Item 18.

<sup>1</sup> Amounts before restructuring and impairment are non-GAAP measures. Please refer to Appendix A of the Operating and Financial Review for a more detailed description.

Reported sales in Europe, Africa and Middle East were 15 percent below 2014, but had been reduced by approximately 25 percent due to weaker exchange rates relative to the US dollar, including the Euro, Russian ruble

and Ukrainian hryvnia. At constant exchange rates, sales were 10 percent above 2014, with local currency price increases of 12 percent, principally in the CIS to compensate the currency weakness, offset by 2 percent lower sales volumes. See the Sales commentary section above for further information on sales in the region.

Gross profit margin was 0.7 percentage points lower and, excluding restructuring and impairment was also 0.7 percentage points lower. Local currency price increases in Russia and the Ukraine offset the adverse impact of exchange rate weakness and enabled gross profit to be largely maintained. The portion of Restructuring and impairment in 2014 that was included in Cost of goods sold related to the acquisitions completed in the year.

Marketing and distribution costs were 19 percent lower, 4 percent at constant exchange rates, with lower charges for doubtful receivables following strong customer collections in Eastern Europe and cost savings realized under the AOL restructuring program.

General and administrative was 33 percent higher including increased restructuring charges. Excluding restructuring and impairment, General and administrative was 22 percent lower, 17 percent at constant exchange rates due to the inclusion in 2015 of the gain on disposal of land from a site in Switzerland. Restructuring and impairment charges reported within General and administrative were \$128 million in 2015 compared with \$30 million in 2014. Charges in 2015 included \$107 million related to progressing the AOL restructuring program, including restructuring the marketing organization and the relocation of certain support activities to lower cost countries, and \$7 million for the integration of acquisitions completed in previous years. Charges in 2014 included first year costs of the AOL program in the region.

Operating income as a percentage of sales was 2 percentage points lower in 2015, but excluding restructuring and impairment was broadly flat at 33 percent, with the lower Marketing and distribution and General and administrative expenses offsetting the reduced gross profit margin.



North America	Total as reported under IFRS				Change		Restructuring and impairment		Before restructuring and impairment <sup>1</sup>		Change before restructuring and impairment <sup>1</sup>	
	2015	2014	Actual %	CER %	2015	2014	2015	2014	Actual %	CER %		
(\$m, except change %)												
Sales	3,410	3,582	-5%	-4%	–	–	3,410	3,582	-5%	-4%		
Cost of goods sold	(1,779)	(2,003)	11%	9%	–	–	(1,779)	(2,003)	11%	9%		
<b>Gross profit</b>	1,631	1,579	3%	3%	–	–	1,631	1,579	3%	3%		
as a percentage of sales	48%	44%					48%	44%				
Marketing and distribution	(537)	(564)	5%	3%	–	–	(537)	(564)	5%	3%		
General and administrative	(121)	(114)	-6%	-7%	(37)	(22)	(84)	(92)	9%	8%		
<b>Operating income</b>	973	901	8%	6%	(37)	(22)	1,010	923	9%	8%		
as a percentage of sales	29%	25%					30%	26%				

This table does not represent an income statement prepared under IFRS. Please refer to the segmental information reported in Note 4 to the consolidated financial statements in Item 18.

<sup>1</sup> Amounts before restructuring and impairment are non-GAAP measures. Please refer to Appendix A of the Operating and Financial Review for a more detailed description.

Reported sales decreased by 5 percent, 4 percent at constant exchange rates, with sales volumes 1 percent lower and 3 percent lower local currency sales prices. See the Sales commentary section above for further information on sales in the region. Sales included \$145 million from the license agreement with KWS and Limagrain, which increased the gross profit margin by approximately 2.3 percentage points; excluding this, gross profit margin was approximately 1.5 percentage points higher in 2015, 1 percentage point at constant exchange rates, partly due to the impact of lower volumes of lower margin solo glyphosate sales in 2015.

Marketing and distribution costs were 5 percent lower, 3 percent at constant exchange rates, with savings from restructuring within both the marketing and distribution functions.

General and administrative excluding restructuring and impairment was 9 percent below 2014, 8 percent at constant exchange rates, due partially to a settlement gain relating to the US defined benefit pension plan and the realization of insurance proceeds relating to claims made in prior years, where recovery had not previously been assumed.

Restructuring and impairment costs were \$15 million higher than 2014 and in 2015 included \$23 million under the AOL program, including a minor impairment related to the closure of a seeds plant in the US. 2015 charges also included \$7 million of impairment of exclusive distribution rights where an agreement was terminated. Charges in 2014 included \$12 million for initiatives under the AOL program, cash costs for the closure of activities that had not

been divested with the Dulcinea business and final charges under previous restructuring programs.

Operating income as a percentage of sales increased by 4 percentage points as a result of the higher gross profit margin, including the favorable impact of the \$145 million license income from the agreement with KWS and Limagrain.

<b>Latin America</b>	Total as reported under IFRS				Restructuring and impairment		Before restructuring and impairment <sup>1</sup>		Change before restructuring and impairment <sup>1</sup>	
	2015	2014	Actual %	% CER	% 2015	2014	2015	2014	Actual %	% CER
(\$m, except change %)										
Sales	3,632	4,279	-15%	-5%	–	–	3,632	4,279	-15%	-5%
Cost of goods sold	(2,118)	(2,492)	15%	5%	–	–	(2,118)	(2,492)	15%	5%
<b>Gross profit</b>	1,514	1,787	-15%	-4%	–	–	1,514	1,787	-15%	-4%
as a percentage of sales	42%	42%					42%	42%		
Marketing and distribution	(557)	(615)	9%	-13%	–	–	(557)	(615)	9%	-13%
General and administrative	(67)	(103)	35%	-6%	(28)	(26)	(39)	(77)	50%	–
<b>Operating income</b>	890	1,069	-17%	-15%	(28)	(26)	918	1,095	-16%	-15%
as a percentage of sales	25%	25%					25%	26%		

This table does not represent an income statement prepared under IFRS. Please refer to the segmental information reported in Note 4 to the consolidated financial statements in Item 18.

<sup>1</sup> Amounts before restructuring and impairment are non-GAAP measures. Please refer to Appendix A of the Operating and Financial Review for a more detailed description.

Sales decreased by 15 percent, 5 percent at constant exchange rates with 1 percent lower sales volumes and 4 percent lower local currency sales prices. See the Sales commentary section above for further information on sales in the region. Gross profit margin was stable at 42 percent, approximately 0.4 percentage points lower at constant exchange rates. The favorable mix impact of reduced sales volume of lower margin glyphosate, lower glyphosate active ingredient purchase costs and an improved gross profit margin on seeds products from the new soybean operating model combined to offset the adverse impact of lower sales prices.

Marketing and distribution costs were 9 percent lower than 2014, but were 13 percent higher at constant exchange rates, with relatively high local cost inflation rates, particularly in Argentina, and higher charges to provisions for doubtful receivables due to weaker macroeconomic and liquidity conditions, particularly in Brazil; these more than offset the full year benefit in 2015 of the reduction of the commercial organization in Argentina that occurred in 2014.

General and administrative excluding restructuring and impairment was approximately 50 percent lower than 2014, but broadly flat at constant exchange rates, with costs savings in support functions offset by an increase in litigation costs. General and administrative in 2015 was net of currency hedging gains of \$31 million, compared with losses of \$6 million in 2014.

Restructuring and impairment costs increased by \$2 million to \$28 million in 2015. The 2015 amount includes \$22 million related to the AOL restructuring program, including restructuring of marketing operations and initial costs to establish an integrated system and support platform in Brazil. Charges in 2014 included non-cash impairments of \$14 million for the write-down of machinery in Brazil due to significant changes in production processes and \$9 million for initiatives to drive efficiencies in local commercial operations under the AOL program.

Operating income was \$179 million lower, \$177 million excluding restructuring and impairment, due to the reduced sales and increased charges for doubtful receivables. Operating income as a percentage of sales declined by 0.5 percentage points. Excluding restructuring and impairment, operating income as a percentage of sales declined by 0.3 percentage points and by 2.6 percentage points at constant exchange rates due to increased Marketing and distribution costs, including the higher charges for doubtful receivables.

Asia Pacific	Total as reported under IFRS				Restructuring and impairment		Before restructuring and impairment <sup>1</sup>		Change before restructuring and impairment <sup>1</sup>	
	2015	2014	Actual %	CER%	2015	2014	2015	2014	Actual %	CER%
(\$m, except change %)	2015	2014	Actual %	CER%	2015	2014	2015	2014	Actual %	CER%
Sales	1,837	2,033	-10%	-3%	–	–	1,837	2,033	-10%	-3%
Cost of goods sold	(1,012)	(1,107)	9%	4%	–	–	(1,012)	(1,107)	9%	4%
<b>Gross profit</b>	825	926	-11%	-3%	–	–	825	926	-11%	-3%
as a percentage of sales	45%	46%					45%	46%		
Marketing and distribution	(286)	(314)	9%	4%	–	–	(286)	(314)	9%	4%
General and administrative	(55)	(52)	-7%	-11%	(20)	(4)	(35)	(48)	27%	26%
<b>Operating income</b>	484	560	-14%	-3%	(20)	(4)	504	564	-11%	–
as a percentage of sales	26%	28%					28%	28%		

This table does not represent an income statement prepared under IFRS. Please refer to the segmental information reported in Note 4 to the consolidated financial statements in Item 18.

Amounts before restructuring and impairment are non-GAAP measures. Please refer to Appendix A of the Operating and Financial Review for a more detailed description.

Sales were 10 percent lower, but only 3 percent lower at constant exchange rates, with 7 percent lower sales volumes and 4 percent higher local currency sales prices. See the Sales commentary section above for further information regarding sales in the region. Gross profit margin declined by 0.6 percentage points, but was flat at constant exchange rates, with higher local currency sales prices and reduced sales of lower margin paraquat offset by adverse country mix within the region.

Marketing and distribution costs were 9 percent lower, 4 percent at constant exchange rates, with savings from restructuring in the marketing function.

General and administrative excluding restructuring and impairment decreased by \$13 million, approximately \$12 million at constant exchange rates, with tight cost constraints on support functions, minor increases in government grants and gains from an intangible asset disposal.

Restructuring and impairment charges in 2015 increased by \$16 million to \$20 million. Charges in 2015 included \$16 million for implementation of AOL programs and \$3 million final charges under a previous restructuring program.

Operating income margin decreased by 2 percentage points to 26 percent, but excluding restructuring and impairment remained flat at 28 percent.

**Unallocated**

Unallocated costs decreased by \$200 million, or 10 percent from 2014, to \$1,781 million largely due to a decrease in Cost of goods sold of \$146 million reflecting more favorable production cost variances in the production of Crop Protection products. The favorable production cost variances are due to both weaker currency exchange rates in purchasing and manufacturing costs and lower purchase prices, including those linked to the price of oil. Research and development expense was 5 percent lower, but was 3 percent higher at constant exchange rates as cost savings from ongoing restructuring were offset by the \$49 million of gains from pension plan amendments in the UK and Netherlands recorded in 2014. Global marketing expense decreased by \$27 million due to the restructuring and reorganization of the global marketing teams. General and administrative was reported including currency hedging losses of \$30 million compared with gains of \$13 million in 2014. Excluding restructuring and impairment, General and administrative decreased by \$33 million to \$274 million. At constant exchange rates, these costs were approximately \$30 million higher, with cost savings from the AOL restructuring program more than offset by the \$22 million gain recorded in 2014 from the amendments to the UK and Netherlands pension plans and lower gains in 2015 on tangible asset disposals. Restructuring and impairment charges reported within Unallocated increased by \$72 million to \$168 million. Charges in 2015 included \$66 million related to the AOL program, including impairments at two manufacturing sites, a further impairment related to a seeds crop where expectations of future profitability have reduced and approximately \$77 million of acquisition, divestment and related costs, including advisory costs associated with industry consolidation transactions. Details of restructuring and impairment for 2015 and 2014 are shown further below.

<b>Lawn and Garden</b>	Total as reported under IFRS		Change		Restructuring and impairment		Before restructuring and impairment <sup>1</sup>		Change before restructuring and impairment <sup>1</sup>			
	2015	2014	Actual	% CER	%	2015	2014	2015	2014	Actual	% CER	%
(\$m, except change %)	2015	2014	Actual	% CER	%	2015	2014	2015	2014	Actual	% CER	%
Sales	648	693	-7%	3%	–	–	648	693	-7%	3%		
Cost of goods sold	(298)	(318)	6%	-1%	–	–	(298)	(318)	6%	-1%		
<b>Gross profit</b>	350	375	-7%	4%	–	–	350	375	-7%	4%		
as a percentage of sales	54%	54%					54%	54%				
Marketing and distribution	(161)	(174)	8%	–	–	–	(161)	(174)	8%	–		
Research and development	(52)	(54)	3%	-1%	–	–	(52)	(54)	3%	-1%		
General and administrative	(17)	(47)	63%	14%	(7)	(15)	(10)	(32)	69%	-1%		
<b>Operating income</b>	120	100	19%	22%	(7)	(15)	127	115	10%	14%		
as a percentage of sales	19%	14%					20%	17%				

This table does not represent an income statement prepared under IFRS. Please refer to the segmental information reported in Note 4 to the consolidated financial statements in Item 18.

<sup>1</sup> Amounts before restructuring and impairment are non-GAAP measures. Please refer to Appendix A of the Operating and Financial Review for a more detailed description.

Lawn and Garden sales were 7 percent lower, but were 3 percent higher at constant exchange rates, with a 1 percent increase in local currency sales prices and a 2 percent increase in sales volumes. See the Sales commentary section above for further information on sales in the segment. Gross profit margin decreased by 0.1 percentage points but increased by 0.8 percentage points at constant exchange rates from increased volumes of higher margin Turf & Landscape products.

Marketing and distribution costs were 8 percent lower, but were flat at constant exchange rates. Research and development expense was 3 percent lower, 1 percent higher at constant exchange rates, with restructuring activities at the Netherlands site having started in the final quarter of the year. General and administrative was reported net of a \$24 million currency hedging gain under the EBITDA hedging program compared with \$8 million in 2014. General and administrative excluding restructuring and impairment was 69 percent lower than 2014 including the hedging gains and at constant exchange rates was 1 percent higher.

Restructuring costs in 2015 decreased by \$8 million compared with 2014 and in 2015 related largely to the AOL program. Restructuring costs in 2014 were due to continuing restructuring of the Flowers business, including initiatives to improve efficiency as part of the AOL program.

Operating income as a percentage of sales increased by approximately 5 percentage points to 19 percent. Excluding restructuring and impairment, operating income as a percentage of sales increased by approximately 3 percentage points to 20 percent, 16 percent excluding the hedging gain; at constant exchange rates, operating income as a percentage of sales increased by approximately 1.8 percentage points.

### **Defined Benefit Pensions**

Defined benefit pension expense was a charge of \$165 million in 2015 compared with a credit of \$36 million in 2014. After adjusting for the non-recurrence in 2015 of \$175 million of one-time gains in 2014 from plan amendments and settlements in the UK and Netherlands, pension expense increased by \$26 million, mainly due to a reduction in the discount rate used to measure expense for the Swiss pension plan, from 2.25 percent in 2014 to 1.25 percent in 2015, and to \$11 million of early retirement costs incurred in implementing the AOL program, partly offset by first year savings from the UK plan amendment and the reporting of Netherlands benefit expense as defined contribution rather than defined benefit.

Syngenta contributions to defined benefit pension plans were \$168 million in 2015 compared with \$185 million in 2014. The decrease was due to Syngenta having paid in 2014 a \$25 million additional lump sum contribution resulting from the 2013 Swiss plan amendment. No such additional contributions were made in 2015.

## Restructuring and impairment

Restructuring and impairment charges for the years ended December 31, 2015 and 2014, broken down into the main restructuring initiatives, consisted of the following:

(\$m)	2015	2014
Accelerating operational leverage programs:		
Cash costs	228	49
Non-cash costs	12	14
Integrated crop strategy programs:		
Cash costs	27	61
Operational efficiency programs:		
Cash costs	–	18
Acquisition, divestment and related costs:		
Cash costs		
Associated with industry consolidation, including ChemChina	62	–
Other acquisition and related costs	29	27
Non-cash items	1	13
Other non-cash restructuring and impairment:		
Other non-current asset impairments	29	24
Total restructuring and impairment <sup>1</sup>	388	206

<sup>1</sup> \$nil (2014: \$13 million) is included within Cost of goods sold and \$388 million (2014: \$193 million) as

<sup>1</sup> Restructuring within General and Administrative.

## 2015

For discussion regarding Restructuring and Impairment during 2015, please see the “Restructuring and Impairment sub-section of the preceding “2016 compared with 2015” section under “Results of Operations” in this “Operating and

Financial Review and Prospects”.

## 2014

### Accelerating operational leverage programs

In February 2014, Syngenta commenced the restructuring program to drive further improvements in operating income margins and accelerate delivery of operational leverage. 2014 cash costs of \$49 million included \$14 million for initiatives to restructure marketing and commercial operations, \$13 million for projects to drive efficiencies in territory commercial operations, particularly in Latin America, \$11 million to rationalize logistical operations and optimize production capacity, \$5 million for Research and Development productivity projects, and \$6 million for project management. Non-cash charges consisted of \$1 million for the impairment of a site, which was closed, and \$13 million for inventory write-downs due to a significant rationalization of the Vegetables product range.

### Integrated crop strategy programs

Cash costs of \$61 million included \$24 million of charges for the transfer of certain system and process management activities to a new internal service center in India, including severance and pension costs of \$11 million, \$25 million for the development and rollout of processes and training programs for marketing the integrated Crop Protection and Seeds product offers and related commercial reorganization, \$4 million for information system projects, \$4 million to restructure the integrated Research and Development function, \$2 million to restructure the Human Resource organization and \$2 million for legal entity rationalization projects.



### Operational efficiency programs

The operational efficiency restructuring programs announced in 2004 and 2007 were substantially complete. The final expenditures of \$18 million in 2014 largely related to the rollout of standardized and outsourced human resource support services.

### Acquisition, divestment and related costs

Cash costs of \$27 million included \$21 million incurred to integrate previous acquisitions, mainly Devgen, MRI, PSB, and the Polish and German winter wheat and oilseed rape breeding and business operations of Lantmännen. A further \$6 million consisted of transaction costs, including those related to uncompleted transactions. Non-cash items is the reversal of inventory step-up related to the MRI and PSB acquisitions.

### Other non-cash restructuring

Other non-cash restructuring consisted of \$20 million of fixed asset impairments, including \$14 million for plant and machinery in Brazil and Canada due to significant changes in production processes and \$6 million for development costs of major plant expansion projects that were subsequently aborted, and \$4 million for the impairment of loan notes related to strategic venture capital investments.

### **Financial expense, net**

Financial expense, net increased to \$256 million in 2015 from \$217 million in 2014. Currency related financial expenses in 2015 of \$215 million were \$76 million higher than 2014 reflecting the higher cost of hedging in emerging markets and increased exposures in Latin American countries due to later receivable collections. Net interest expense of \$19 million in 2015 was \$24 million lower than in 2014 with lower levels of average gross debt in 2015 and more recent debt issuances at lower interest rates than the debt they replaced.

### **Taxes**

Syngenta's effective tax rate in 2015 was 16 percent, 2 percent higher than the 14 percent effective tax rate for 2014. Syngenta's Swiss statutory tax rate was 22 percent in both years. Income taxed at different rates reduced the effective

tax rate by 8 percent in 2015, compared with 4 percent in 2014, with a higher weighting of income subject to a lower tax rate, including in Switzerland where certain intellectual property income is subject to tax at a reduced rate; total income before taxes in Switzerland was 53 percent of group income before tax in 2015 compared with 33 percent in 2014. Tax deduction for amortization and impairments not recognized for IFRS reduced the tax rate by 2 percent (3 percent in 2014) due to the impairment of the shares held by several group companies in subsidiaries resulting from a decrease in the value of the subsidiaries as determined under local GAAP, due in part to weaker exchange rates of the functional currency of the subsidiaries. Changes in prior year estimates and other items increased the tax rate by 4 percent in 2015, compared with reducing the tax rate by 2 percent in 2014, due to a change in the tax treatment of certain costs in the US in 2015. Non-recognition of deferred tax assets increased the tax rate by 5 percent in 2015 (3 percent in 2014) mainly due to deferred tax assets in parts of Latin America where the criteria for recognizing deferred tax assets was not met because of local currency weakness and weak economic conditions; conversely an improvement in profitability in operations in Russia and the Ukraine contributed to a 2 percent reduction in the tax rate from recognition of previously unrecognized deferred tax assets (1 percent in 2014).

The tax rate on restructuring and impairment was 23 percent in 2015, compared with 18 percent for 2014 due to the different mix of gains and losses included in the net charge over the period and the varying tax treatments applied in different countries.

#### **Net income for the period and other supplementary income data**

Net income attributable to Syngenta shareholders in 2015 was \$1,339 million, 17 percent lower than the 2014 amount of \$1,619 million. Sales were 11 percent lower due to weaker foreign currency exchange rates relative to the US dollar. Operating costs excluding Restructuring and impairment as a percentage of sales were 1.4 percentage points lower, but including the higher level of Restructuring and impairment were 0.2 percentage points higher. Operating costs in 2014 were net of a \$175 million gain recognized on changes to the UK and Netherlands pension plans. These combined to reduce operating income by 13 percent from 2014. As a result of the higher financial expense, net, and the increase in the effective tax rate, net income was 17 percent below 2014.

After related taxation, restructuring and impairment charges in 2015 were \$300 million compared with \$168 million in 2014 largely due to increased charges related to the AOL restructuring program announced in 2014 and increased acquisition, divestment and related costs, including those for advisors supporting Syngenta in industry consolidation transactions.

## Foreign operations and foreign currency transactions

Syngenta's subsidiaries use their local currency as their functional currency for accounting purposes except where the use of a different currency more fairly reflects their actual circumstances.

Syngenta operates worldwide and its business has grown significantly in emerging markets, with a broadening of the currency effects that need to be closely monitored. Syngenta regularly analyzes how currency fluctuations will impact its operating results and manages the impact with a combination of commercial actions, such as product pricing, and financial risk management strategies, such as hedging. Next to the Euro, the Swiss franc and the British pound, the Brazilian real gives rise to a major currency exposure due to the large size of Syngenta's business activities in Brazil. Sales prices to customers in Brazil largely are linked to the US dollar, which limits the impact of fluctuations in the US dollar/Brazilian real exchange rate, including the significant devaluation of the Brazilian real that occurred in 2015 and the subsequent strengthening during 2016. Similarly, Syngenta manages its currency exposure in the CIS, mainly Russia and Ukraine, by increasing local currency sales prices to compensate the loss in sales value from the currency devaluation. Russia and the Ukraine experienced significant currency volatility and a devaluation in 2015; in 2016 the Russian ruble stabilized against the US dollar, while the Ukrainian hryvnia weakened further.

Syngenta has manufacturing and research and development facilities in the United Kingdom and net of sales revenues has a short exposure in British pounds sterling of less than \$500 million. The British pound weakened relative to the US dollar in 2016 following the "Brexit" vote, but the short exposure had been largely matched by currency hedges in line with normal policy and only a minor net gain was recorded in 2016 relative to 2015. At current exchange rates, a further minor year-on-year gain will be recorded in 2017.

Syngenta regularly monitors receivables exposure in all countries in which it operates. In the Eurozone, Greece, Italy, Portugal and Spain have been experiencing weak macro-economic conditions since 2010. Parts of Latin America, including Argentina and Brazil are also experiencing economic and financial difficulties and this has led to constraints in the availability of credit; in Venezuela, exchanging local currency into US dollars to pay for imported goods can be difficult. Receivables exposure from customers in Russia and the Ukraine has increased during 2016, with 73 percent of 2016 sales in those countries having been collected as of December 31, 2016 compared with 85 percent of 2015 sales. The increased exposure is largely due to the timing of sales; in 2016, 13 percent of total sales in the CIS were made in the fourth quarter whereas in 2015, fourth quarter sales were 8 percent of the total for the year. Sales in the CIS were 6 percent of Syngenta's total sales in 2016 (2015: 5 percent).

The following table outlines for the above named countries the aggregate, gross trade receivables, those past due for more than 180 days and the related provision for doubtful receivables at December 31, 2016 and 2015.

(\$m)	2016	2015
Gross trade receivables	2,789	2,363

Past due for more than 180 days	<b>360</b>	216
Provision for doubtful trade receivables	<b>274</b>	209

The increases in receivables past due for more than 180 days and provision for doubtful trade receivables includes increased exposures in Latin America. In Brazil, poor economic conditions, commodity price weakness and the impact of adverse weather constrained grower liquidity and the availability of credit, and in Venezuela the general economic conditions and availability of US dollars deteriorated further. A major proportion of growers in Argentina using Syngenta's products export their crops, which enables them to generate income that is economically linked to the US dollar. Because of this, Syngenta is able to price most of its sales in Argentina in US dollars through to cash collection, which reduces its exposure to the Argentine peso. However, future legislation, competitors' behavior or central bank restrictions may limit or remove this protection or further limit the ability of Syngenta to access US dollars in, or remit US dollars from, Argentina. Sales in Argentina were 3 percent of Syngenta's total sales in 2016.

At December 31, 2016, approximately 62 percent of Syngenta's cash and cash equivalent was held in US dollars, approximately 14 percent in Indian rupees, approximately 4 percent in Ukrainian Hryvnia, and approximately 3 percent in Thai baht. No other individual currency made up more than 2 percent.

## **Liquidity and capital resources**

Syngenta's principal source of liquidity is cash generated from operations. This has been more than sufficient to cover cash used for investment activities in all years since 2006, except in 2012 when the higher level of cash used for investing activities resulting from increased business acquisitions required funding with a combination of cash generated from operations and the issuance of unsecured non-current bonds. Except for any significant business acquisitions or a significant deterioration in the rate of receivables collections from that currently expected by management, cash generated from operations is expected to be more than sufficient to cover cash expected to be used for investment activities in 2017.

Working capital fluctuations are supported by short-term funding available through commercial paper and related syndicated committed credit facilities. Operating in a seasonal business, Syngenta typically obtains funds from its short-term facilities during the first half of the year to fund operations during the northern hemisphere growing season and repays these funds during the second half when receivables are collected. Longer-term capital resources include unsecured non-current bonds issued under a Euro Medium Term Note (EMTN) program, unsecured non-current Notes issued under a Note Purchase Agreement in the US Private Placement market and unsecured non-current bonds issued in the US public debt market. See Capital markets and credit facilities for details of outstanding debt.

For information on Syngenta's funding and treasury policies and objectives in terms of the manner in which treasury activities are controlled, see Note 27 to the consolidated financial statements in Item 18.

Syngenta reported cash and cash equivalents on December 31, 2016 and 2015 of \$1,284 million and \$1,141 million, respectively. At December 31, 2016 and 2015, Syngenta had current financial debt of \$767 million and \$547 million, respectively, and non-current financial debt of \$2,854 million and \$3,183 million, respectively.

## **Capital markets and credit facilities**

Funds for Syngenta's working capital needs were available during the year from its \$2,500 million Global Commercial Paper program supported by a committed, revolving, multi-currency, syndicated credit facility. Syngenta entered into its Global Commercial Paper program in 2000 and amended it in 2007. In January 2016, the amount of the syndicated credit facility was increased from \$1.5 billion to \$2.5 billion. Its contractual expiry date is in 2019 but it has a change of control clause which allows each lender to cancel its commitment unless renegotiated terms are agreed within 30 days of a change of control occurring. In order to address the risk of early termination, ChemChina has provided cover for the backstop facility and also for other financing needs arising from the change of control via a committed Target Facilities Agreement that Syngenta expects to be able to access on successful completion of the ChemChina Tender Offer (see Note 3 to the consolidated financial statements in Item 18 for further discussion of the ChemChina Tender Offer). At December 31, 2016 Syngenta had \$100 million of commercial paper issuances outstanding (2015: \$nil) and there were no borrowings outstanding under the syndicated credit facility (2015: \$nil).

Absent major acquisitions, Syngenta targets maintaining an investment grade credit rating, as recognized by major third-party rating agencies, which it currently believes provides an optimal balance between financial flexibility and the cost of capital. Syngenta's short- and long-term credit facilities and outstanding bond note instruments do not contain any significant covenants affecting its ability to pay dividends or borrow additional funds. In addition, there are no material legal or economic restrictions on the ability of subsidiaries to transfer funds to the Company in the form of cash dividends except as disclosed in the consolidated cash flow statement.

The table below summarizes Syngenta's unsecured notes in issuance at December 31, 2016:

(\$m)	Issuance date	Carrying amount	Value at issue
Euro floating rate note 2017	March 2014	<b>263</b>	<b>344</b>
0.750% CHF bond 2019	March 2014	<b>344</b>	<b>396</b>
5.110% US dollar private placement 2020	December 2005	<b>83</b>	<b>75</b>
1.875% Eurobond 2021	March 2014	<b>526</b>	<b>689</b>
3.125% US dollar bond 2022	March 2012	<b>515</b>	<b>500</b>
1.625% CHF bond 2024	March 2014	<b>245</b>	<b>283</b>
5.350% US dollar private placement 2025	December 2005	<b>75</b>	<b>75</b>
1.250% Eurobond 2027	March 2015	<b>523</b>	<b>559</b>
2.125% CHF bond 2029	March 2014	<b>147</b>	<b>170</b>
5.590% US dollar private placement 2035	December 2005	<b>100</b>	<b>100</b>
4.375% US dollar bond 2042	March 2012	<b>248</b>	<b>250</b>
<b>Total</b>		<b>3,069</b>	<b>3,441</b>

Other than as a result of the ChemChina transaction, management is of the opinion that, absent a major business acquisition or a very significant deterioration in working capital or the rate of receivables collections from that currently expected, the funding available from the sources described above will be sufficient to satisfy Syngenta's working capital, capital expenditures and debt service requirements for the foreseeable future, including cash expenditures relating to restructuring programs. In the event of a major business acquisition, Syngenta would seek additional funding from capital markets or other sources. Except for the Target Facilities Agreement, noted above, to cover any refinancing needs that may arise as a consequence of the completion of the ChemChina transaction, Syngenta regards as sufficiently remote the likelihood that a very significant deterioration in working capital or unexpected decline in the rate of receivables collections will occur as not to require the development of a detailed contingency funding plan.

**Cash flow**

The following table sets out certain information about cash flow for each of the periods indicated:

(\$m)	Year ended December 31,		
	2016	2015	2014
Cash flow from operating activities	<b>1,807</b>	1,190	1,931
Cash flow used for investing activities	<b>(521)</b>	(462)	(729)
Cash flow used for financing activities	<b>(1,134)</b>	(1,188)	(420)

**Cash flow from operating activities**

## 2016 compared with 2015

Cash flow from operating activities increased by \$617 million to \$1,807 million in 2016 from \$1,190 million in 2015 largely due to changes in net working capital. Cash inflows from inventory reduction in 2015 were \$252 million compared with \$32 million in 2014; year-end inventories as a percentage of sales decreased from 32 percent in 2015 to 30 percent in 2016. Outflows from trade and other working capital assets decreased by \$494 million in 2016 due to a significantly lower build-up in trade receivables in Brazil than in 2015 and the receipt of royalty income in 2016 under agreements signed in previous years. Cash inflows from trade and other working capital liabilities decreased by \$139 million in 2016; trade accounts payable as a percentage of sales increased by 1 percentage point in 2016, but had increased by 2 percentage points in 2015. Income before taxes in 2016 decreased by \$231 million from 2015 for the reasons described above. Non-cash items were \$97 million higher in 2016 mainly due to higher impairment charges and charges in respect of share based compensation and lower gains on disposal of non-current assets. Adjusted for non-cash items, income before taxes was \$134 million lower than 2015. Cash outflows for financial expense, net increased from 2015 to 2016 largely due to timing differences between underlying realized foreign exchange gains and losses and the cash flows from the related hedges. Cash paid in respect of income taxes was \$263 million lower than in 2015 due to payments in 2015 in respect of several tax years for an entity in Switzerland and lower advance tax payments in the United States. Cash paid in 2016 in respect of restructuring provisions was \$52 million lower than 2015 largely due to lower severance payments in 2016.

## 2015 compared with 2014

Cash flow from operating activities decreased by \$741 million to \$1,190 million in 2015 from \$1,931 million in 2014 largely due to changes in net working capital. Cash inflows from inventory reduction in 2015 were \$32 million compared with \$326 million in 2014; year-end inventories as a percentage of sales were 32 percent in both years. Outflows from trade and other working capital assets increased by \$536 million in 2015 largely due to delayed collections and extended sales terms in Latin America and the change in sales terms in Brazil, which brought forward the recognition of receivables. Cash inflows from trade and other working capital liabilities increased by \$175 million in 2015 from a low level in 2014 following the inventory reduction in the year; the 2015 increase also included higher

accrued expenses, including those related to restructuring charges. Income before taxes in 2015 decreased by \$303 million from 2014 for the reasons described above. Non-cash items were \$395 million higher in 2015 mainly due to the \$403 million net charges in respect of provisions; net charges in respect of pension provisions were \$148 million in 2015 compared with a net credit of \$35 million in 2014, and net charges to restructuring provisions were \$125 million higher in 2015; adjusted for non-cash items, income before taxes was \$92 million higher than 2014. Cash outflows for financial expense, net decreased from 2014 to 2015 due to lower interest payments and net realized foreign exchange. Cash paid in respect of income taxes was \$152 million higher than in 2014 including the above payments in respect of several tax years in Switzerland. Cash contributions to pension plans were \$28 million lower in 2015; 2014 included a non-recurring, additional payment of \$25 million made to the Swiss plan as part of the 2013 plan amendment. Cash paid in 2015 in respect of restructuring provisions was \$99 million higher than 2014 largely due to the progression of the AOL restructuring program.

### **Cash flow used for investing activities**

2016 compared with 2015

Cash flow used for investing activities was \$521 million in 2016, \$59 million more than in 2015. Additions to property, plant and equipment were broadly flat; a similar level is currently expected in 2017. An increase in purchases of intangibles was due partly to capitalized software development costs and software license purchases related to projects within the AOL restructuring programs. Cash outflows from purchases of marketable securities increased by \$53 million, mainly due to investments in Brazil. Proceeds from disposals decreased by \$73 million in 2016, due to the sale of land in Switzerland and the US in 2015. The cash inflows for business divestments increased from \$1 million in 2015 to \$58 million in 2016, which related to the divestments of Bioline and the Goa manufacturing site in India.



2015 compared with 2014

Cash flow used for investing activities was \$462 million in 2015, \$267 million less than in 2014. Additions to property, plant and equipment were \$147 million lower than 2014 as investments were reduced in response, in part, to the lower growth in the crop

protection and seeds markets seen since 2013. Proceeds from disposals increased by \$43 million in 2015, which included the above land sales. The cash outflows for business acquisitions decreased from \$86 million in 2014, which was for the purchase of PSB and the German and Polish winter wheat and winter oilseed rape breeding and business operations of Lantmännen, to \$11 million in 2015, which includes the acquisition of Land.db Enterprises Inc.

### **Cash flow used for financing activities**

2016 compared with 2015

Cash flow used for financing activities of \$1,134 million was \$54 million lower than in 2015. No bonds were issued or repaid in 2016; in 2015, bonds were issued and repaid at maturity as described below. The dividend paid to shareholders in 2016 decreased by \$38 million compared with 2015 due largely to a weaker Swiss franc. There were no share repurchases in 2016; in 2015, Syngenta repurchased 389,500 of its own shares, with 158,000 shares then expected to be used for future requirements of share based payment plans and 231,500 related to a share repurchase program. Sales of treasury shares in all years related to employee share and share option plans.

2015 compared with 2014

Cash flow used for financing activities of \$1,188 million was \$768 million higher than in 2014 mainly due to a decrease in new borrowings. Syngenta issued EUR 500 million in Euro denominated bonds in 2015, and EUR 750 million in Euro denominated bonds and CHF 750 million in Swiss domestic bonds in 2014. In both 2015 and 2014, bonds of EUR 500 million were repaid at maturity. The dividend paid to shareholders in 2015 increased by \$46 million compared with 2014. Net treasury share purchases were \$70 million lower in 2015; in 2015, Syngenta repurchased 389,500 of its own shares compared to 440,095 in 2014.

### **Research and development (“R&D”)**

Syngenta’s Research and Development organization is dedicated to developing quality crop protection and seeds products, as well as crop-focused solutions which integrate multiple technologies. R&D focuses on taking a holistic approach to help customers grow their specific crop using the best technology to address their needs, be it a single technology, a combination of technologies, or technologies and services.

Syngenta is committed to improving crop yield and quality in a sustainable way and, through its global product safety group and global regulatory team, is committed to developing and registering products that are safe and effective. Syngenta maximizes its innovation potential by leveraging its industry expertise and partnering with other technology leaders across the globe.

The total spent on research and development was \$1,299 million in 2016, \$1,362 million in 2015 and \$1,430 million in 2014. Attribution of research and development costs for 2016 was \$1,247 million for Syngenta's Regional Crop Protection and Seeds business and \$52 million in Lawn and Garden. In 2015, the attribution was \$1,310 million for the Regional Crop Protection and Seeds business and \$52 million in Lawn and Garden. In 2014, the attribution was \$1,376 million for the Regional Crop Protection and Seeds business and \$54 million in Lawn and Garden.

There are no off-balance sheet financing transactions associated with research and development activity.

### Contractual obligations, commitments and contingent liabilities

At December 31, 2016, Syngenta had contractual obligations to make future payments in the periods indicated in the following:

(\$m)	Notes to the financial statements reference	<b>Total</b>	<b>Less than 1 year</b>	<b>1-3 years</b>	<b>3-5 years</b>	<b>5-10 years</b>	<b>More than 10 years</b>
Financial debt	16, 18	3,563	756	345	609	835	1,018
Interest on fixed rate financial debt	27	712	66	132	122	162	230
Other non-current liabilities	18	19	17	2	-	-	-
Capital lease payments	25	62	17	31	6	8	-
Operating lease payments	25	227	67	99	42	19	-
Capital expenditures	25	176	158	18	-	-	-
Pension contribution commitments	22	134	34	69	31	-	-
Unconditional purchase obligations	25	1,206	784	296	126	-	-
Long-term research agreements and other long-term commitments	25	123	62	38	16	7	-
<b>Total</b>		<b>6,222</b>	<b>1,961</b>	<b>1,030</b>	<b>952</b>	<b>1,031</b>	<b>1,248</b>

Of the total financial debt, floating rate financial debt is \$504 million (mainly local bank loans and overdraft facilities), all of which is due within one year. No interest obligation in respect of this debt is included in the table above. There is no contractual obligation to renew this debt. The debt amount, and the interest payments associated with it, will vary over time according to Syngenta's funding requirements and future interest rates.



Fixed rate debt of \$3,059 million is comprised primarily of the outstanding Eurobonds, Swiss franc domestic bonds and \$ bonds and private placement notes. Fixed rate interest payments of \$712 million on these are included above.

Other non-current liabilities arise from deferred payments related to acquisitions and license agreements.

Provisions for long-term liabilities totaling \$1,143 million shown in Syngenta's consolidated balance sheet have not been included in the above table because the timing of their payment is not contractually fixed and cannot be estimated with sufficient certainty within the context of the time periods in the table. This applies particularly to those amounts which are not expected to be paid during 2016. Note 19 to the consolidated financial statements in item 18 presents the components of the estimated \$182 million of provisions that are expected to be paid during 2016.

The supply agreements for materials giving rise to the unconditional purchase obligations are entered into by Syngenta to ensure availability of materials meeting the specifications required by Syngenta. Where suppliers have made significant capital investment, these agreements generally provide for Syngenta to pay penalties in the event that it terminates the agreements before their expiry dates.

Pension contribution commitments totaling \$134 million represent unconditional fixed payments to the UK pension fund according to the schedule of contributions agreed during 2015. Not included in the above table are:

Additional UK Pension Fund contributions of up to \$19 million per year which are required to be paid if the actual return on UK pension plan assets over the period to November 30, 2020 is less than the agreed assumption.

Swiss Pension Fund contributions for future service. The rules of Syngenta's main Swiss defined benefit pension fund commit Syngenta to contributing a fixed percentage of employees' pensionable pay to the fund.

As disclosed in Note 22 to the consolidated financial statements in Item 18, Syngenta expects to pay \$150 million of contributions to its defined benefit pension plans in 2017 excluding restructuring costs and excluding any accelerated payments which Syngenta may decide to make as business and financial market conditions develop during 2016. \$34 million of these contributions are included as commitments in the table above. The remaining \$116 million represents 2017 service contributions, which are not included as commitments in the table above.

The above table excludes income tax liabilities of \$400 million in respect of uncertain tax positions. These are presented within current income tax liabilities in the consolidated balance sheet because it is not possible to make a reasonably reliable estimate of the actual period of cash settlement with the respective taxing authorities.

## **Off-balance sheet arrangements**

Syngenta had no off-balance sheet arrangements as at December 31, 2016, other than the above contractual obligations, commitments and contingent liabilities. Syngenta has no unconsolidated special purpose entities that are likely to create material contingent obligations.

## **Critical accounting estimates**

Critical accounting estimates and new accounting pronouncements are discussed in Notes 2 and 29 to the consolidated financial statements in Item 18.

## **Recent developments**

Note 30 to the consolidated financial statements in Item 18 provides details of events which occurred between the balance sheet date and February 7, 2017 that would require adjustment to or disclosure in the consolidated financial statements. No events have occurred between February 7, 2017 and February 16, 2017, the date of this filing that would require disclosure.

## **Trend and Outlook**

The prices of a basket of the key field crops of corn, soybean, wheat and rice further declined in 2016, remaining below the levels seen in the immediate aftermath of the global financial crisis in the 2009 to 2011 period. Global stocks of these key crops relative to consumption remain above the longer term historic average and this is likely to constrain near term price increases in these crop commodities. The level of crop prices in turn constrains farm incomes and reduces the incentive for farmers to increase planted area or use new technology, either in seed or crop protection, to maximize yield and/or crop quality. Poor liquidity and lack of available credit in certain geographies, particularly in Latin America, has also negatively impacted on demand. Given this market context, Syngenta currently anticipates low agribusiness market growth in 2017. Longer term, Syngenta continues to expect that population growth and dietary change, particularly due to increasing wealth in emerging markets, will drive demand for new technology and agribusiness growth.

Weaker foreign exchange rates relative to the US dollar, particularly in the first half of the year, reduced reported sales in 2016 by approximately 3 percent, with sales in Euro reduced by approximately 2 percent and sales in emerging markets reduced by approximately 6 percent. In some markets, particularly Russia and the Ukraine, where currency decline was approximately 25 percent, the adverse impact was substantially offset by local currency sales price

increases to maintain US dollar prices. A stronger US dollar is expected to continue to reduce reported sales in 2017; if exchange rates at the end of 2016 continued through 2017, Syngenta estimates a further adverse impact to reported sales of approximately 2 percent. The impact of exchange rate movements on operating income is discussed below.

At the regional level, the market in **North America** in 2016 continued to reflect low farmer profitability, reducing the demand for crop protection and seeds products. Syngenta's sales in the region in 2016 were 6 percent lower than in 2015, but sales in 2015 included \$145 million from a license with KWS and Limagrain; excluding this, 2016 sales were 1 percent lower. A planned reduction of sales of low margin solo glyphosate reduced 2016 sales volumes in the region by approximately 3 percent; no similar reduction is planned for 2017. In **Europe, Africa and the Middle East**, lower commodity prices and adverse weather conditions in Western Europe in the second quarter reduced the crop protection market in 2016. Reported sales in 2016 were impacted by currency weakness relative to the US dollar, which reduced reported sales by 7 percent; sales price increases were implemented to partially offset this, particularly in Russia and the Ukraine, which increased sales in the region by 3 percent. A low level of market growth is expected in 2017 and at exchange rates prevailing at the start of the year, the adverse impact of weaker exchange rates and also the offsetting increase to sales prices in parts of Eastern Europe are both expected at a lower level in 2017; price increases to offset weaker currencies are generally not expected to be achievable in the Eurozone and other developed markets. In **Latin America**, reported sales in 2016 were 9 percent lower than in 2015. In 2015, Syngenta modified sales terms in Brazil, which changed the point of revenue recognition and resulted in a one-time increase in reported sales of \$239 million. Syngenta's sales in the region in 2015 also included \$55 million from the aforementioned license with KWS and Limagrain. In addition, Syngenta stopped sales in Venezuela in 2016 as a result of not receiving payment for prior year shipments. Adjusting for these items, sales in 2016 would have been 1 percent higher than in 2015. Market growth in 2016 was constrained by the lower crop prices discussed above, and the strengthening of the Brazilian real through the year further impacted farmer profitability. Sales in Brazil were further impacted by reducing high channel inventories through 2016 owing to adverse weather conditions and continuing credit constraints. A low level of market growth is expected in 2017. Sales were flat in **Asia Pacific** in 2016, but were 2 percent higher at constant exchange rates. The full year performance included growth of 15 percent in the second half of the year as key markets recovered from the impact of the El Niño weather conditions. For 2017, Syngenta currently expects market growth in mid-single digits.

Lawn and Garden sales in 2016 increased by 2 percent, 4 percent at constant exchange rates, with strong growth in the Controls business offsetting lower sales in Flowers. Syngenta currently expects growth in Controls sales to moderate, but a return to a low level of growth in Flowers, with a continued focus on cost control to maintain operating margins at constant exchange rates.

Syngenta has a strong pipeline of new crop protection products at various stages of development and, with market leadership in crop protection chemicals, a strong position in several key seeds crops and leading commercial organizations in all four regions. Syngenta believes it has a clear competitive advantage to deliver above market sales growth over the longer term. In 2017, crop protection product sales growth is expected to be driven by the growth in ACURON™ and SOLATENOL™, with expansion in the United States and launches in Europe, Africa and the Middle East and growing contributions from the recently launched ADEPIDYN™ and ORONDIS™. This is expected to more than offset lower sales in some older technologies. In Seeds, growth will be driven by sales of corn seeds, particularly including traits, increased license income (subject to regulatory approvals) and above market growth in sales of vegetable seeds.

Syngenta will continue to drive savings and productivity in 2017 through the AOL program. These savings, net of re-investment in increased Research and development and Marketing and distribution costs are expected to offset

inflation. In Research and development, further savings under the AOL program 2017 will be offset by cost inflation and additional expenditure both on new active ingredient development and increased regulatory costs and overall are expected marginally higher in 2017 than 2016. Savings from the AOL program in Marketing and distribution costs and General and administrative costs (excluding restructuring) are planned to be re-invested in increased marketing expenditure to drive future market share growth, for example in the Vegetables business and overall expenditure is planned to be higher in 2017 than 2016.

Excluding impairments, which cannot be forecast, the progression of the AOL program noted above is expected to result in increased restructuring charges related to this program in 2017. In general the timing of the recognition of charges for particular restructuring events, which is dependent on when irreversible commitments to the events occur, makes it difficult to predict such costs with certainty. Expenses in 2017 are also expected to include further charges to cash-settle employee share plans following completion of the ChemChina Tender Offer noted above.

In 2016, oil prices traded in a range of \$30-55 per barrel, being towards the upper end of the range in the latter part of the year and remaining around that level through January 2017. With its current product mix, Syngenta estimates that each \$10 movement in the price of a barrel of oil impacts its cost of goods sold by approximately \$30-35 million. However, due to supplier production chains and Syngenta's own inventory, it can take from 9 to 12 months for movements in the oil price to feed through into cost of goods sold. As at the end of January 2017, the impact of movements in the price of oil is not expected to have a significant impact on 2017 compared to 2016.

In 2016, 53 percent of Syngenta's sales were in emerging markets, up from around 35 percent ten years ago. Emerging markets continue to have higher long-term growth potential because significant crop yield gaps exist versus developed markets; this growth potential is further supported by ongoing technology adoption. Managing volatility in such markets, in particular credit and currency exposures, is integral to Syngenta's business model.



Overall, Syngenta has significant currency exposures, which at a high level can be summarized as:

-a short position against the US dollar in Swiss francs and British pounds

a net long position in Euros over the course of a full year, relatively minor compared with sales in Euros, but with a  
-long position in the first half selling season and a short position in the second half from more evenly spread  
Euro-based operating costs including raw material costs

-a long position in Japanese yen, Australian and Canadian dollars and many emerging market currencies

in Brazil and Argentina, a significant portion of sales are effectively priced in US dollars, resulting in a net short  
-local currency exposure, though the linkage has weakened in Brazil and there can be a time lag before local currency  
prices are adjusted

As noted above, following the recent exchange rate volatility in Russia and the Ukraine, Syngenta has acted to link pricing of sales in these countries (both of which export grain to the global market) to US dollars to reduce the long exposure to these currencies. More than 50 percent of the currency impact was recovered through sales price in 2016 and combined with a recovery in sales volumes drove US dollar operating income in the territory above the level of 2015.

Forecast transaction exposures in the major currencies are hedged under a rolling 12 month program, largely through forward contracts. In 2016, Syngenta estimates the impact on underlying sales and operating costs of exchange rate movements to have been approximately \$59 million adverse to 2015, which together with a net hedging cost of \$73 million compared with a gain of \$21 million in 2015, resulted in an adverse year-on-year impact on operating income from exchange rate movements of approximately \$153 million when compared with 2015. The major driver of the adverse net impact was weaker emerging market currencies, particularly the Russian ruble and Ukrainian hryvnia where the impact of these two currencies was partly recovered in sales prices; excluding the sales price recovery in the ruble and hryvnia, the adverse net impact was estimated to be approximately \$45 million. At rates prevailing in January 2017, Syngenta expects a relatively minor net impact on operating income relative to 2016 from the currency movements. This is due to the adverse impact on underlying exposures of a generally stronger US dollar on sales net of the favorable impact of the weaker Swiss franc and British pound sterling on operating costs, offset by a favorable net hedging result compared with 2016. A significant portion of emerging market currency exposures in particular are unhedged, so the actual impact may differ positively or negatively from the above estimate. The net hedging result is reported within General and administrative in the consolidated income statement in Item 18.

### **ChemChina Tender Offer**

As of March 23, 2016, CNAC Saturn (NL) B.V., a subsidiary of China National Chemical Corporation, a state-owned enterprise of the People's Republic of China, launched public tender offers in Switzerland and the United States to

acquire all the publicly held Ordinary Shares and, in the U.S. offer, also all American Depositary Shares (ADSs) of Syngenta AG for \$465 per Ordinary Share in cash. Syngenta and its Board of Directors have agreed to support the ChemChina Tender Offer. ChemChina has announced that, as of 5:00 p.m., New York City time, on December 16, 2016, approximately 19,222,302 Syngenta AG Ordinary Shares (including those represented by ADSs) had been validly tendered in, and not withdrawn from, the ChemChina Tender Offer. The Main Offer Period has been extended until March 2, 2017, with further extension likely to follow until all offer conditions are fulfilled, in particular regulatory approval by all competent merger control and other authorities, but excluding the Minimum Acceptance Rate condition. At such time, the Offeror will extend the ChemChina Tender Offer for the last time by a period of up to 20 trading days. The ChemChina Tender Offer is conditional, among other things, on acceptance by shareholders owning 67 percent of Syngenta AG issued shares and on regulatory approval by the competent merger control and other authorities.

The Transaction Agreement between ChemChina and Syngenta AG may be terminated in specified circumstances, including by either party if all conditions are not satisfied by June 30, 2017, provided the Swiss Takeover Board no longer requires the ChemChina Tender Offer to remain open. Pursuant to the Transaction Agreement, ChemChina has agreed to pay Syngenta an amount equal to \$3 billion if, despite all other conditions of the ChemChina Tender Offer having been satisfied or still being capable of being satisfied, the ChemChina Tender Offer does not become unconditional and/or is terminated as a result of the failure to obtain Chinese regulatory approvals or antitrust approvals, subject to certain exceptions. In certain circumstances, including if the Syngenta AG Board of Directors were to withdraw its support for the ChemChina Tender Offer and as a result the ChemChina Tender Offer is not successful or does not become unconditional, Syngenta would be required to pay ChemChina \$848 million.

Regulatory approval for the transaction was received from the Committee on Foreign Investment in the United States (CFIUS) on August 19, 2016. At December 31, 2016, clearance for the transaction had been received from antitrust authorities in respect of Australia, COMESA (Common Market for Eastern and Southern Africa), Israel, Japan, Kenya, Macedonia, Pakistan, Russia, Serbia, the Republic of South Africa, South Korea, Turkey and Ukraine.

If the ChemChina Tender Offer becomes unconditional, Syngenta AG will pay a special dividend of CHF 5.00 per share immediately before the first settlement of the ChemChina Tender Offer. The offer price will not be adjusted for this dividend. The Transaction Agreement provides that after the first settlement, 4 out of 10 members of Syngenta's board of directors shall be persons who have no affiliation with ChemChina or its affiliates (each, an Independent Director). Certain matters will require the affirmative vote of at least two Independent Directors, including, among others, (i) any change in the location of Syngenta's headquarters, (ii) any raising of new debt or making of distributions which would lower the rating of Syngenta to a level below investment grade (by Moody's and Standard & Poor's), (iii) any reduction in Syngenta's Research and Development budget in any given year to a level below 80 percent of the average Research and Development spend in the years 2012-2015, (iv) any material change in the agricultural sustainability programs or reduction of funding of the Syngenta Foundation for Sustainable Agriculture to a level below 80 percent of the average funding per year 2012-2015, (v) any material change to Syngenta's Health, Safety and Environment Policy and Standards and (vi) any material change to Syngenta's Code of Conduct. Approval by the Independent Directors will also be required, subject to certain exceptions, for any transaction between any member of the ChemChina group, on the one hand, and any member of the Syngenta group, on the other hand, if the transaction is not made at market terms. The above corporate governance arrangements shall remain in place until the earlier of (i) 5 years following the first settlement of the ChemChina Tender Offer and (ii) a re-listing of Syngenta Shares through an initial public offering.



In the event that ChemChina and/or its Subsidiaries hold between 90 percent and 98 percent of the voting rights in Syngenta after the second settlement of the ChemChina Tender Offer, ChemChina intends to merge Syngenta with a Swiss company directly or indirectly controlled by ChemChina in accordance with articles 8 para. 2 and 18 para. 5 of the Swiss Merger Act, whereby the remaining public shareholders of Syngenta will be compensated (in cash or otherwise) and not receive any shares in the surviving company. In the event that ChemChina and/or its Subsidiaries hold more than 98 percent of the voting rights in Syngenta after the second settlement, the Offeror intends to request the cancellation of the remaining publicly held Syngenta Shares in accordance with article 137 of the Financial Markets Infrastructure Act (FMIA).

### **Quantitative and qualitative disclosure about market risk**

For quantitative and qualitative disclosure about market risk, see Item 11.

### **Appendix A**

#### **Reconciliation of non-GAAP measures to equivalent GAAP measures**

A non-GAAP measure is a numerical measure of financial performance, financial position or cash flows that either:

includes, or is subject to adjustments that have the effect of including, amounts that are excluded in the most directly comparable measure calculated and presented under IFRS; or

excludes, or is subject to adjustments that have the effect of excluding, amounts that are included in the most directly comparable measure calculated and presented under IFRS.

Syngenta uses non-GAAP measures in this report where they are regarded by management as important for the investor to fully understand Syngenta's performance. The non-GAAP measures presented in this report are measures adjusted for exchange rate movements and to exclude restructuring gains and losses, impairment losses and divestment gains and losses. The Company presents these measures because:

movements in exchange rates historically have had, and in the future are expected to have, a significant impact on sales and operating income from period to period; and

restructuring and impairment charges historically have fluctuated, and in the future are expected to fluctuate, significantly from period to period and thereby have a volatile impact on results.

Syngenta has been engaged in significant restructuring activities since the formation of the Company in 2000, including programs to integrate and extract synergies from the combined operations of the Zeneca agrochemicals business and the Novartis agribusiness, the integration of business combinations, the Operational Efficiency programs, the implementation of the integrated crop strategy and, beginning in 2014, the AOL program. The incidence of restructuring charges is periodic and volatile, reflecting the timing of irrevocable commitments related to specific sites and operations. Therefore the impact on reported performance varies from period to period and there is limited continuity in the specific composition or size of such charges. In 2016, measures excluding restructuring and impairment also exclude the incremental effect of applying cash-settled share based payment accounting due to the share plan amendments related to the ChemChina Tender Offer described in Note 3 to the consolidated financial statements in Item 18. Internal financial reporting and management and employee incentive plans are substantially based on financial measures excluding the charges for restructuring and impairment so that management is incentivized to deliver the benefits of the associated restructuring and not to achieve short-term financial targets by deferring implementation of restructuring plans. Restructuring programs typically deliver benefits with a payback over several years, similar to capital investments, and control over restructuring expenditures is performed on a similar project basis to that applied with capital investments.

Syngenta presents non-GAAP measures on operating income before restructuring and impairment at both the segmental and group levels. Restructuring and impairment charges have had a material effect on operating income in the period covered by the review. In the opinion of management, reporting operating performance excluding restructuring and impairment in addition to the GAAP measures provides a more thorough understanding of business performance. Together with disclosure of the material elements within restructuring and impairment and of the overall anticipated size and timeframe of restructuring programs, these measures may assist investors in forecasting future operating performance. In addition to GAAP measures, Syngenta uses measures of operating performance excluding restructuring and impairment in internal reporting to management and the Board of Directors, and these measures are used in the incentive plans for Syngenta management and other employees. Restructuring and impairment charges have been incurred in all the periods covered by the review and are expected to continue to arise and have a material effect on operating performance in future periods. Consequently, non-GAAP measures of operating income before restructuring and impairment do not present a complete picture of operating performance and these measures should be seen only as supplementary to the GAAP measure.

Syngenta presents non-GAAP information on income before taxes excluding restructuring and impairment together with income tax expense before restructuring and impairment to assist investors to calculate the Group tax rate both including and excluding the impact of restructuring and impairment charges. The tax rate on restructuring and impairment charges has been volatile and different from the tax rate on income before taxes excluding restructuring and impairment, due in part to many categories of restructuring or impairment charges not being deductible for tax purposes. In addition to GAAP measures, measures of income before taxes excluding restructuring and impairment and income tax expense excluding restructuring and impairment are used in internal reporting to management and the Board of Directors. Restructuring and impairment charges have been incurred in all the periods covered by the review and are expected to continue to arise and have a material effect on operating performance in future periods. Consequently, non-GAAP measures of income before taxes excluding restructuring and impairment and income tax expense before restructuring and impairment do not present a complete picture of financial performance and these measures should be seen only as supplementary to the GAAP measure.

Syngenta presents non-GAAP information on net income and earnings per share before restructuring and impairment and, where relevant, on net income and earnings per share from continuing operations before restructuring and impairment. As above, restructuring and impairment charges have had a material effect on operating income in the period covered by the review. In the opinion of management, reporting net income and earnings per share excluding restructuring and impairment in addition to the GAAP measures provides a more thorough understanding of business performance. Together with disclosure of the material elements within restructuring and impairment and of the overall anticipated size and timeframe of restructuring programs, this disclosure may assist investors in forecasting future performance. In addition to net income and earnings per share prepared in accordance with GAAP, Syngenta uses net income and earnings per share excluding restructuring and impairment in internal reporting to management and the Board of Directors, and the measure is used in the incentive plans for Syngenta management and other employees. Restructuring and impairment charges have been incurred in all the periods covered by the review and are expected to continue to arise and have a material effect on financial performance in future periods. Consequently, the non-GAAP measures of net income and earnings per share before restructuring and impairment do not present a complete picture of financial performance and these measures should be seen only as supplementary to the GAAP measures.

For improved clarity, the definitions of these non-GAAP measures and reconciliations of non-GAAP measures to the appropriate GAAP measure are provided below. The tables below are included to show the reconciliation of the GAAP measures to the non-GAAP measures used in the report and do not represent income statements prepared under IFRS.

**Reconciliation of net income excluding restructuring and impairment (non-GAAP measure) to profit for the period (GAAP measure)**

2016 (\$m, except percentage, share and per share amounts)	<b>Total</b>	<b>Restructuring and impairment</b>	<b>Excluding restructuring and impairment</b>
<b>Operating income</b>	<b>1,647</b>	<b>(477)</b>	<b>2,124</b>
Income/(loss) from associates and joint ventures	5	-	5
Financial expense, net	(291)	-	(291)

<b>Income before taxes</b>	<b>1,361 (477)</b>	<b>1,838</b>
Income tax expense	(180) 87	(267)
<b>Net income</b>	<b>1,181 (390)</b>	<b>1,571</b>
Attributable to non-controlling interests	(3) -	(3)
Net income attributable to Syngenta AG shareholders	<b>1,178 (390)</b>	<b>1,568</b>
Tax rate	<b>13% 18%</b>	<b>15%</b>
Number of shares – basic (millions)	<b>92</b>	<b>92</b>
Number of shares – diluted (millions)	<b>92</b>	<b>92</b>
<b>Basic earnings per share</b>	<b>12.80 (4.24)</b>	<b>17.04</b>
<b>Diluted earnings per share</b>	<b>12.79 (4.24)</b>	<b>17.03</b>

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2015 (\$m, except percentage, share and per share amounts)	Total	Restructuring and impairment	Excluding restructuring and impairment
<b>Operating income</b>	1,841	(388)	2,229
Income/(loss) from associates and joint ventures	7	-	7
Financial expense, net	(256)	-	(256)
<b>Income before taxes</b>	1,592	(388)	1,980
Income tax expense	(248)	88	(336)
<b>Net income</b>	1,344	(300)	1,644
Attributable to non-controlling interests	(5)	-	(5)
Net income attributable to Syngenta AG shareholders	1,339	(300)	1,639
Tax rate	16%	23%	17%
Number of shares – basic (millions)	92		92
Number of shares – diluted (millions)	92		92
<b>Basic earnings per share</b>	14.57	(3.26)	17.83
<b>Diluted earnings per share</b>	14.52	(3.26)	17.78

2014 (\$m, except percentage, share and per share amounts)	Total	Restructuring and impairment	Excluding restructuring and impairment
<b>Operating income</b>	2,105	(206)	2,311
Income/(loss) from associates and joint ventures	7	-	7
Financial expense, net	(217)	-	(217)
<b>Income before taxes</b>	1,895	(206)	2,101
Income tax expense	(273)	38	(311)
<b>Net income</b>	1,622	(168)	1,790
Attributable to non-controlling interests	(3)	-	(3)
Net income attributable to Syngenta AG shareholders	1,619	(168)	1,787
Tax rate	14%	18%	15%
Number of shares – basic (millions)	92		92
Number of shares – diluted (millions)	92		92
<b>Basic earnings per share</b>	17.66	(1.83)	19.49
<b>Diluted earnings per share</b>	17.60	(1.82)	19.42

2013 (\$m, except percentage, share and per share amounts)	Total	Restructuring and impairment	Excluding restructuring and impairment
<b>Operating income</b>	2,086	(179)	2,265
Income/(loss) from associates and joint ventures	48	-	48
Financial expense, net	(200)	-	(200)
<b>Income before taxes</b>	1,934	(179)	2,113
Income tax expense	(285)	38	(323)
<b>Net income</b>	1,649	(141)	1,790
Attributable to non-controlling interests	(5)	-	(5)
Net income attributable to Syngenta AG shareholders	1,644	(141)	1,785
Tax rate	15%	22%	15%
Number of shares – basic (millions)	92		92
Number of shares – diluted (millions)	92		92
<b>Basic earnings per share</b>	17.88	(1.53)	19.41
<b>Diluted earnings per share</b>	17.78	(1.52)	19.30





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2012 (\$m, except percentage, share and per share amounts)	Total	Restructuring and impairment	Excluding restructuring and impairment
<b>Operating income</b>	2,256	(265)	2,521
Income/(loss) from associates and joint ventures	7	-	7
Financial expense, net	(147)	-	(147)
<b>Income before taxes</b>	2,116	(265)	2,381
Income tax expense	(266)	83	(349)
<b>Net income</b>	1,850	(182)	2,032
Attributable to non-controlling interests	(3)	-	(3)
Net income attributable to Syngenta AG shareholders	1,847	(182)	2,029
Tax rate	13%	31%	15%
Number of shares – basic (millions)	92		92
Number of shares – diluted (millions)	92		92
<b>Basic earnings per share</b>	20.16	(1.98)	22.14
<b>Diluted earnings per share</b>	20.05	(1.98)	22.03

**Constant exchange rates**

Syngenta compares results from one period to another period in this report using variances calculated at constant exchange rates (“CER”). To present that information, current period results for entities reporting in currencies other than US dollars are converted into US dollars at the prior period’s exchange rates, rather than the exchange rates for the current year. See Note 26 to the consolidated financial statements in Item 18 for information on average exchange rates in 2016 and 2015. For example, if a European entity reporting in CHF sold CHF 100 million of products in 2016 and 2015, Syngenta’s financial statements would report \$101 million of revenues in 2016 (using 0.99 as the rate, which was the average exchange rate in 2016) and \$104 million in revenues in 2015 (using 0.96 as the rate, which was the average exchange rate in 2015). The CER presentation would translate the 2016 results using the 2015 exchange rates and indicate that underlying revenues were flat. Syngenta presents this CER variance information in order to assess how its underlying business performed before taking into account currency exchange fluctuations. Syngenta also presents its actual reported results in order to provide the most directly comparable data under GAAP.

## Item 6 — Directors, Senior Management and Employees

### Board of Directors

At January 31, 2017, the Syngenta Board of Directors (the Board) and its Committees are organized as shown below.

Syngenta is led by a strong and experienced Board. It currently includes representatives with six nationalities, drawn from broad international business and scientific backgrounds. Its members bring diversity in expertise and perspective to the leadership of a complex, highly regulated, global business.

The Board is the highest level of management in the Company and exercises general supervision over the objectives and the conduct of business. In addition, the Board takes an active role in reviewing and enhancing corporate governance within Syngenta. The non-transferable and inalienable duties of the Board as defined in the Syngenta Articles of Incorporation are listed below. More detailed information on the duties and competencies of the Board is available in the Regulations Governing the Internal Organization of Syngenta on [www.syngenta.com](http://www.syngenta.com) in the section “Who we are/Corporate Governance”.

### Responsibilities of the Board of Directors

The Board of Directors (the Board) has the following non-transferable and inalienable responsibilities:

- ultimate direction of the business of the Company and the giving of the necessary directives
  - determination of the organization of the Company
  - administration of accounting, financial control and financial planning
- appointment and removal of the persons entrusted with the management and representation of the Company
  - appointment of an Independent Proxy in cases where the Independent Proxy elected by the General Meeting of Shareholders is not capable of acting
- ultimate supervision of the persons entrusted with the management of the Company, specifically in view of their compliance with the law, the Articles of Incorporation, regulations and directives

preparation of the Business Report and the Compensation Report and of the General Meeting of Shareholders and the carrying out of the resolutions adopted by the General Meeting of Shareholders

- notification of the court if liabilities exceed assets

adoption of resolutions concerning the increase of the share capital to the extent that such power is vested in the Board (article 651 paragraph 4 CO), as well as resolutions concerning the confirmation of capital increases and respective amendments to the Articles of Incorporation

- examination of the professional qualifications of the external auditor.

The Board has delegated the authority to manage the Company's operations to the Chief Executive Officer (CEO) and the Executive Committee.

### **Chairman of the Board of Directors**

The Chairman of the Board of Directors is a non-executive member of the Board. He leads the Board in the exercise of its non-transferable duties, including the ultimate management and oversight of the Company. The Chairman, together with the Chief Executive Officer (CEO), assumes overall responsibility for the development of the Company's strategies and ensures close alignment and common understanding between the Board, its Committees, the CEO and the Executive Committee of such strategies and their implementation. On behalf of the Board, the Chairman exercises ongoing oversight and governance over the CEO and through him also over the Executive Committee. The Chairman oversees the reputation of the Company and, together with the CEO, represents the interests of the Company to important stakeholders and the general public.

Should the Chairman be unable to carry out his duties, the Vice Chairman shall act in his stead.

### **Functions and mandates of the members of the Board of Directors**

The functions and activities performed by the members of the Board of Directors apart from their duties as non-executive members of the Board, do not relate significantly to Syngenta or its subsidiaries. Also, none of the non-executive Directors was a member of the management of Syngenta or one of the Company's subsidiaries in the three financial years preceding the reporting year.

The members of the Board may hold no more than the following number of mandates in the supreme executive bodies of companies and organizations:

- up to additional 4 mandates in listed companies

- up to 5 mandates in non-listed companies

up to 10 mandates in (i) charitable organizations, (ii) associations or foundations and (iii) other non-profit institutions.

Several mandates held in different companies of the same group count as one mandate. Mandates within companies under the direct or indirect control of Syngenta (subsidiaries) or which are not required to be registered in the Swiss Commercial Register or a similar foreign register are not limited by numbers. A short-term temporary overrun of the limitations set forth above by one mandate is permissible.

### **Election of the members of the Board of Directors and terms of office, constitution of the Board**

The members of the Board are elected by the shareholders at the Annual General Meeting (AGM) for a term of one year; re-election is possible. The members of the Board shall automatically retire after the lapse of the 12th year of office or, if earlier, on expiry of the 70th year of age. In each case, retirement becomes effective on the date of the next AGM following such event.

The Chairman of the Board and the members of the Compensation Committee are also elected by the AGM for a one-year term of office; re-election is possible.

In all other respects, the Board constitutes itself. In particular, it elects one Vice Chairman from among its members, appoints the members of the Board committees (except for the Compensation Committee) and the respective chairpersons, the CEO, the further members of the Executive Committee and the Head Internal Audit. It also designates the Secretary who need not be a member of the Board. The Company Secretary acts as Secretary to the Board.

### **Members of the Board of Directors**

At January 31, 2017

**Michel Demaré**

**Born:** August 31, 1956

**Nationality:** Belgian/Swiss

**Initial appointment:** 2012

### **Functions in Syngenta**

Chairman of the Board, non-executive Director

Chairman of the Governance & Nomination Committee and of the Corporate Responsibility Committee

He is also Chairman of the Syngenta Foundation for Sustainable Agriculture.

## Professional background

Michel Demaré was Chief Financial Officer and Executive Vice President of ABB from 2005 to February 2013, serving in addition, between late 2008 and March 2011, as the company's President of Global Markets. Between February and September 2008, he was ABB's acting Chief Executive Officer. Previously he had been Chief Financial Officer Europe for Baxter International Inc. He joined Baxter in 2002 after 18 years at the Dow Chemical Company, where he held various treasury and division CFO positions in Europe (including Switzerland) and the USA. Apart from his functions in Syngenta, Michel Demaré is currently holding the following Board memberships:

- Listed companies: Vice Chairman of UBS Group AG

- Non-listed companies: Member of the Supervisory Board of Louis Dreyfus Company Holdings B.V.

In addition, he is Vice-Chairman of the Supervisory Board of IMD Business School in Lausanne and a member of the Advisory Board at the Institute of Banking and Finance at the University of Zurich.

Michel Demaré holds a License in Applied Economics from the Université Catholique de Louvain (UCL) and an MBA from the Katholieke Universiteit Leuven (KUL) in Belgium.

### **Jürg Witmer**

**Born:** June 22, 1948

**Nationality:** Swiss

**Initial appointment:** 2006

## Functions in Syngenta

Vice Chairman, non-executive Director

Chairman of the Compensation Committee and member of the Governance & Nomination Committee

## Professional background

Jürg Witmer joined Hoffmann-La Roche in Basel in 1978 and subsequently held a number of positions including Legal Counsel, Assistant to the CEO, General Manager and China Project Manager of Roche Far East based in Hong Kong, Head of Corporate Communications and Public Affairs at Roche headquarters in Basel, Switzerland, and General Manager of Roche Austria. From 1999 to 2005, he acted as Chief Executive Officer of the Givaudan Group in Vernier/Geneva. From 2008 to 2012, he was also Chairman of Clariant AG, Basel. Apart from his functions in

Syngenta, Jürg Witmer is currently holding the following Board memberships:

- Listed companies: Chairman of Givaudan Group
- Non-listed companies: Non-executive Director of A. Menarini IFR Florence.

Jürg Witmer has a doctorate in Law from the University of Zurich, as well as a degree in International Studies from the Graduate Institute of the University of Geneva.

**Vinita Bali**

**Born:** November 11, 1955

**Nationality:** Indian

**Initial appointment:** 2012

**Functions in Syngenta**

Non-executive Director

Member of the Corporate Responsibility Committee

**Professional background**

Vinita Bali started her career in India with the Tata Group, and then joined Cadbury India, subsequently working for Cadbury in the UK, Nigeria and South Africa. From 1994 onwards, she held a number of senior positions in marketing and general management at The Coca-Cola Company in the USA and Latin America, becoming Head of Corporate Strategy in 2001, and then joined the Zyman Group as Head of its Business Strategy practice in the USA in 2003. From 2005 to 2014 Vinita Bali was the Managing Director of Britannia Industries, India's publicly listed premier food company. Apart from her functions in Syngenta, Vinita Bali is currently holding the following Board memberships:

- Listed companies: Non-executive Director of Titan Industries, CRISIL and Smith & Nephew PLC

Non-listed companies: Chairman of GAIN (Global Alliance for Improved Nutrition), Vice Chairman of CARE India -Solutions for Sustainable Development, non-executive Director of Katsuri & Sons Ltd., and Advisory Board member of PwC in India.

She also holds Advisory or Governing Board mandates in several institutions in the education sector.



Vinita Bali holds an MBA from The Jamnalal Bajaj Institute of Management Studies, University of Bombay and a Bachelor degree in Economics from the University of Delhi.

**Stefan Borgas**

**Born:** September 11, 1964

**Nationality:** German

**Initial appointment:** 2009

**Functions in Syngenta**

Non-executive Director

Member of the Compensation Committee and of the Audit Committee

**Professional background**

Stefan Borgas is President and Chief Executive Officer of RHI AG in Austria since December 1, 2016. Previously he served as CEO of Israel's ICL Group from September 2012 to 2016 and as CEO of Lonza Group (Switzerland) from June 2004 to January 2012. Before this he spent 14 years with BASF Group where he held various leadership positions in Fine Chemicals and Engineering Plastics in the USA, Germany, Ireland and China. Apart from his functions in Syngenta, he holds no other mandates in the supreme executive bodies of listed or non-listed companies.

Stefan Borgas holds a degree in Business Administration from the University of Saarbrücken and an MBA from the University of St. Gallen.

**Gunnar Brock**

**Born:** April 12, 1950

**Nationality:** Swedish

**Initial appointment:** 2012

**Functions in Syngenta**

Non-executive Director

Chairman of the Audit Committee and member of the Governance & Nomination Committee

**Professional background**

Gunnar Brock worked for the Tetra Pak Group for many years, with spells in Asia, Australia and Europe, returning – after a period as President and Chief Executive Officer of Alfa Laval – to become President and Chief Executive Officer of the Tetra Pak Group, headquartered in Switzerland. From 2002 to 2009 he served as President and Chief

Executive Officer of the Atlas Copco Group. Apart from his functions in Syngenta, Gunnar Brock is currently holding the following Board memberships:

- Listed companies: Chairman of Stora Enso and non-executive Director of Investor AB

- Non-listed companies: Chairman of Mölnlycke Health Care and non-executive Director of Patricia Industries (both 100 percent affiliates of Investor AB), and non-executive Director of Stena AB.

Gunnar Brock holds an MBA from the Stockholm School of Economics.

**Eleni Gabre-Madhin**

**Born:** July 12, 1964

**Nationality:** Swiss

**Initial appointment:** 2013

**Functions in Syngenta**

Non-executive Director

Member of the Corporate Responsibility Committee

**Professional background**

Eleni Gabre-Madhin is the co-founder and CEO of eleni LLC, which supports the formation of commodity exchanges across Africa, helping to promote food security. She also founded and was CEO of the Ethiopia Commodity Exchange. Previously, she was a Senior Program Leader for Strategy issues at the International Food Policy Research Institute in Addis Ababa and worked for several institutions, such as the World Bank in Washington (2003–2004). Apart from her functions in Syngenta, she holds no other mandates in the supreme executive bodies of listed or non-listed companies.

Eleni Gabre-Madhin holds a BA in Economics from Cornell University, a Master of Science in Agricultural Economics from Michigan State University and a PhD in Applied Economics (Food Research Institute) from Stanford University. She received the Outstanding Dissertation Award from the American Agricultural Economics Association for her research on grain markets in Ethiopia.

**David Lawrence**

**Born:** March 9, 1949

**Nationality:** British

**Initial appointment:** 2009

**Functions in Syngenta**

Non-executive Director

Member of the Audit Committee

He is also Chairman of the Science and Technology Advisory Board.

**Professional background**

David Lawrence was Head Research & Development at Syngenta from 2002 to 2008. Prior to this role, David Lawrence was Head Research & Technology Projects (2000–2002) for Syngenta. Prior to this, he was Head International R&D Projects for Zeneca Agrochemicals, having previously held several senior scientific roles. Apart from his functions in Syngenta, David Lawrence is currently holding the following Board memberships:

- Non-listed companies: Chairman of the UK Knowledge Transfer Network Ltd. and of Agrimetrix Ltd., and non-executive Director of Spectrum Ltd.

He is also a non-executive Director of the John Innes Foundation (a charitable body), a member of the UK Industrial Biotechnology Leadership Forum, the UK Agri-FoodTech Council, the Nottingham University Synbio Centre Advisory Board, and the Nuffield Council on Bioethics.

David Lawrence graduated in Chemistry from Oxford University with an MA and DPhil in Chemical Pharmacology.

**Eveline Saupper**

**Born:** October 1, 1958

**Nationality:** Swiss

**Initial appointment:** 2013

**Functions in Syngenta**

Non-executive Director

Member of the Compensation Committee

**Professional background**

Eveline Saupper was a partner at the commercial law firm Homburger AG in Zurich until June 2014. Since then, she has been Of Counsel at this law firm. Before joining Homburger in 1985, she worked as a tax specialist with Peat Marwick Mitchell (today KPMG) in Zurich (1983–1985). Apart from her functions in Syngenta, Eveline Saupper is currently holding the following Board memberships:

- Listed companies: Non-executive Director of Flughafen Zürich AG, Georg Fischer AG and Clariant AG

Non-listed companies: Chairman of Mentex Holding AG, non-executive Director of hkp group AG, Stäubli Holding AG and Hoval Group.

Eveline Saupper holds a degree and PhD in Law from the University of St. Gallen. She is admitted to the Bar of Zurich and is a certified tax expert.

**Meetings of the Board of Directors**

The Board of Directors (the Board) meets as often as business requires, however not less than once a quarter. The Chairman defines the agenda of the Board meetings in coordination with the CEO. Any member of the Board may request the convening of a meeting or the inclusion of items of business in the agenda. In 2016, apart from the Board meetings, Board members conducted discussions with officers of the Company to review relevant matters at hand, visited operating locations of the Company and provided information to the management as needed.

In 2016, the Board met as follows:

<b>Members</b>	Meetings attended <sup>1</sup>
Michel Demaré, Chairman	7
Jürg Witmer, Vice Chairman	7
Vinita Bali	7
Stefan Borgas	6
Gunnar Brock	6
Eleni Gabre-Madhin	6
David Lawrence	7
Eveline Saupper	7

1 7 meetings held in 2016; average length of the meetings: 6.5 hours

### **Board Committees**

Some of the Board’s powers and duties are delegated to the Board committees. These are the Governance & Nomination Committee, the Compensation Committee, the Audit Committee and the Corporate Responsibility Committee.

The topical Board Committee charters are available on the Company’s website, in the section “Who we are/Corporate Governance”.

All Board Committees meet on a regular basis. Their members are provided with the materials necessary to fulfil their duties and responsibilities, and to submit full reports to the Board. The key accountabilities of the Board Committees at December 31, 2016, were the following:

### **Governance & Nomination Committee (GNC)**

#### **Main Responsibilities**

- oversees corporate governance issues at Company level
- regularly reviews the independence of the Board and manages the Board’s self-assessment process
- reviews at least once per year the appropriateness and effectiveness of the Board committee structure and composition
- supports the Board in the identification and selection of candidates for the Board and the CEO position
- reviews at least once per year the succession plans for SEC members

The Governance & Nomination Committee consists of the Chairman, who shall act as Chairman of the GNC, and up to three independent, non-executive members of the Board. The Group General Counsel or his/her delegate shall act as Secretary of the Governance & Nomination Committee.

<b>Members</b>	<b>Meetings attended <sup>1</sup></b>
Michel Demaré, Chairman	3
Gunnar Brock	3
Jürg Witmer	3

<sup>1</sup> 3 meetings held in 2016; average length of the meetings: 1 hour

### **Compensation Committee (CC)**

#### **Main Responsibilities**

- reviews and recommends to the Board the compensation & benefits principles, strategy and policies which define the compensation system

- defines the elements and the structure of the compensation system, including the structure of share ownership plans

- reviews and recommends to the Board on an annual basis a proposal for approval by the Annual General Meeting of Shareholders of the total compensation of the Board and the Executive Committee

- pursuant to article 29 of the Articles of Incorporation, sets or amends the compensation packages of the members of the Executive Committee and prepares a proposal to the Board to set or amend the compensation package of the CEO

- prepares and recommends to the Board the Compensation Report for approval.

Further information is available in the 2016 Syngenta Compensation Report and in the charter of the Compensation Committee on the Syngenta website in the section “Who we are/Corporate Governance”.

The Compensation Committee consists of a minimum of three independent, non-executive members of the Board<sup>1</sup>; the Chairman shall not be a member of the Compensation Committee. The Head of Human Resources or his/her delegate shall act as Secretary of the Compensation Committee.

<b>Members</b>	<b>Meetings attended <sup>2</sup></b>
Jürg Witmer, Chairman	5
Stefan Borgas	3
Eveline Saupper	5



1 The Chairman and the CEO are standing guests, except when issues regarding their own positions are discussed

2 5 meetings held in 2016; average length of the meetings: 1.5 hours

## **Audit Committee (AC)**

### **Main Responsibilities**

· assists the Board in fulfilling its supervisory responsibilities with respect to accounting and financial reporting practices of the Company

· monitors the performance of the external auditor, checking its independence and coordinating its work with internal audit

· monitors the implementation of findings of external and internal auditors by management

· assesses the quality of the financial reporting and prepares Board decisions in this area

· monitors the effectiveness of the financial compliance framework and of the internal controls environment.

The Audit Committee consists of at least three independent, non-executive members of the Board; the Chairman shall not be a member of the Audit Committee. A member of the Corporate Legal Department currently acts, as a delegate of the Group General Counsel, as Secretary of the Audit Committee.

<b>Members</b>	Meetings attended <sup>1</sup>
Gunnar Brock, Chairman	5
Stefan Borgas	4
David Lawrence	5

15 meetings held in 2016; average length of the meetings: 2 hours. The external auditor attended all meetings in 2016.

### **Corporate Responsibility Committee (CRC)**

#### **Main Responsibilities**

- reviews and advises the Board on overall Corporate Responsibility priorities, policies and issues
- acts as custodian of the Board in all Corporate Responsibility matters and exercises oversight over the Executive Committee in this respect
- assesses the effectiveness of the implementation of Corporate Responsibility related internal policies.

The Corporate Responsibility Committee consists of the Chairman, at least two further independent, non-executive members of the Board, and the CEO. The Group General Counsel or his/her delegate shall act as Secretary of the Corporate Responsibility Committee.

<b>Members</b>	Meetings attended <sup>1</sup>
Michel Demaré, Chairman	2
Vinita Bali	2
J. Erik Fyrwald	2
Eleni Gabre-Madhin	2

<sup>1</sup> 2 meetings held in 2016; average length of the meetings: 2 hours

### **Information and control instruments of the Board of Directors**

The Board recognizes the importance of being fully informed on material matters that impact Syngenta. It supervises management and monitors its performance through reporting and controlling processes and through the Board committees. It ensures that it has sufficient information to make the appropriate decisions through the following means:

All members of the Executive Committee are regularly invited to attend Board meetings to report on their areas of responsibility, including key data for the core businesses, financial information, existing and potential risks, and updates on developments in important markets. Other members of management attend Board meetings as deemed necessary by the Board.

At each Board meeting, the CEO reports on the meetings of the Executive Committee. The Chairman receives the minutes of the Executive Committee meetings; on request, the minutes are available to all members of the Board.

Board committees regularly meet as appropriate with members of management, external advisors and the external auditor.

- Important information is regularly sent to the Board.

### **Risk management**

Risk management is of highest importance at Syngenta; responsibility for it is assumed by the Board and, within the scope of its duties, by every individual Board committee including the Audit Committee.

A Risk Management Policy sets out global standards for Syngenta and guidelines on how risks are to be identified, classified and managed throughout the business.

The businesses and functions review their risks on a regular basis and decide on how these have developed and how they need to be classified and treated going forward. Specialized functions such as Group Finance, Health Safety & Environment, Legal, Compliance and Security and many others support the business in managing risks in their respective areas. Group risks can be broadly categorized into financial, operational, legal, compliance, regulatory and strategic risks.

Group Risk Management at Syngenta collects information on all identified risks from businesses and functions on a regular basis and facilitates an assessment process by making its own assessment and challenging the teams as appropriate. Risks are described and tracked on a dedicated Risk Management Information System.

Group Risk Management reports Syngenta's Risk Profile to the Syngenta Executive Committee and the Board of Directors.

## **Audit**

### **Internal Audit**

Internal Audit, as an independent function, carries out control, operational and system audits. All subsidiaries are within the scope of Internal Audit. Audit plans are reviewed and approved by the Audit Committee, and any suspected irregularities noted during audits are reported without delay. Internal Audit reports on issues arising from internal audits to the Audit Committee and shares reports with the external auditor.

### **External auditor**

The external auditor is accountable to the Audit Committee, the Board and ultimately to the shareholders. At the completion of the audit, the external auditor presents and discusses the audit reports on the financial statements and internal controls with the Audit Committee, highlighting the significant accounting, control and auditing matters addressed during the course of the audit. The external auditor attends all Audit Committee meetings and at least once a year the external auditor takes part in a meeting with the Board.

### **Duration of the mandate and term of office of the lead auditor**

KPMG AG was initially elected as external auditor at the Annual General Meeting in April 2014. The appointment is for one year and can be renewed annually. The auditor in charge may serve for no more than five years. The current auditor in charge, Richard Broadbelt, has served for three business years (2014–2016).

### **Board of Directors oversight over external audit**

The Audit Committee, on behalf of the Board, is responsible for monitoring the performance of the external auditor and verifying its independence. In addition, the Audit Committee monitors the implementation of findings of the external auditor by the management. The Audit Committee also considers and makes recommendations on the appointment, reappointment or removal of the external auditor to the Board, which then nominates the external auditor for election by the Annual General Meeting. As an additional duty, the Audit Committee authorizes non-audit services of the external auditor permitted under any of the listing or other rules applicable to Syngenta. The CFO and the Group Financial Controller are generally invited to the meetings of the Audit Committee; the external auditor, the Head Internal Audit and other members of management may also be invited as appropriate. The Chairman of the Audit Committee reports orally to the Board after each meeting on the work performed by the Committee, its findings and actions undertaken.

### **Executive Committee and Executive Team**

Under the leadership of the Chief Executive Officer (CEO), the Executive Committee is responsible for the active leadership and the operative management of the Company. It consists of the CEO, the President Global Crop Protection and EAME, LATAM and APAC, the President Global Seeds and North America, the Chief Financial Officer (CFO), the Head Research & Development, the Head Global Operations and the Head Legal & Taxes.

The Executive Committee, together with the Head Human Resources, the Head Corporate Affairs and the Head Business Development, builds the Executive Team.

J. Erik Fyrwald has been CEO of the Company since June 1, 2016, succeeding John Ramsay who was CEO *ad interim* from November 1, 2015, to May 31, 2016, apart from his function as CFO. As per September 30, 2016, John Ramsay also stepped down as CFO of the Company.

During the reporting year, three further members of the Syngenta Executive Committee stepped down from their functions: Caroline Luscombe, Head Human Resources (at June 30, 2016), Jonathan Seabrook, Head Corporate Affairs (at September 30, 2016) and Davor Pisk, COO APAC & North America (at October 31, 2016).

### **Members of the Executive Team**

At January 31, 2017

<b>Members</b>	<b>Function</b>
J. Erik Fyrwald*	Chief Executive Officer (CEO)
Christoph Mäder*	Head Legal & Taxes and Company Secretary
Patricia Malarkey*	Head Research & Development
Jonathan Parr*	President Global Crop Protection and EAME, LATAM and APAC
Mark Patrick*	Chief Financial Officer (CFO)
Mark Peacock*	Head Global Operations
Jeff Rowe*	President Global Seeds and North America
Laure Roberts	Head Human Resources
Mark Titterington	Head Corporate Affairs
Alexander Tokarz	Head Business Development

\* Members of the Executive Committee

### **Responsibilities of the Executive Committee**

The duties of the Executive Committee comprise in particular:

- formulation of the fundamentals of corporate policy
- designing the Company's strategy and strategic plans for the approval of the Board of Directors (the Board)

- implementation of the strategies, strategic plans and the periodic assessment of the attainment of goals
  - submission of regular reports for the attention of the Board or its Committees
  - promotion of a modern and active leadership culture
  - provision and optimal utilization of resources (finances, management capacity)
  - establishment of an active communications policy within and outside the Company
- systematic selection, development and promotion of new and potential management personnel

examination and approval of significant agreements with third parties and business activities involving extraordinary high risks

- establishment of guidelines for planning, organization, finance, reporting, information and other technology, etc.

### **Chief Executive Officer (CEO)**

The CEO is nominated by the Board; he shares responsibility for the strategic direction of the Company with the Chairman. The CEO and the Executive Committee are jointly responsible for the active leadership and operative management of the Company. The CEO leads the Executive Committee. Members of the Executive Committee are directly responsible to the CEO. The CEO, together with the Chairman, manages the reputation of the Company and represents the interests of the Company to important stakeholders and the general public.

## **Duration of employment contracts and mandates**

Employment contracts with members of the Executive Committee are concluded for an indefinite term. The maximum notice period for the CEO and all members of the Executive Committee is 12 months.

The members of the Executive Committee, subject to the approval by the Chairman of the Board, may hold no more than the following number of mandates in the supreme executive bodies of companies and organizations:

- up to 2 mandates in listed companies

- up to 2 mandates in non-listed companies

- up to 4 mandates upon instruction of Syngenta in companies that are not directly or indirectly controlled by Syngenta

up to 10 mandates in (i) charitable organizations, (ii) associations or foundations and (iii) other non-profit institutions.

Several mandates held in different companies of the same group count as one mandate. Mandates within companies under the direct or indirect control of Syngenta (subsidiaries) or which are not required to be registered in the Swiss Commercial Register or a similar foreign register are not limited by numbers.

## **Executive Committee**

At January 31, 2017

### **J. Erik Fyrwald**

**Born:** July 29, 1959

**Nationality:** American

**Appointment:** 2016

## **Functions in Syngenta**

Chief Executive Officer

Member of the Corporate Responsibility Committee



### **Professional background**

J. Erik Fyrwald was previously President and Chief Executive Officer of Univar, a leading distributor of chemistry and related products and services (2012–2016); President of Ecolab, a cleaning and sanitation, water treatment, and oil and gas products and services provider (2011–2012); and Chairman, President and Chief Executive Officer of Nalco, a water treatment and oil and gas products and services company (2008–2011). He was Group Vice President of the Agriculture and Nutrition Division of the E. I. du Pont de Nemours and Company – DuPont (2003–2008). Apart from his functions in Syngenta, J. Erik Fyrwald serves on the Board of Directors for Eli Lilly and Company (including their Science and Technology Committee), CropLife International and the Swiss-American Chamber of Commerce.

He holds a Bachelor's degree in Chemical Engineering from the University of Delaware and completed the Advanced Management Program at Harvard Business School.

### **Christoph Mäder**

**Born:** July 21, 1959

**Nationality:** Swiss

**Appointment:** 2000

### **Functions in Syngenta**

Head Legal & Taxes and Company Secretary

### **Professional background**

Christoph Mäder was Head of Legal & Public Affairs for Novartis Crop Protection (1999–2000) and Senior Corporate Counsel for Novartis International AG (1992–1998). He is Vice Chairman of *economiesuisse*, the main umbrella organization representing Swiss economy. He is also a non-executive Director of Lonza AG (listed company), a member of the Board of *scienceindustries*, the association of Swiss chemical, pharmaceutical and biotech industries, and a member of the Board of the Basel Chamber of Commerce.

He graduated from Basel University Law School, and is admitted to the Bar in Switzerland.

**Patricia Malarkey**

**Born:** November 23, 1965

**Nationality:** British/American

**Appointment:** 2014

**Function in Syngenta**

Head Research & Development

**Professional background**

Prior to her current function as Head Research & Development, Patricia Malarkey was Head Research & Development for Lawn & Garden at Syngenta (2012–2013). Before that, she held a number of senior scientific functions in Crop Protection, Seeds and Biotechnology at Syngenta in Europe and the United States. Patricia Malarkey holds no other mandates in the supreme executive bodies of listed or non-listed companies.

She graduated from the University of Glasgow in Agricultural Chemistry and holds a master's degree in Toxicology from the University of Surrey.

**Jonathan Parr**

**Born:** February 27, 1961

**Nationality:** British

**Appointment:** 2015

**Function in Syngenta**

President Global Crop Protection and EAME, LATAM and APAC

**Professional background**

Prior to his current function as President Global Crop Protection and EAME, LATAM and APAC, Jonathan Parr was Chief Operating Officer (COO) EAME & Latin America (2015–2016). Before that, he was Head of Global Crops & Assets for Syngenta (2014), Regional Director for EAME (2009–2013), Head of Syngenta Flowers (2007–2008), Head of Marketing and Strategy (2004–2007) and European Manufacturing Manager (2000–2003). Before joining Syngenta, he worked for AstraZeneca as a Factory Manager (1998–2000), Global Product Manager Fungicides (1996–1998) and Supply Chain Project Manager (1994–1996). From 1987 to 1994, he held Project and Engineering Management functions at Imperial Chemical Industries (ICI). Jonathan Parr holds no other mandates in the supreme executive bodies of listed or non-listed companies.

Jonathan Parr is a Chartered Engineer and also holds an honors Bachelor degree in Civil Engineering from the University of Southampton as well as a Master in Management from the University of McGill, Canada, and a diploma in International Management from the INSEAD Institute.

**Mark Patrick**

**Born:** March 14, 1969

**Nationality:** British

**Appointment:** 2016

**Function in Syngenta**

Chief Financial Officer

**Professional background**

Prior to his appointment as Chief Financial Officer, Mark Patrick was Head Commercial Finance at Syngenta (2011–2016). Prior to that, he was Head Crop Protection Finance (2008–2011 and 2005–2006), Head Finance North America Crop Protection (2006–2008), Head Business Reporting (2003–2005) and APAC Regional Supply Finance Head Syngenta in Hong Kong. He joined AstraZeneca in 1993. Mark Patrick holds no other mandates in the supreme executive bodies of listed or non-listed companies.

He is a Chartered Management Accountant and also holds an honors degree in Quantity Surveying and a Post Graduate degree in Economics.

**Mark Peacock**

**Born:** February 2, 1961

**Nationality:** British

**Appointment:** 2007

**Function in Syngenta**

Head Global Operations

**Professional background**

Mark Peacock was previously Head of Global Supply (2003–2006) and Regional Supply Manager for Asia Pacific (2000–2003) for Syngenta. Prior to this he was a Product Manager in Zeneca Agrochemicals and General Manager of the Electrophotography Business in Zeneca Specialties. Mark Peacock holds no other mandates in the supreme executive bodies of listed or non-listed companies.

He has a degree in Chemical Engineering from Imperial College, London, and a Master in International Management from McGill University in Montreal.

**Jeff Rowe**

**Born:** May 2, 1973

**Nationality:** American

**Appointment:** 2016

**Function in Syngenta**

President Global Seeds and North America

**Professional background**

Prior to his current function as President Seeds and North America, Jeff Rowe was Vice President, Strategic Services and Planning at DuPont Pioneer (2015–2016) and also sat on the company’s Leadership Team (DPLT). Before, he was Regional Director for DuPont Pioneer Europe (2011–2015), Vice President Biotech Affairs and Regulatory (2008–2011) and Corporate Counsel (2001–2008). Jeff Rowe started his career with Pioneer in 1995 in Supply Management. Apart from his function in Syngenta, he has been a member of the U.S.-Ukraine Business Council (USUBC) Executive Committee since 2003. Jeff Rowe holds no other mandates in the supreme executive bodies of listed or non-listed companies.

He has a Bachelor of Science in Agricultural Economics from the Iowa State University, a Juris Doctorate from Drake Law School, and a Global Executive MBA from the NYU Stern School of Business and the London School of Economics.

**Management contracts**

Syngenta has not entered into management contracts with any third party.

**Service contracts / Change of control**

The employment agreements of members of the Executive Committee, including the CEO, and the agreements of the members of the Board of Directors, including the Chairman, do not have any change of control clauses. Neither the Executive Committee nor the Board of Directors agreements contain any provisions for termination payments (“golden parachute” or “handshake” or similar arrangements) with regard to severance or other termination events.

**Relationships and arrangements involving Directors or members of the Executive Committee**

None of the above Directors or members of the Executive Committee has any family relationship with any other Director or member of the Executive Committee. There were no arrangements or understandings with major shareholders, customers, suppliers or others, pursuant to which any of the above Directors or of the Executive Committee members was selected as a Director or as member of the Executive Committee.

## Employees of Syngenta

### 2016

Syngenta had approximately 27,600 permanent employees as of December 31, 2016. Approximately 15 percent of these were in North America, 18 percent in Latin America, 22 percent in Asia Pacific and the remaining 45 percent in Europe, Africa and Middle East.

The functional distribution of Syngenta employees for the year ended December 31, 2016 was approximately as follows:

Production	40%
Research and development	18%
Marketing and distribution	27%
Administration and general overhead	15%

The number of temporary employees varies greatly during each year due to the seasonal nature of the business. During 2016, the highest level of temporary employees was approximately 3,200.

In several countries, part of the workforce is unionized or represented by works councils. Syngenta's relationships with its unions and other employee organizations are generally good and there have been no significant industrial disputes over the past five years at any of Syngenta's major business locations.

### 2015

Syngenta had approximately 28,400 permanent employees as of December 31, 2015. Approximately 15 percent of these were in North America, 18 percent in Latin America, 22 percent in Asia Pacific and the remaining 45 percent in Europe, Africa and Middle East.

The functional distribution of Syngenta employees for the year ended December 31, 2015 was approximately as follows:

Production	39%
Research and development	19%
Marketing and distribution	27%
Administration and general overhead	15%

During 2015, the highest level of temporary employees was approximately 4,700.

## 2014

Syngenta had approximately 29,000 permanent employees as of December 31, 2014. Approximately 16 percent of these were in North America, 17 percent in Latin America, 22 percent in Asia Pacific and the remaining 45 percent in Europe, Africa and Middle East.

The functional distribution of Syngenta employees for the year ended December 31, 2014 was approximately as follows:

Production	38%
Research and development	20%
Marketing and distribution	30%
Administration and general overhead	12%

During 2014, the highest level of temporary employees was approximately 5,000.



## Share ownership

The aggregate amount of Syngenta shares and share options held by current Directors and the members of the Executive Committee as of December 31, 2016, based on information available to the Company, is 0.12 percent of all outstanding shares, i.e. none of Syngenta's Directors or the Executive Committee members individually owns more than one percent of the Company's outstanding shares. For more information on Syngenta shares and share options owned by individual Directors and by individual members of the Executive Committee see "Compensation Report, 2016 Holding of shares and options".

For a description of arrangements involving Syngenta's employees in the capital of the Company, see Note 23, "Employee share participation plans", to the consolidated financial statements in Item 18.

## Compensation

### Compensation elements

Syngenta's total compensation package includes:

- fixed compensation – base salary
- variable compensation – short-term incentive plans and, for selected leaders, long-term incentive plans
- benefits (including all insured benefits and retirement pension plans).

### Fixed compensation

Fixed compensation is represented as annual base salary paid in cash, typically on a monthly basis and set by reference to the:

- size and scope of the job
- external market value of the job
- skills, experience and performance of the employee.

To ensure market competitiveness, base salaries are subject to review every year by considering factors such as Company affordability, benchmark data, external market movement, economic environment and individual performance.

In addition, certain employees may receive customary cash allowances for expenses.

### Variable compensation

Variable compensation consists of short-term incentives and, for selected leaders, long-term incentives. Target variable compensation is determined by the work level and scope of the individual's job, as well as the external market value of the respective job and the location. The actual payment is dependent on business performance and individual performance. It may be granted in cash, shares, restricted stock units, performance stock units and/or stock options.

All of the variable compensation plans are governed by their own set of regulations which include leaver provisions.

The various short- and long-term incentive plans are summarized in the table below with more detail in the following sections.

**Fixed and variable compensation**

	Chairman of the Board	Members of the Board	Executive Committee	Senior Management	All Employees	Description	Link to compensation principles
Fixed compensation	•	•	•	•	•	Cash – all employees. The Chairman of the Board and other members of the Board may opt for cash and/or shares	Attract and retain high-quality employees. Provided for ongoing performance and delivery in position

**Short-Term variable compensation**

Short-Term Incentive	•••	Cash – all employees				Performance-based compensation. Provided to focus and reward employees on annual company/team and /or individual performance	
Sales Incentive Plan	•	Cash – selected employees within the commercial function					

**Long-Term variable compensation**

Deferred Share Plan <sup>6</sup>	••	Deferred share awards or shares and matching shares <sup>1</sup>				An opportunity to turn short-term incentive into long-term equity. Provided to focus leaders on sustainable value creation and increase their alignment with shareholders	
Executive LTI Plan <sup>6</sup>	•	Stock options and PSUs <sup>2</sup>				Rewards leadership, innovation and performance. Provided to focus leaders on sustainable business performance and alignment with shareholders	
LTI Plan <sup>6</sup>	•	Stock options and RSUs <sup>3</sup>					
Employee Share Purchase Plan (ESPP) <sup>4,6</sup>	••	employees: share purchase up to CHF 5,000.– p.a. at 50 percent discount rate				Identification and commitment to Syngenta	

<sup>1</sup> In Switzerland, employees are offered a choice of share awards or shares under the DSP. In all other countries, employees receive share awards. For the purposes of this report, both are referred to as “share awards”

<sup>2</sup> Performance Stock Units

<sup>3</sup> Restricted Stock Units

<sup>4</sup> Since 2015, Executive Committee members are not eligible to participate in the ESPP

<sup>5</sup> Other Employee Share Purchase Plans providing different discounted share purchase options for employees are also established in 37 other countries

<sup>6</sup> These plans were replaced from January 1, 2017, see Changes to the Compensation System below

**Short-Term Incentive (STI)**

The target STI is set as a percentage of base salary which varies by work level as shown in the table below:

	STI targets (as a percentage of base salary)
Chief Executive Officer	80%
Executive Committee	70%
Senior Management <sup>1</sup>	30%–40%
Management <sup>1</sup>	25%

1 Higher target percentages apply to managers and senior managers in the USA

Both the individual and financial percentage awards can range from zero to 200 percent of the STI target as outlined in the Articles of Incorporation (Article 29, 10). The STI payout is limited to two times the target award.

*STI design for Executive Committee members*

For Executive Committee members, emphasis is placed on the achievement of financial results. Financial performance measures determine 70 percent of the STI award, while 30 percent is based on individual performance. The financial performance measure consists of earnings per share (EPS) (55 percent) and cash flow return on investment (CFROI) of the Group (15 percent). Individual performance is measured against goals set within the performance management process.

In addition, the STI payout is contingent upon the annual Group Net Income (GNI) reaching a threshold of 85 percent of the target budget.

*STI design for managers and employees below the Executive Committee*

For managers and employees below the Executive Committee, the STI award weights equally Company financial results and individual performance. Financial performance is determined primarily on the basis of full year business contribution versus budget and further key performance indicators including market share, progressive improvement in business quality, price increases, foreign exchange mitigation and inventory management.

Individual performance is measured in the same way as for Executive Committee members.

*STI payout determination*

At the end of the calendar year both Company and individual performance are assessed, and actual achievement is compared with the targets and goals set at the beginning of the year. The assessment of financial performance is formula-driven, i.e. actual achievement against target determines the STI percentage award. The assessment of individual performance results in a performance rating which is used to determine an individual percentage award for STI purposes.

**Deferred Share Plan (DSP)**

The DSP is used to convert part of the annual cash-based STI into a three-year equity based plan and is offered to around 350 participants globally.

It requires a mandatory percentage of the STI to be deferred into Syngenta share awards with a vesting period of three years thereby exposing participants fully to the share value development over this period. A participant may voluntarily defer a further portion of the STI into share awards. In return, Syngenta matches each deferred share award on a one-for-one basis, thus doubling the total number of shares received by the participant. The matching of the share awards is subject to continued employment with Syngenta at the end of the three-year vesting period. The mandatory and voluntary percentages vary by work level as shown in the table below:

STI subject to deferral	Mandatory	Voluntary	Maximum
Chief Executive Officer	40%	40%	80%
Executive Committee	40%	40%	80%
Senior Management	10%–30%	20%–40%	50%
Management	0%	20%	20%

The number of share awards is calculated based on the closing share price at grant date and the amount of STI deferred (mandatory plus any voluntary amount). The calculation is made by applying the following formula:

### **Long-Term Incentive (LTI) Plans**

The target LTI is set as a percentage of base salary which varies by work level as shown in the table below:

	LTI target (as a percentage of base salary)
Chief Executive Officer	140%
Executive Committee	100%
Senior Management <sup>1</sup>	25%–40%
Management <sup>1</sup>	20%

<sup>1</sup> Higher target percentages apply to managers and senior managers in the USA

### **Executive Long-Term Incentive Plan (Executive LTI Plan)**

Since 2015 Executive Committee members have been eligible to participate in the Executive LTI Plan. The key design features of the Executive LTI Plan are outlined below:

#### *Grant value*

Depending on the contribution made towards driving sustainable long-term growth in the business, the individual awards granted may be lower or higher than the target LTI and can range from zero to 150 percent, as outlined in the Articles of Incorporation (Article 29, 10).

#### *Vesting value*

The value of the award at vesting will depend firstly on the number of awards that vest subject to the applicable performance conditions, and secondly on the development of the Syngenta share price. The value of the vested award may therefore be higher or lower than the value at grant.

*Award types*

Participants will receive 50 percent of their incentive in stock options and 50 percent in Performance Stock Units (PSUs).

Granting equal allocations of stock options and PSUs balances the advantages and risks of these instruments. The awards allow participants to benefit from increases in the stock price over time; however, participants are equally exposed to decreases.

Syngenta stock options represent the right to purchase Syngenta shares at a fixed strike price for a defined period of time. The exercise price of the stock options is set equal to the closing share price at the grant date. Stock options granted vest after three years and are exercisable for a period of seven years from the vesting date. Syngenta PSUs represent the right to receive Syngenta shares at nil cost at the end of a three-year vesting period. Vesting of stock options and PSUs are subject to both continued employment with Syngenta and the satisfaction of the performance conditions.



*Number of Executive LTI awards*

The number of awards granted will be calculated with reference to the fair value of each instrument based on the below formula.

The option value is determined using a commonly accepted stock option pricing method. The PSU value is the closing share price on the grant date.

*Performance measures*

Stock options

The number of stock options that vest are based on the Company's total shareholder return (TSR) versus a comparator group of 15 other companies over rolling three-year performance periods. Relative TSR has been chosen as the performance measure as it allows for an objective external assessment over a sustained period on a basis that is familiar to shareholders.

The comparator group includes the Company's direct competitors: BASF SE, Bayer AG, The Dow Chemical Co, EI du Pont de Nemours & Co and Monsanto Co, and 10 other companies selected from industries and regions where Syngenta competes for capital and talent: Clariant AG, Givaudan SA, Nestle SA, Novartis AG, Roche Holding AG, Akzo Nobel N.V., Danone SA, Koninklijke DSM N.V., SAB Miller Plc and Solvay SA. If any company in the comparator group is deemed by the Compensation Committee to no longer be suitable, for example in the case of delisting, bankruptcy, merger, etc., it will be removed and replaced by a suitable alternative. SAB Miller Plc will be removed from the comparator group and will be replaced by a suitable alternative.

At the end of the three-year performance period all of the companies will be ranked from the highest (rank 1) to the lowest (rank 16) TSR. The number of stock options which will vest are calculated on a stepped quartile payout scale (four ranked positions per quartile). TSR is measured in US dollars. The total number of stock options that could vest range from zero to 125 percent of the number granted. Lower quartile performance (ranked positions 13 to 16) results in zero percent vesting. Upper quartile performance (ranked positions 1 to 4) results in 125 percent vesting. The actual

value of these stock options is determined by how far the share price at the end of the performance period has exceeded the exercise price at grant. As stated in the 2015 Compensation Report, the vesting schedule for the 2016 plan and beyond has been changed so that no stock options will vest for below median performance. Above median, stock options will vest on a linear scale from 100 percent vesting at median (Syngenta is ranked 8 out of 16) to 200 percent vesting (Syngenta is ranked 1 out of 16). While this change provides for the same payout probability, it is more aligned with shareholders' interests.

Performance Stock Units (PSUs)

The number of PSUs that vest is based on internal performance measures which support the Company's long-term strategy:

Agribusiness growth and business quality – these targets are aligned with the Company's objective of increasing its share over time at higher levels of profitability.

Cash flow return on investment (CFROI) – a focus on cash generation and cash return to shareholders is an integral part of the Company's financial framework. The value of the investments necessary to grow the business is measured through CFROI.

EBITDA margin percent – reflects the Company's commitment to margin improvement through the Accelerating Operational Leverage (AOL) program.

The Good Growth Plan – reflects the Company's commitment to improving resource efficiency, rejuvenating ecosystems and revitalizing rural communities.

The Compensation Committee believes that these performance measures, in addition to relative TSR, best represent the measures used by shareholders to assess the Company's value. Each of the internal performance measures has a weighting of 25 percent and is tested annually during the performance period. The Plan is structured in a way that the impact of achievement increases in weighting over the three years.

The total number of PSUs that could vest range from zero to 100 percent of the number granted.

As stated in the 2015 Compensation Report, 100 percent of the 2016-2018 Executive LTI Plan awards were granted in the form of PSUs, i.e. no stock options were granted in February 2016. The PSUs continue to be subject to the secondary performance conditions, in that 50 percent of the PSUs that will vest shall be based on the Company's total shareholder return versus a comparator group of 15 other companies and the other 50 percent of the PSUs that will vest shall be based on internal performance conditions which support the Company's long-term strategy.

*Claw back*

In the event that the Compensation Committee determines that an Executive Committee member materially breached their duties as a member of the Executive Committee, it reserves the right to claw back a portion or all of the PSUs and non-vested stock options from that Executive Committee member.

*Target setting and disclosure for the PSUs*

Each year, the Compensation Committee approves the performance measure targets for a new three-year plan which shall be aligned to both the long-term strategy of the Company and to the operating budget. As the targets are market sensitive the Company will not disclose them in advance but will disclose retrospectively, on an annual basis, the degree to which performance was achieved against the targets. The Compensation Committee believes that the consistent use of performance measures together with the overlapping performance years will enhance the focus on longer-term operating performance.

*Leaver rules*

Leaver circumstances are governed by the Executive LTI Plan regulations. In the case of retirement, a participant's equity awards will vest with performance measured as per the original schedule. In the event of resignation the equity awards will vest with performance measured as per the original schedule, pro-rated for time served.

### **Long-Term Incentive Plan (LTI Plan) for managers below Executive Committee**

The LTI Plan continues to operate for employees below the Executive Committee, around 1,000 participants globally. The LTI Plan operates similarly to the Executive LTI Plan though with the following distinguishing features:

Participants receive 50 percent of their incentive in the form of stock options and 50 percent in the form of Restricted Stock Units (RSUs).

Both stock options and RSUs are subject to a three-year vesting period and to continued employment with Syngenta; there are no additional performance measures.

The actual LTI granted to a participant is their target LTI multiplied by an individual percentage, which is derived from the participant's performance rating from the performance management process. This ensures that the LTI grant is based on achievement of goals linked to delivering the business strategy.

As stated in the 2015 Compensation Report 100 percent of the 2016 LTI Plan award was granted in the form of RSUs, i.e. no stock options were granted in February 2016.

The Executive Committee members participated in this LTI Plan for the grants made in 2014 and prior years.

### **Employee Share Purchase Plan (ESPP)**

The ESPP provides employees with the opportunity to become Syngenta shareholders through the purchase of Syngenta shares at a preferential price.

The Swiss ESPP allows participants to purchase up to CHF 5,000 worth of shares at 50 percent of the share price on the date of purchase. These shares are subject to a blocking period of three years. The regulations of the Swiss ESPP allow all employees in Switzerland to be eligible to participate in the Swiss ESPP. However, from 2015 onwards, members of the Executive Committee were no longer eligible to participate.

Where reasonably possible, similar all-employee share purchase plans are in operation in other countries, taking into account local practices, tax and legal requirements.

### **Sales Incentive Plans**

Sales Incentive Plans are designed for employees whose primary responsibility is revenue generation based on the sale of Syngenta products. They offer these employees the opportunity to be compensated for individual and team success, based on performance achieved against sales targets.

No member of the Executive Committee participates in a Sales Incentive Plan.

### **Benefits**

Benefits consist mainly of retirement, insurance and healthcare plans designed to provide a reasonable level of security for all employees and their dependents in respect of retirement, health, disability and death in service. The level of benefits is subject to country-specific laws, regulations and market practice. Other benefits that may be provided according to local market practice include long-service awards and perquisites. Employees at all levels who are on an international assignment may also receive benefits in line with the Syngenta International Assignment Policy. Executive Committee members participate in the Company's retirement plans in accordance with applicable laws.

### **Compensation structure**

The compensation elements described in the Compensation Report refer primarily to Switzerland and to senior executives. Although many of the elements are operated consistently on a global basis, local market variations apply.

The following charts illustrate the relation between the different compensation elements at target performance with maximum DSP deferral.

The charts show that at maximum DSP deferral more than two-thirds of the target compensation is performance-based and therefore at risk. In addition, at target, equity-based compensation is greater than cash compensation. Members of the Executive Committee are therefore highly exposed to share price movements, which reinforces a focus on the long-term success of Syngenta and aligns their interests with those of the Syngenta shareholders.

### **Changes to the compensation system**

See Note 3 to the consolidated financial statements in Item 18 for details of the impact of the ChemChina Tender Offer on Syngenta's Equity Plans. Following the completion of the ChemChina transaction, Syngenta expects to no longer be a publicly listed Company and will no longer provide equity plans as reward mechanisms. Therefore the Board of Directors and the Compensation Committee took the decision to discontinue the existing equity plans effective December 31, 2016 and introduce new market-competitive incentive plans from January 1, 2017, rather than introducing them part-way through the performance year. In so doing, the Company sought to ensure that the same level of total compensation was maintained.

### **Compensation of the Board of Directors**

The compensation of the members of the Board of Directors was voted on at the 2016 Annual General Meeting. The compensation expected to be paid during the applicable period between the 2016 and 2017 Annual General Meetings (CHF 4,005,132; \$3,932,383 using the currency exchange rate at December 31, 2016) is within the amount approved by the shareholders (CHF 4,500,000; \$4,418,262 using the currency exchange rate at December 31, 2016).

### **Compensation of the Chairman**

The non-executive Chairman of the Board receives a predefined annual fee and no variable compensation. Two-thirds of the annual fee is paid monthly in cash and one-third is paid quarterly in the form of restricted shares, which are blocked from trading for a period of three years. The number of restricted shares paid each quarter is determined by dividing the share portion of the fee by the market price of a Syngenta share at each quarterly grant date.

### **Compensation of non-executive Directors**

Non-executive Directors receive an annual fee. This consists of a basic fee for services to the Board and an additional fee for individual assignments to committees of the Board. No variable compensation is paid to non-executive Directors.

Non-executive Directors have the option to receive part of their annual fee in the form of shares that are either freely tradable or blocked from trading for five years (under the Share Plan for non-executive Directors). This option exists in order to reinforce their focus on Syngenta's long-term, sustainable success and align their interests with those of shareholders. Shares are granted once a year with the grant value per share being the market price at the grant date.

As noted above, the Board of Directors and the Compensation Committee have taken the decision to discontinue the existing equity plans effective December 31, 2016, which includes the Share Plan for the non-executive Directors. The non-Executive Directors will therefore no longer be provided with the option to receive part of their annual fee in the form of shares. The Chairman will also no longer receive part of his annual fee in restricted shares.

### **Annual fees for non-executive Directors**



<b>Function</b>	<b>Annual fee<sup>1</sup></b>
Base fees:	
Chairman of the Board	1,774,128
Vice-Chairman of the Board	405,515
Member of the Board	217,964
Additional fees <sup>2</sup> :	
Chairman of the Audit Committee	111,517
Member of the Audit Committee	30,414
Member of the Compensation Committee	25,345
Member of the Corporate Responsibility Committee	20,276
Member of the Governance & Nomination Committee	20,276
Chairman of the Science and Technology Advisory Board	20,276

All fee amounts are reported in US dollars and the fees cover the period from AGM to AGM. Members of the Syngenta Board of Directors receive their cash compensation in Swiss francs. The US dollar compensation amounts presented have been converted into US dollars using the average currency exchange rate in effect during 2016. The average Swiss franc per US dollar exchange rate for the year ended December 31, 2016 is 0.99 (2015: 0.96). For further information regarding currency exchange rates, see Note 26 to the consolidated financial statements in Item 18.

<sup>2</sup>No additional fees are payable to the Chairman and the Vice-Chairman

The Board of Directors, at the recommendation of the Compensation Committee following its annual review, took the decision not to increase the annual fees of the non-executive Directors in 2016.

**Compensation of non-executive Directors in 2016**

Non-executive Directors	Fee in		Fee in Restricted shares	Number of unrestricted shares	Number of restricted shares	Total number of shares	Other company costs <sup>1</sup>	Total compensation
	Fee in cash	unrestricted shares						
Michel Demaré <sup>2</sup>	1,181,071	-	593,990	-	1,526	1,526	94,068	1,869,129
Vinita Bali <sup>3</sup>	119,120	119,199	-	304	-	304	13,579	251,898
Stefan Borgas <sup>4</sup>	68,226	-	205,855	-	525	525	12,657	286,738
Gunnar Brock <sup>5</sup>	349,757	-	-	-	-	-	76,143	425,900
Eleni Gabre-Madhin <sup>6</sup>	119,120	119,199	-	304	-	304	-	238,319
David Lawrence <sup>7</sup>	134,327	134,492	-	343	-	343	35,720	304,539
Eveline Saupper <sup>8</sup>	243,309	-	-	-	-	-	13,862	257,171
Jürg Witmer <sup>9</sup>	20,726	385,046	-	982	-	982	20,889	426,661
<b>Total</b>	<b>2,235,656</b>	<b>757,936</b>	<b>799,845</b>	<b>1,933</b>	<b>2,051</b>	<b>3,984</b>	<b>266,918</b>	<b>4,060,355</b>

1 Company-paid social security

<sup>2</sup> Michel Demaré is Chairman of the Board, Chairman of the Governance & Nomination Committee and the Corporate Responsibility Committee

<sup>3</sup> Vinita Bali is a member of the Corporate Responsibility Committee

<sup>4</sup> Stefan Borgas is a member of the Audit Committee and a member of the Compensation Committee

<sup>5</sup> Gunnar Brock is Chairman of the Audit Committee and a member of the Governance & Nomination Committee. The fee and social security contributions were paid to a company controlled by Gunnar Brock.

<sup>6</sup> Eleni Gabre-Madhin is a member of the Corporate Responsibility Committee

<sup>7</sup> David Lawrence is a member of the Audit Committee and Chairman of the Science and Technology Advisory Board

<sup>8</sup> Eveline Saupper is a member of the Compensation Committee

<sup>9</sup> Jürg Witmer is Vice Chairman of the Board, Chairman of the Compensation Committee and a member of the Governance & Nomination Committee

All values are reported in US dollars. Members of the Syngenta Board of Directors receive their cash compensation in Swiss francs. The US dollar compensation amounts presented have been converted into US dollars using the average currency exchange rate in effect during 2016. The average Swiss franc per US dollar exchange rate for the year ended December 31, 2016 is 0.99 (2015: 0.96). For further information regarding currency exchange rates, see Note 26 to the consolidated financial statements in Item 18.



**Compensation of non-executive Directors in 2015**

Non-executive Directors	Fee in	Fee in	Number of	Number of	Total number of	Other company costs <sup>1</sup>	Total compensation	
	cash	unrestricted	restricted	unrestricted				restricted
	shares	shares	shares	shares	shares			
Michel Demaré <sup>2</sup>	1,213,550	-	610,220	-	1,613	1,613	96,938	1,920,708
Vinita Bali <sup>3</sup>	244,792	-	-	-	-	-	13,997	258,789
Stefan Borgas <sup>4</sup>	127,604	127,930	-	304	-	304	14,608	270,142
Gunnar Brock <sup>5</sup>	359,375	-	-	-	-	-	76,440	435,815
Eleni Gabre-Madhin <sup>6</sup>	244,792	-	-	-	-	-	-	244,792
David Lawrence <sup>7</sup>	138,021	138,030	-	328	-	328	38,599	314,650
Eveline Saupper <sup>8</sup>	125,000	-	125,405	-	298	298	12,513	262,918
Jacques Vincent <sup>9</sup>	250,000	-	-	-	-	-	-	250,000
Jürg Witmer <sup>10</sup>	416,667	-	-	-	-	-	21,554	438,221
<b>Total</b>	<b>3,119,801</b>	<b>265,960</b>	<b>735,625</b>	<b>632</b>	<b>1,911</b>	<b>2,543</b>	<b>274,649</b>	<b>4,396,035</b>

<sup>1</sup> Company-paid social security

<sup>2</sup> Michel Demaré is Chairman of the Board, Chairman of the Chairman's & Governance Committee, the Corporate Responsibility Committee and the Nomination Committee

<sup>3</sup> Vinita Bali is a member of the Corporate Responsibility Committee

<sup>4</sup> Stefan Borgas is a member of the Audit Committee

<sup>5</sup> Gunnar Brock is Chairman of the Audit Committee and a member of the Nomination Committee. The fee and social security contributions were paid to a company controlled by Gunnar Brock.

<sup>6</sup> Eleni Gabre-Madhin is a member of the Corporate Responsibility Committee

<sup>7</sup> David Lawrence is a member of the Audit Committee and Chairman of the Science and Technology Advisory Board

<sup>8</sup> Eveline Saupper is a member of the Compensation Committee

<sup>9</sup> Jacques Vincent is a member of the Compensation Committee

<sup>10</sup> Jürg Witmer is Vice Chairman of the Board, Chairman of the Compensation Committee and a member of the Chairman's & Governance Committee and the Nomination Committee

All values are reported in US dollars. Members of the Syngenta Board of Directors receive their cash compensation in Swiss francs. The US dollar compensation amounts presented have been converted into US dollars using the average currency exchange rate in effect during 2015. The average Swiss franc per US dollar exchange rate for the year ended December 31, 2015 is 0.96. For further information regarding currency exchange rates, see Note 26 to the consolidated financial statements in Item 18.

**Compensation of members of the Executive Committee**

The compensation for the 2016 financial year (CHF 24,031,726; \$23,595,215 using the currency exchange rate at December 31, 2016) is within the amount approved by the shareholders (CHF 41,000,000; \$40,255,277 using the currency exchange rate at December 31, 2016).

In 2016, the members of the Executive Committee, received salaries, incentives and other elements, including benefits in kind, in line with the compensation policy and as detailed in the next following table.

Erik Fyrwald was appointed CEO on June 1, 2016. The figures in the next following table include his compensation from June 1, 2016 and payments made upon joining the Company for loss of compensation. The loss of compensation payment is being paid over a period of two years from the commencement of employment. Erik Fyrwald received the highest total compensation for 2016 and his figures are disclosed in the second following table.

Jeff Rowe was appointed President Global Seeds and North America. The figures in the next following table include his compensation from September 16, 2016 and payments made upon joining the Company for loss of compensation. The loss of compensation payment is being paid over a period of two years from the commencement of employment.

Mark Patrick, former Head of Commercial Finance, was appointed CFO on October 1, 2016. The figures in the next following table include his compensation for the full 2016 year.

In addition in 2016, three out of eight Executive Committee members received an increase in base salary.

### **Compensation to former members of the Executive Committee**

John Ramsay (former CFO) and Davor Pisk (former COO) are no longer Executive Committee members and will be leaving the Company in 2017. The figures in the next following table include their compensation.

Caroline Luscombe, former Head Human Resources, and Jonathan Seabrook, former Head Corporate Affairs, left the Company on June 30, 2016 and September 30, 2016 respectively. The figures in the next following table include their compensation for the period worked in 2016. In addition the figures include the contractual compensation paid to Jonathan Seabrook upon his departure from the Company.

None of the former members of the Executive Committee received any severance payments.

### **The link between 2016 performance and pay**

Both business and individual performance impact the actual variable compensation paid to all employees including the Executive Committee members.

EPS and CFROI are the two financial performance measures used to determine 70 percent of the STI award for Executive Committee members. Both were below target in 2016, therefore the financial STI payout was below target.

In terms of 2016 individual performance, which makes up the remaining 30 percent of the STI award, Executive Committee members' goals were to deliver the Company's corporate goals as well as drive sustainable long-term business growth. In a challenging industry environment, profitability was maintained despite the non-recurrence of a \$200 million corn trait royalty received in 2015. The target for operational leverage savings was exceeded and the Company continued to demonstrate good progress in its R&D pipeline. Actual STI payouts varied according to each individual's contribution.

CFROI, EBITDA margin percent, agribusiness growth and business quality and progress against the Good Growth Plan are used as performance measures for the PSUs granted within the Executive LTI Plan. For the PSUs granted in 2015, 2016 targets for EBITDA and the Good Growth Plan were met. However, CFROI and agribusiness growth and business quality were below target. For the PSUs granted in 2016, all the 2016 metrics were below target with the exception of the Good Growth Plan.

Relative TSR over the three-year vesting period is used as the performance measure for 50 percent of the PSUs granted in 2016 within the Executive LTI Plan and so results are not yet available.

### **Compensation for members of the Executive Committee**

The following two tables show in the column for the year 2015 the number of share awards and PSUs that were granted on February 24, 2016, for the year 2015 (excluding the shares purchased under the Employee Share Purchase Plan). The numbers of units granted were determined after the preparation of the 2015 report and are disclosed retroactively in this 2016 report. As a consequence, the actual values of the granted share awards and PSUs differ slightly from the values reported in 2015. This is because the number of share awards and PSUs at grant is rounded to the next whole numbers of units.

**Compensation for members of the Executive Committee as of December 31, 2016<sup>1,2,3,4</sup> (a total of 11 people during the year)**

Compensation elements	2016	Number of units		Values	
		2015	2016	2015	2016
Fixed compensation in cash			<b>7,160,798</b>	7,311,685	
Allowances in cash			<b>563,077</b>	382,729	
STI compensation in cash <sup>5</sup>			<b>3,624,652</b>	1,520,727	
Total compensation in cash			<b>11,348,527</b>	<b>9,215,141</b>	
DSP deferred shares <sup>6,7</sup>		-	5,617	-	2,353,289
DSP matching shares <sup>6,7,8</sup>		-	5,617	<b>1,833,360</b>	2,353,289
LTI options <sup>7</sup>		-	-	-	-
LTI PSUs <sup>6,7</sup>		-	19,509	-	8,173,458
ESPP shares <sup>7,9</sup>	12	-	-	<b>2,372</b>	-
Insurance, pension costs			<b>1,539,422</b>	1,845,707	
Benefits in kind <sup>10</sup>			<b>479,654</b>	183,888	
Company social security cost			<b>1,085,416</b>	1,420,621	
Subtotal compensation			<b>16,288,751</b>	<b>25,545,393</b>	
Contractual compensation <sup>11</sup>			<b>8,074,313</b>	<b>3,188,623</b>	
Total compensation			<b>24,363,064</b>	<b>28,734,016</b>	

Notes refer to 2016 unless other years are indicated

<sup>1</sup> Erik Fyrwald and Jeff Rowe joined the Company on June 1, 2016 and September 16, 2016, respectively. The figures include their compensation for 2016

<sup>2</sup> Mark Patrick joined the Executive Committee in October 2016. The figures for 2016 include his compensation for the full year

<sup>3</sup> John Ramsay (former CFO) and Davor Pisk (former COO) are no longer Executive Committee members and will be leaving the Company in 2017. The figures include their compensation for 2016

<sup>4</sup> Caroline Luscombe (former Head Human Resources) and Jonathan Seabrook (former Head Corporate Affairs) left the Company during 2016. The figures include their compensation for the period worked in 2016

<sup>5</sup> Short-term incentive in cash, payable in 2017 for 2016

<sup>6</sup> The number of deferred shares, matching shares and PSUs for 2015 was determined on February 19, 2016, after the preparation of the 2015 report. The numbers of shares and PSUs at grant for 2015 were rounded to the next whole number; consequently the values actually granted differ slightly from the values disclosed in the 2015 report. The difference from what was presented in the Compensation Report 2015 is less than USD 7,100

<sup>7</sup> The equity plans have been discontinued effective December 31, 2016, therefore no further equity grants will be made

<sup>8</sup> The figure for 2016 is the value to replace the loss of the DSP matching shares. This amount will be paid to the Executive Committee members in 2020



9The ESPP shares relate to Mark Patrick's purchase prior to becoming an Executive Committee member

10Value of tax services and other allowances, including refund of relevant tax (cash)

The figure includes the total payments to Erik Fyrwald and Jeff Rowe on joining the company for loss of compensation. These amounts are being paid over a two year period from the commencement of employment. In addition it includes the contractual compensation paid to Jonathan Seabrook upon his departure from the Company

All values are reported in US dollars. Members of the Syngenta Executive Committee receive their cash compensation in Swiss francs, except Jeff Rowe who is based in the US and is paid in US dollars. The US dollar compensation amounts presented have been converted into US dollars using the average currency exchange rate in effect during the year. The average Swiss franc per US dollar exchange rate for the year ended December 31, 2016 is 0.99 (2015: 0.96). For further information regarding currency exchange rates, see Note 26 to the consolidated financial statements in Item 18.

**Highest compensation for a member of the Executive Committee (Erik Fyrwald, CEO, appointed June 1, 2016)**

Compensation elements	2016	Number of units		Values
		2015	2016	2015 <sup>7</sup>
Fixed compensation in cash <sup>1</sup>			<b>907,765</b>	1,332,469
Allowances in cash			<b>67,828</b>	137,068
STI compensation in cash <sup>2</sup>			<b>589,011</b>	845,833
Total compensation in cash			<b>1,564,604</b>	2,315,370
DSP deferred shares <sup>3</sup>		-	-	-
DSP matching shares <sup>3, 4</sup>		-	<b>471,208</b>	-
LTI options <sup>3</sup>		-	-	-
LTI PSUs <sup>3</sup>		-	-	-
Insurance, pension costs			<b>112,469</b>	399,299
Benefits in kind <sup>5</sup>			<b>292,417</b>	71,292
Company social security cost			<b>444,798</b>	326,190
Subtotal compensation			<b>2,885,496</b>	<b>3,112,151</b>
Contractual compensation <sup>6</sup>			<b>5,600,000</b>	<b>3,188,623</b>
Total compensation			<b>8,485,496</b>	<b>6,300,774</b>

Notes refer to 2016 unless other years are indicated

1 Fixed compensation in cash for the period worked in 2016

2 Short-term incentive in cash, pro-rated for the period worked in 2016, payable in 2017

3 The equity plans have been discontinued effective December 31, 2016, therefore no further equity grants will be made

4 The figure for 2016 is the value to replace the loss of the DSP matching shares. This amount will be paid in 2020

5 Value of tax services and other allowances, including refund of relevant tax (cash)

6 The figure includes the total payment to Erik Fyrwald on joining the company for his loss of compensation. This amount is being paid over a period of two years from the commencement of employment

7 The values for 2015 relate to the former CEO, Michael Mack, who left Syngenta on October 31, 2015 and are as disclosed in the 2015 Compensation Report

All values are reported in US dollars. Erik Fyrwald receives his cash compensation in Swiss francs. The US dollar compensation amounts presented have been converted into US dollars using the average currency exchange rate in effect during the year. The average Swiss franc per US dollar exchange rate for the year ended December 31, 2016 is 0.99 (2015: 0.96). For further information regarding currency exchange rates, see Note 26 to the consolidated financial statements in Item 18.

**Holding of shares by non-executive Directors and members of the Executive Committee**

Holding of shares of non-executive Directors\* at December 31, 2016 and 2015

	Number of unrestricted shares		Number of restricted shares		% voting rights	
	2016	2015	2016	2015	2016	2015
Non-executive Directors						
Michel Demaré	2,281	1,075	6,014	5,694	< 0.1%	< 0.1%
Vinita Bali	304	-	-	-	< 0.1%	< 0.1%
Stefan Borgas	1,438	826	1,459	1,546	< 0.1%	< 0.1%
Gunnar Brock	700	700	-	-	< 0.1%	< 0.1%
Eleni Gabre-Madhin	304	-	-	-	< 0.1%	< 0.1%
David Lawrence	13,309	12,966	-	-	< 0.1%	< 0.1%
Eveline Saupper	650	650	1,602	1,602	< 0.1%	< 0.1%
Jürg Witmer	9,982	9,000	-	-	< 0.1%	< 0.1%
Total unrestricted/restricted shares	28,968	25,217	9,075	8,842	< 0.1%	< 0.1%
Jacques Vincent <sup>1</sup> (January 1 – April 26, 2016)	-	2,682	-	-	< 0.1%	< 0.1%
Total shares	38,043	36,741				

1 Jacques Vincent retired from the Board of Directors at the AGM 2016

\* Including related parties. Related parties are spouses, parents, children living in the same household, legal entities they own or otherwise control, and any legal or natural person that acts as their fiduciary

Holding of shares by members of the Executive Committee\* at December 31, 2016<sup>1</sup>

Members of the Executive Committee	Vested shares		% Voting rights	Unvested shares			Total	
	Un-restricted	Restricted		Un-converted share awards	DSP Unvested matching rights	DSP Unvested	Unvested	Total Vested/Un-vested
Erik Fyrwald <sup>2</sup>	6,263	-	< 0.1%	-	-	-	-	6,263
Patricia Malarkey	480	672	< 0.1%	453	1,125	778	3,552	7,060
Christoph Mäder	13,949	1,151	< 0.1%	-	1,137	857	3,342	20,436
Jonathan Parr	80	14	< 0.1%	1,282	1,282	461	4,492	7,611
Mark Patrick	663	40	< 0.1%	396	396	1,266	-	2,761
Mark Peacock	1,946	14	< 0.1%	1,674	1,674	933	3,790	10,031
<b>Total Executive Committee shares</b>	23,381	1,891	< 0.1%	3,805	5,614	4,295	15,176	54,162

1 Jeff Rowe does not hold any shares and is therefore not included in the table

2 Erik Frywald holds 31,315 American Depositary Shares, which have been disclosed as 6,263 unrestricted shares

\* Including related parties. Related parties are spouses, parents, children living in the same household, legal entities they own or otherwise control, and any legal or natural person that acts as their fiduciary

## Holding of shares by members of the Executive Committee\* at December 31, 2015

Members of the Executive Committee	Vested shares		% Voting rights	Unvested shares				Total Vested/ unvested
	Unrestricted	Restricted		Unconverted DSP share awards	Unvested DSP matching rights	Unvested LTI RSU	Unvested LTI PSU	
Caroline Luscombe	2,065	27	< 0.1%	1,110	1,110	1,381	1,220	6,913
Patricia Malarkey	356	-	< 0.1%	476	476	931	1,370	3,609
Christoph Mäder	12,174	1,211	< 0.1%	-	1,184	1,523	1,260	17,352
Jonathan Parr	1,779	27	< 0.1%	745	745	791	1,694	5,781
Mark Peacock	13	27	< 0.1%	1,612	1,612	1,581	1,524	6,369
Davor Pisk	10,573	859	< 0.1%	1,192	2,024	2,080	1,834	18,562
John Ramsay	7,747	797	< 0.1%	1,064	1,834	1,870	1,637	14,949
Jonathan Seabrook	1,133	27	< 0.1%	1,067	1,067	1,342	1,201	5,837
Total Executive Committee shares	35,840	2,975	< 0.1%	7,266	10,052	11,499	11,740	79,372

\* Including related parties. Related parties are spouses, parents, children living in the same household, legal entities they own or otherwise control, and any legal or natural person that acts as their fiduciary

**Holding of stock options by non-executive Directors and members of the Executive Committee**

As of December 31, 2016 and December 31, 2015, respectively, no non-executive Directors held any stock options.

**Holding of stock options by members of the Executive Committee\* as of December 31, 2016**

Year of allocation	2015	2014	2013	2012	2011	2010	2009	2008
Underlying equity	Share	Share	Share	Share	Share	Share	Share	Share
Term (years)	10	10	10	10	10	10	10	10
Exercise period (years)	7	7	7	7	7	7	7	7
Option: share/ADS ratio	1:1	1:1	1:1	1:1	1:1	1:1	1:1	1:1
Exercise price CHF	332.20	325.90	391.40	300.40	308.71	283.70	233.43	301.50
Vesting status	unvested		vested					
Options held at December 31, 2016:								
Members of the Executive Committee <sup>1</sup>								

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Patricia Malarkey	13,697	5,664	772	782	617	-	-	-
Christoph Mäder	12,598	6,234	4,387	5,057	3,518	3,304	-	-
Jonathan Parr	16,933	3,352	2,176	2,230	1,668	1,632	1,225	-
Mark Patrick	3,236	2,239	1,763	1,903	1,093	-	-	-
Mark Peacock	15,240	6,787	4,271	4,418	3,639	-	-	-
Totals by grant year	61,704	24,276	13,369	14,390	10,535	4,936	1,225	-
Total unvested options	85,980							
Total vested options	44,455							
Total options on shares	130,435							

<sup>1</sup> Erik Frywald and Jeff Rowe do not hold any options and are therefore not included in the table

\* Including related parties. Related parties are spouses, parents, children living in the same household, legal entities they own or otherwise control, and any legal or natural person that acts as their fiduciary

**Holding of stock options by members of the Executive Committee\* as of December 31, 2015**

Year of allocation	2015	2014	2013	2012	2011	2010	2009	2008	2007
Underlying equity	Share	Share	Share	Share	Share	Share	Share	Share	Share
Term (years)	10	10	10	10	10	10	10	10	10
Exercise period (years)	7	7	7	7	7	7	7	7	7
Option:share ratio	1:1	1:1	1:1	1:1	1:1	1:1	1:1	1:1	1:1
Exercise price CHF	332.20	325.90	391.40	300.40	308.71	283.70	233.43	301.50	226.70
Vesting status	unvested			vested					

**Options held as of December 31, 2015**

## Members of the Executive Committee

Caroline Luscombe	12,192	6,033	3,639	2,637	–	–	–	–	–
Patricia Malarkey	13,697	5,664	772	782	617	–	–	–	–
Christoph Mäder	12,598	6,234	4,387	5,057	3,518	3,304	–	–	–
Jonathan Parr	16,933	3,352	2,176	2,230	1,668	1,632	1,225	–	–
Mark Peacock	15,240	6,787	4,271	4,418	3,639	–	–	–	–
Davor Pisk	18,333	8,446	6,065	6,525	4,586	–	–	–	–
John Ramsay	16,369	7,541	5,497	6,117	4,491	–	4,506	–	2,453
Jonathan Seabrook	13,458	6,452	1,972	2,287	1,791	–	–	–	–
Totals by grant year	118,820	50,509	28,779	30,053	20,310	4,936	5,731	–	2,453
Total unvested options	198,108								
Total vested options	63,483								
Total options on shares	261,591								

\* Including related parties. Related parties are spouses, parents, children living in the same household, legal entities they own or otherwise control, and any legal or natural person that acts as their fiduciary

**Item 7 — Major Shareholders and Related Party Transactions****Major Shareholders**

At January 31, 2017, to Syngenta's knowledge the following shareholders held 3 percent or more of Syngenta's share capital:

Name and location of shareholder, nominee or ADS depository	Notified number of shares	Notified holding in % <sup>1</sup>
BlackRock, Inc., New York	4,728,777	5.08 <sup>2</sup>
The Capital Group Companies, Inc., Los Angeles	2,941,643	3.16% <sup>3</sup>

<sup>1</sup>Notified holding in percent of total share capital at the time of the latest disclosure

<sup>2</sup>Latest disclosure on April 14, 2014

<sup>3</sup>Latest disclosure on May 4, 2016

The notified holdings may not reflect the actual status at January 31, 2017 because the Company, the other parties to the tender offer proceedings and all shareholders or groups of shareholders acting in concert with (direct or indirect) shareholdings of at least 3 percent of the voting rights of the Company have been subjected to a special regime regarding the obligation to file disclosure notifications since February 3, 2016, the date of the pre-announcement of the ChemChina Public Tender Offer as follows::

During proceedings regarding a public tender offer, persons according to article 20 paragraph 1 FMIO-FINMA<sup>1</sup> and articles 38 and 39 TOO<sup>2</sup> must exclusively fulfil the disclosure obligations defined by the Swiss Takeover Board in accordance with article 134 paragraph 5 FMIA and articles 38 and 39 TOO. Accordingly, no disclosure obligations pursuant to articles 120 and 121 FMIA apply to shareholders of Syngenta for crossing a threshold during the proceedings regarding the tender offer, if a reportable threshold (of at least 3 percent) had been reported already; however, cases requiring notification which occurred during the takeover process must be reported pursuant to articles 120 and 121 FMIA after the expiration of the Additional Acceptance Period of the offer (article 20 paragraph 2 FMIO-FINMA).

Accordingly, The Capital Group Companies, Inc., Los Angeles, notified on January 22, 2016, to have fallen below the threshold of 3 percent (2.96 percent), and on May 4, 2016, to have exceeded 3 percent again (3.16 percent at April 6, 2016). The notifications are publicly available on [www.six-exchange-regulation.com/en/home/publications/significant-shareholders.html](http://www.six-exchange-regulation.com/en/home/publications/significant-shareholders.html). More recent notifications of this shareholder have not been published by SIX Exchange Regulation which may be due to the exemption described above.



In addition, since January 1, 2014:

BlackRock Inc., New York, had reported from January 1, 2014 through December 31, 2015, 5 changes in their holdings, none of them being significant, as they all ranged between 4.99 and 5.15 percent. No changes in the holdings of BlackRock, Inc., New York, have been published by SIX Exchange Regulation in 2016 and in January 2017 which may be due to the exemption described above.

From January 1, 2014, through May 13, 2015, The Bank of New York Mellon Corporation (“BNYM”) had reported in total 67 changes in their holdings, all ranging between 4.57 and 2.99 percent. In most of the cases, the disclosures were not delivered for crossing of thresholds, but to reflect the addition or deletion of direct or indirect holders within BNYM. The most recent notification of BNYM relates to their reporting having fallen below the reportable 3 percent threshold to a holding of 2.90 percent at May 14, 2015. No notifications have been received in 2016 and in January 2017.

All disclosures made by Syngenta under the Swiss Stock Exchange Act are available on <https://www.six-exchange-regulation.com/en/home/publications/significant-shareholders.html>.

Not included in the above list are nominees that hold shares on behalf of other investors and beneficial owners.

All Syngenta shareholders have the same voting rights.

<sup>1</sup> FMIO-FINMA: Ordinance of the Swiss Financial Market Supervisory Authority on Financial Market Infrastructures and Market Conduct in Securities and Derivatives Trading

<sup>2</sup> TOO: Ordinance of the Takeover Board on Public Takeover Offers

As of January 31, 2017, Syngenta AG itself held 346,344 shares in treasury corresponding to 0.37 percent of the share capital.

As of January 31, 2017, the Company is not aware of any other party which held 3 percent or more of the share capital of Syngenta AG.

To its knowledge, as of January 31, 2017, the Company is not owned or controlled, directly or indirectly, by any other corporation, by any government or by any other natural or legal person, severally or jointly. Except for the proposal by ChemChina to acquire all publicly held registered shares of Syngenta AG through a tender offer to shareholders described in Note 3 to the consolidated financial statements in Item 18, there are no arrangements known to the Company, the operation of which may at a subsequent date result in a change of control of the Company.

As of January 31, 2017, 51,330,027 ADSs of Syngenta AG corresponding to 11.09 percent of the share capital and 2,980,537 ordinary shares of Syngenta AG corresponding to 3.22 percent of the share capital were held by a total of 1,378 registered holders domiciled in the United States.

### **Related Party Transactions**

There were no related party transactions other than those described in Item 4 and in Notes 14 and 24 to the consolidated financial statements in Item 18.

### **Interests of Experts and Counsel**

Not applicable.

## **Item 8 — Financial Information**

### **Consolidated Financial Statements and Other Financial Information**

#### **Consolidated Financial Statements**

See Item 18 “Financial Statements” for Syngenta’s consolidated financial statements.

#### **Legal Proceedings**

For information regarding legal proceedings, see Note 25 to consolidated financial statements in Item 18.

#### **Dividends and Dividend Policy**

Since the foundation of the Company, cash returns to shareholders have been distributed for each financial year. The level of returns has depended on the financial performance of Syngenta as well as on the need to fund capital expenditures, working capital and other investments.

All distributions to shareholders proposed by the Board of Directors require the approval of the shareholders of the Company in a General Meeting of Shareholders. Holders of ADSs and CDIs receive their cash payments in relation to the number of Syngenta shares represented by the ADSs or CDIs. The payments to the holders of ADSs listed on the New York Stock Exchange are distributed through the Bank of New York Mellon, which converts the Swiss franc amount into US dollars for distribution to such holders. The payments to holders of CDIs are distributed through CREST, which converts the Swiss franc amount into British pounds for distribution to such holders.

At the 2016 General Meeting of Shareholders on April 26, 2016, shareholders approved a dividend payment of CHF 11.00 per share for the financial year 2015. The Swiss payment date for this dividend was May 2, 2016. In addition, shareholders approved a special dividend of CHF 5.00 per share, the payment being subject to the condition precedent that the ChemChina Tender Offer becomes unconditional. The special dividend will be paid immediately prior to the first settlement of the ChemChina Tender Offer.

On February 8, 2017, the Company has further announced that in view of the proximity of the anticipated closure of the ChemChina Tender Offer, the Board of Directors has decided to schedule the Annual General Meeting (AGM) in June 2017. With the first settlement of the transaction expected to take place before the AGM, there will not be a proposal for payment of a regular dividend for the business year 2016. As stated above, a special dividend of CHF 5.00 per share will be paid conditional upon and prior to the first settlement of the ChemChina Tender Offer.

For information on Swiss law requirements regarding dividends, see Item 10 “Additional Information—Dividends”. For information about deduction of withholding taxes, see Item 10 “Additional Information—Taxation—Switzerland”.

### **Significant Changes**

No significant changes have occurred since December 31, 2016 except as disclosed in Item 4 and in Note 30 to the consolidated financial statements in Item 18.

**Item 9 — The Offer and Listing****Trading Markets and Price Ranges**

Syngenta's shares are listed in Switzerland on the SIX Swiss Exchange, which is the principal trading market for Syngenta's shares. Syngenta's shares are also listed and traded on the New York Stock Exchange (in the form of ADSs).

The information presented in the tables below represent, for the periods indicated, the reported high and low market prices quoted in their respective currency.

**Market Prices on the SIX Swiss Exchange**

	Price per share in CHF	
	High	Low
<b>Annual Highs and Lows</b>		
2012	380.20	274.80
2013	416.00	335.30
2014	364.40	273.20
2015	435.20	280.00
2016	433.30	348.10

**Quarterly Highs and Lows**

<b>2015</b>		
First Quarter	338.60	280.00
Second Quarter	435.20	310.80
Third Quarter	414.90	301.00
Fourth Quarter	396.80	288.50
<b>2016</b>		
First Quarter	420.00	348.10
Second Quarter	408.70	360.50
Third Quarter	433.30	366.00
Fourth Quarter	431.20	371.30

**Monthly Highs and Lows for most recent six months**

<b>2016</b>		
August	428.70	379.00
September	433.30	421.40
October	431.20	383.50

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November	397.50371.30
December	414.30388.00
<b>2017</b>	
January	434.90402.50

**Market Prices on the New York Stock Exchange**

	Price per ADS <sup>1</sup> in \$ High Low
<b>Annual Highs and Lows</b>	
2012	83.1958.03
2013	87.7374.41
2014	80.2558.72
2015	98.1561.61
2016	89.1368.94

**Quarterly Highs and Lows**

<b>2015</b>	
First Quarter	71.2462.37
Second Quarter	98.1566.60
Third Quarter	86.7361.61
Fourth Quarter	79.9961.81

**2016**

First Quarter	83.6568.94
Second Quarter	85.8974.97
Third Quarter	89.1374.99
Fourth Quarter	88.1974.52

**Monthly Highs and Lows for most recent six months**

<b>2016</b>	
August	88.1677.76
September	89.1386.90
October	88.1979.37
November	80.8874.52
December	81.0277.38
<b>2017</b>	
January	86.9478.91

1

One ADS represents one-fifth of one common share of the Company.

## **Item 10 — Additional Information**

### **Capital Structure and Shares**

Upon the decision of the AGM of April 26, 2016, the nominal share capital of Syngenta is CHF 9,257,814.90, divided into 92,578,149 registered shares with a par value of CHF 0.10 each. All of the Syngenta shares have been issued in registered form and are fully paid-in.

Previously, from April 29, 2014, to April 26, 2016, the share capital of Syngenta was CHF 9,294,564.90, divided into 92,945,649 registered and fully paid-in shares with a par value of CHF 0.10 each.

At December 31, 2016, Syngenta does not have any conditional or authorized capital.

At December 31, 2016, Syngenta held 357,658 shares in treasury, corresponding to 0.39 percent of the share capital.

### **Memorandum and Articles of Incorporation**

Set out below is a brief summary of certain provisions of the Articles of Incorporation of Syngenta (herein referred to as AoI) and of the Swiss Code of Obligations (Schweizerisches Obligationenrecht) as it relates to the Syngenta shares. This description does not purport to be complete and is qualified in its entirety by reference to the Swiss Code of Obligations and the AoI of Syngenta. Copies of the Syngenta AoI are available at the offices of Syngenta AG, Schwarzwaldallee 215, 4058 Basel, Switzerland, and can be accessed on the Internet ([www.syngenta.com](http://www.syngenta.com)) in the section “Who we are/Corporate Governance”. An English translation of the currently valid AoI as approved by the 2016 Annual General Meeting (AGM) is included as an exhibit to this Annual Report.

### **Company’s objects and purposes**

Syngenta AG is registered as a stock corporation in the Commercial Register of the Canton of Basel-City under the registration number CHE-101.160.902. The business purpose of Syngenta is to hold interests in enterprises, particularly in the areas of agribusiness; in special circumstances, Syngenta may also directly operate such businesses. Syngenta may acquire, mortgage, liquidate or sell real estate and intellectual property rights in Switzerland or abroad.



## **Shareholder Participation and Voting Rights**

Each share registered under a shareholder's name in the Swiss share register of Syngenta entitles its holder to participate and vote at a general meeting. One share represents one vote. There are no preferential rights for individual shareholders.

Shares may be voted without any limit in scope if holders expressly declare having acquired these shares in their own name and for their own account. In accordance with article 659a of the Swiss Code of Obligations, the Company cannot exercise the voting rights relating to the shares held in treasury.

On the New York Stock Exchange, the shares are traded in the form of American Depositary Shares (ADSs). ADSs are US securities representing Syngenta shares; five ADSs represent one Syngenta share. The Bank of New York Mellon acts as the Syngenta Depositary for ADSs and administers the ADS program in the US. Syngenta ADS holders are entitled to give written instructions to the Depositary on how to vote on their behalf at a general meeting.

Shareholders may only be represented at a shareholders' meeting by their legal representative, another shareholder with the right to vote, proxies designated in agreements with or regulations relating to nominees or the Independent Proxy. Further regulations relating to powers of attorney and general instructions to the Independent Proxy are defined in article 14 of the Syngenta Articles of Incorporation.

Syngenta has issued special provisions concerning nominee registrations: a nominee holding more than 3 percent of the Company's share capital may be registered as a nominee with voting rights only if the nominee discloses the identity of those ultimate beneficial owners of shares claiming 1 percent or more of the Company's share capital.

Voting instructions to be represented by the Independent Proxy can be submitted in writing by returning a proxy form or also via Internet.

### **Shareholder ownership**

The disclosure of share ownership is regulated in article 120 of the Swiss Financial Market Infrastructure Act (FMIA), which replaced the previous Federal Act on Stock Exchanges and Securities Trading (SESTA) at January 1, 2016. It stipulates that whosoever, directly, indirectly or acting in concert with third parties acquires or sells for their own account shares or purchase or sale rights relating to securities in a company domiciled in Switzerland whose equity securities are listed in whole or in part in Switzerland and thereby attains, falls below or exceeds the threshold percentages of 3, 5, 10, 15, 20, 25, 33, 50 or 66 of voting rights, whether or not such rights may be exercised, must notify the company and the stock exchanges on which the equity securities in question are listed.

However, the Company, the other parties to the tender offer proceedings and all shareholders or groups of shareholders acting in concert with (direct or indirect) shareholdings of at least 3 percent of the voting rights of the Company have been subjected to a special regime regarding the obligation to file disclosure notifications since February 3, 2016, the date of the pre-announcement of the ChemChina Tender Offer as follows:

During proceedings regarding a public tender offer, persons according to article 20 paragraph 1 FMIO-FINMA<sup>6</sup> and articles 38 and 39 TOO<sup>7</sup> must exclusively fulfil the disclosure obligations defined by the Swiss Takeover Board in accordance with article 134 paragraph 5 FMIA and articles 38 and 39 TOO. Accordingly, no disclosure obligations pursuant to articles 120 and 121 FMIA apply to shareholders of Syngenta for crossing a threshold during the proceedings regarding the tender offer, if a reportable threshold (of at least 3 percent) had been reported already; however, cases requiring notification which occurred during the takeover process must be reported pursuant to articles 120 and 121 FMIA after the expiration of the Additional Acceptance Period of the offer (article 20 paragraph 2 FMIO-FINMA).

### **Shareholders' Meetings**

Under Swiss law, an AGM must be held within six months after the end of Syngenta's business year. Shareholders' meetings may be convened by the Board or, if necessary, by the statutory auditor. A shareholders' meeting is convened by way of a notice in the Swiss Commercial Gazette at least 20 days prior to such meeting. The notice includes the

detailed agenda and clear explanations of all proposals by the Board. Registered shareholders may also be informed by mail or by electronic means.

The Board is further required to convene an extraordinary shareholders' meeting if determined by an ordinary shareholders' meeting, if requested by shareholders holding in the aggregate at least ten percent of the share capital of Syngenta or if requested by the auditor.

One or more shareholders whose combined shareholdings represent an aggregate nominal value of at least CHF 10,000 (i.e. 100,000 shares) may demand that an item be included in the agenda of a general meeting of shareholders. Such a demand must be made in writing at the latest 60 days before the meeting and specify the items and proposals of these shareholders.

<sup>6</sup> FMIO-FINMA: Ordinance of the Swiss Financial Market Supervisory Authority on Financial Market Infrastructures and Market Conduct in Securities and Derivatives Trading

<sup>7</sup> TOO: Ordinance of the Takeover Board on Public Takeover Offers

The shareholders' meeting passes resolutions and holds elections, if not otherwise required by law or the Company's Articles of Incorporation (AoI), with the absolute majority of the votes represented. Under Swiss law and per the Company's AoI, a resolution passed at a shareholders' meeting with a supermajority of 66 percent of the votes represented and the absolute majority of the nominal value of the Syngenta shares represented is required for all resolutions as listed in article 704 of the Swiss Code of Obligations.

Any provision in the AoI for a stricter voting requirement than the voting requirements prescribed by law or the existing AoI must be adopted in accordance with such stricter voting requirements. The AoI of Syngenta do not contain provisions that provide stricter voting requirements for shareholders' meetings than the voting requirements prescribed by law.

According to the Syngenta AoI the following powers shall be vested exclusively in the General Meeting of shareholders:

- to adopt and amend the Articles of Incorporation (AoI)

- to elect the members of the Board, the Chairman of the Board, the members of the Compensation Committee, the Independent Proxy and the external auditor

- to approve the Management Report and the consolidated financial statements

- to approve the annual financial statements and to decide on the allocation of profits shown on the balance sheet, in particular with regard to dividends

- to discharge the members of the Board and the Executive Committee

- to approve the compensation of the Board and the Executive Committee pursuant to article 29 of the Articles of Incorporation

- to pass resolutions concerning all matters which by law or the Articles of Incorporation are reserved to the authority of the General Meeting of shareholders.

The Board implements voting procedures allowing the will of the majority to be determined unambiguously and as efficiently as possible. The Board also takes appropriate measures to allow the Independent Proxy to carry out his function effectively. Whenever possible, votes and elections shall be held electronically; the results shall be made available as soon as possible, but no later than one week after the shareholders' meeting has been held.

## Directors

According to article 24 of the Articles of Incorporation (AoI), the Board may pass resolutions with respect to all matters which are not reserved to the authority of the shareholders' meeting by law or by the AoI. The exercise of this power does not require shareholder approval.

The members of the Board are elected by the shareholders at the AGM for a term of one year; re-election is possible. The members of the Board shall automatically retire after the lapse of the 12<sup>th</sup> year of office or, if earlier, on expiry of the 70<sup>th</sup> year of age. In each case, retirement becomes effective on the date of the next AGM following such event.

The Chairman of the Board and the members of the Compensation Committee are also elected by the AGM for a one-year term of office; re-election is possible.

In all other respects, the Board constitutes itself. In particular, it elects one Vice-Chairman from among its members, appoints the members of the Board Committees (except for the Compensation Committee) and the respective chairpersons, the CEO, the further members of the Executive Committee and the Head Internal Audit. It also designates the Secretary who need not be a member of the Board. The Company Secretary acts as Secretary to the Board.

The Compensation Committee reviews and recommends to the Board on an annual basis a proposal for approval by the AGM of the total compensation of the Board and the Executive Committee. According to article 17 of Syngenta's AoI, the power to approve the compensation of the Board and the Executive Committee pursuant to article 29 of the AoI is exclusively vested in the AGM.

Swiss law requires Directors and members of senior management to safeguard the interests of the Company and imposes a duty of care and a duty of loyalty on such persons. These duties are generally interpreted to mean that Directors and members of senior management may not participate in decisions that personally affect them. Directors and officers are personally liable to the Company for breach of these duties. According to article 6 of the Regulations governing the Internal Organization of Syngenta, all Directors are obliged to leave the meeting room and abstain from deliberating or deciding on any matter that affects or reasonably might affect the interests of such members or of persons or entities closely related to such member. It is the responsibility of each member to inform the Chairman and the Secretary of the Board in case of a potential conflict of interest. The obligations set forth in this provision also apply to the work carried out in Board Committees.

Syngenta's AoI contain no specific provisions permitting or prohibiting Directors from borrowing from the Company. However, Swiss law provides that a Director, or any other persons associated with a Director, must refund to the Company any payments made to such Director or persons by the Company, other than payments made at arm's length. The United States Sarbanes-Oxley Act, enacted in July 2002, makes it unlawful for the Company directly or indirectly to extend or maintain credit, to arrange for an extension of credit or to renew a credit, in the form of a personal loan, to or for its executive officers or Directors.

### **Pre-Emptive Rights**

Under Swiss law, any share issue, whether for cash, non-cash consideration or no consideration, is subject to prior approval at the shareholders' meeting. As a rule, Syngenta shareholders have pre-emptive rights for all new issues of securities. However, these pre-emptive rights may be restricted or excluded by a resolution of a shareholders' meeting on valid grounds. The resolution must be taken by a majority of two-thirds of the votes represented at the meeting and the absolute majority of the par value of the shares represented (unless provided otherwise in the AoI). Valid grounds include, for instance, the acquisition of all or part of the assets and liabilities or the acquisition of the shares of another company as well as the creation of employee participation plans. The shareholders may not be treated unequally in connection with any exclusion of pre-emptive rights. Moreover, it must be in the interest of the Company to exclude such pre-emptive rights in any given case. In the event of a conditional or authorized share capital increase, the shareholders' meeting may delegate the decision as to whether pre-emptive rights should be excluded to the Board provided the fundamental principles upon which the decision has to be made are determined pursuant to the shareholders' meeting.

### **Duration and Liquidation**

The AoI do not limit Syngenta's duration. Syngenta may be dissolved at any time by a shareholders' resolution which must be passed by (1) an absolute majority of the Syngenta shares represented at the meeting in the event Syngenta is dissolved by way of liquidation, and (2) a super-majority of two-thirds of the votes represented and the absolute majority of the nominal value of the Syngenta shares represented at the meeting for other events (for example a merger where Syngenta is not the surviving entity).

Under Swiss law, any surplus arising out of liquidation (after the settlement of all claims of all creditors) is distributed to shareholders in proportion to the paid-up nominal value of Syngenta shares held by them.

## **Dividends**

Swiss law requires that at least five percent of the annual net profits of the Company be retained by the Company as general statutory reserves for so long as these reserves amount to less than twenty percent of the Company's nominal share capital. Under Swiss law, dividends are paid only if approved by the shareholders. In addition, the AoI provide that the allocation of profit shown on the Company's balance sheet is determined by shareholders at the shareholders' meeting. The Board may propose that a dividend be paid, but cannot itself approve the dividend. In practice, the dividend proposal of the Board is usually approved at the AGM. Dividends are usually due and payable shortly after the shareholders' resolution relating to the allocation of profits has been passed. The Company only has one class of shares with a nominal value of CHF 0.10 each. Each such share is entitled to share equally in Syngenta's profits and to receive equal dividends. Holders of CDIs and ADSs will receive dividends in proportion to the number of Syngenta shares represented by the CDIs or ADSs.

## **Redemption Provision**

Swiss law limits the number of shares which the Company may hold or repurchase. The Company and its subsidiaries may repurchase shares only if (i) the Company has sufficient free reserves to pay the purchase price and (ii) the aggregate nominal value of such shares does not exceed ten percent of the nominal share capital of the Company. No dividend is paid on shares held by the Company and its subsidiaries. Furthermore, the Company must create a reserve on its balance sheet in the amount of the purchase price of the acquired shares.

## **Change of control**

According to Swiss law, shareholders may pass a resolution to merge with another corporation at any time. In accordance with Swiss law, article 17 of Syngenta's AoI confers authority upon the shareholders to pass resolutions concerning all matters which by law or the AoI are reserved to the authority of the shareholders at the general meeting. However, article 18 of the AoI requires the approval of at least two-thirds of the votes represented at the general meeting in order for the shareholders to effect the dissolution of the Company without liquidation.

Under the Swiss Stock Exchange Act, shareholders and groups of shareholders acting in concert who hold more than one-third of the voting rights of a company incorporated in Switzerland of which at least one class of equity securities is listed on the Swiss Exchange must submit a takeover bid to all remaining shareholders. A mandatory takeover bid must be made under certain rules (including rules with respect to price and procedures) as set forth in the Swiss Stock Exchange Act.



**Significant Differences**

Please see the references to Swiss law throughout this Item 10 “Additional Information”, which highlight certain significant differences between Swiss law and United States law.

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## **Material Contracts**

The following is a summary of Syngenta's material contracts. Because it is a summary, it may not contain all of the information about such contracts that is important to an investor. The summaries are qualified in their entirety by reference to the contracts, copies of which have been filed with the SEC.

## **The Transaction Agreement**

On February 2, 2016, Syngenta entered into a definitive agreement (the "Transaction Agreement") with ChemChina and China National Agrochemical Corporation, pursuant to which ChemChina agreed to cause a newly-incorporated company that is directly or indirectly controlled by ChemChina to submit a tender offer for all publicly held ordinary shares of Syngenta and American Depositary Shares of Syngenta issued by the Bank of New York Mellon as depositary. Under the terms of the Transaction Agreement, which was unanimously approved by Syngenta's Board of Directors, the Offeror will offer the shareholders of Syngenta \$465 per ordinary share, to be paid in cash, plus allow a special dividend of CHF 5 to be paid by Syngenta once the ChemChina Tender Offer is unconditional and prior to its first settlement. For more details on the Transaction Agreement, see Item 4. Information on the Company—History and Development of the Company—Investments and Divestments, Item 5. Operating and Financial Review and Prospects—Trend and Outlook—ChemChina Tender Offer, and Note 3 to the consolidated financial statements in Item 18.

## **Debt Instruments**

Please refer to Notes 16 and 18 to the consolidated financial statements in Item 18 for a description of material contracts pertaining to Syngenta's current financial debt.

## **The Separation Agreements**

At the time of Syngenta's foundation in 2000, the legacy companies Novartis and AstraZeneca, Syngenta and several of their affiliates entered into a series of separation agreements, each of which became effective at the completion of the Transactions, the purpose and effect of which was:

to achieve the separation of the historic, current and possible future liabilities of Novartis agribusiness and Zeneca agrochemicals business from the historic, current and possible future liabilities of the remaining activities of Novartis and AstraZeneca;

to properly allocate amongst the parties liabilities that may arise under relevant securities laws as a result of any misstatements or omissions contained in the various annual report documentation to be distributed to AstraZeneca and Novartis shareholders or as a result of the Transactions themselves;

to provide for the provision of various services between Novartis, AstraZeneca and Syngenta on a transitional, and in certain instances a longer-term, basis; and

to ensure all affected parties have access to necessary relevant information in the future and that, where relevant, such information is subject to appropriate confidentiality provisions.

Out of the initial agreements, the following material agreements are still currently performed in whole or in part or will continue being performed in the future:

***Environmental Matters Agreements***

The Environmental Matters Agreements between Novartis and Syngenta and AstraZeneca and Syngenta specify the obligations of each party to indemnify each other in respect of liabilities relating to environmental and health and safety matters (other than product liability claims) against respective group companies and affiliates which arise through the historic, current and future operations of Syngenta. The purpose of the Environmental Matters Agreements is to address, in general terms, the rights and obligations of Novartis, AstraZeneca and Syngenta for environmental claims that have been or will be incurred and to identify special arrangements for environmental matters related to specific affiliates of each party. The parties are not obligated to reimburse each other for amounts which are covered under an insurance policy or otherwise from a third party.

Under the Environmental Matters Agreements, Syngenta and its subsidiaries indemnify AstraZeneca and Novartis for matters arising from Syngenta's sites and agribusinesses, with exceptions for certain sites and circumstances.

AstraZeneca and Novartis are allocated liability and indemnify Syngenta for such matters arising from their respective sites and businesses, including AstraZeneca's businesses (not including AstraZeneca's agrochemical business) and sites and Novartis' businesses (not including the Novartis agribusiness) and sites, with exceptions for certain specific sites and circumstances.

***Intellectual Property Agreements***

Under the Intellectual Property Agreements, Syngenta acquired title to all relevant intellectual property that is exclusive to or predominantly relates to its business. Syngenta will license or will be granted licenses for relevant intellectual property pertaining to the business of Syngenta that it shares with Novartis or AstraZeneca.

Licenses (other than the license of the Zeneca or Novartis house mark and domain names) are worldwide, exclusive in the field, royalty-free and perpetual. The licenses of the Novartis house mark and domain names are exclusive in the agribusiness field, royalty-free and expired three years after the date of the completion of the Transactions.



## **Exchange Controls**

There are currently no Swiss laws, decrees or regulations restricting the payment of dividends or other payments to holders of Syngenta shares or ADSs who are non-Swiss residents. There are no limitations relating only to non-Swiss persons under Swiss law or the AoI of Syngenta on the right to be a holder of Syngenta shares or ADSs.

## **Taxation**

This taxation summary addresses the material Swiss and United States tax consequences to shareholders in connection with the acquisition and disposition of Syngenta shares or ADSs. This summary does not discuss every aspect of taxation that may be relevant to a particular taxpayer under special circumstances or who is subject to special treatment under applicable law and is not intended to be applicable in all respects to all categories of investors. This summary also assumes that Syngenta's business will be conducted in the manner outlined in this annual report. Changes in Syngenta's organizational structure or the manner in which it conducts its business may invalidate this summary. The laws upon which this summary is based are subject to change, perhaps with retroactive effect. A change to these laws may invalidate the contents of this summary, which will not be updated to reflect changes in laws. Prospective investors should consult their tax advisors regarding the particular personal tax consequences of their acquiring, owning and disposing of shares or ADSs.

### **Switzerland**

The following is a summary of certain material tax considerations relevant to the acquisition and disposition of Syngenta shares (not including the treatment of ADSs) under Swiss tax laws. The following summary does not purport to address all tax consequences of the ownership of Syngenta shares, and does not take into account the specific circumstances of any particular investor. This summary is based on the tax laws of Switzerland as in effect on the date hereof, which are subject to change (or changes in interpretation), possibly with retroactive effect. For purposes of the laws of Switzerland and the United States-Switzerland tax treaty, ADS holders will be treated as holders of the underlying Syngenta shares.

#### ***Withholding Tax on Dividends and Similar Distributions***

Dividends paid and other cash or in kind taxable distributions made by Syngenta to a holder of Syngenta shares (including dividends on liquidation proceeds and stock dividends) are subject to a Swiss withholding tax at a rate of 35 percent. The withholding tax will be withheld by Syngenta on the gross distributions and will be paid to the Swiss Federal Tax Administration. A reduction of the shares' nominal value by means of a capital reduction does not represent a dividend or similar distribution for purposes of Swiss withholding tax. Furthermore, distributions of dividends to shareholders out of qualifying reserves from capital contributions for Swiss withholding tax purposes are as a matter of principle exempt from Swiss withholding tax (*Kapitaleinlageprinzip*).

*Swiss resident recipients.* Swiss resident individuals or legal entities are generally entitled to a full refund or tax credit for the 35 percent withholding tax if they are the beneficial owners of such distributions at the time the distribution is due and duly report the receipt thereof in the relevant income tax return. The 35 percent withholding tax on intercompany dividends paid from Syngenta to a Swiss "parent company" may be only reported in case respective requirements are met (instead of the withholding and refund procedure).

*Non-resident recipients.* The recipient of a taxable distribution from Syngenta who is an individual or a legal entity not resident in Switzerland for tax purposes may be entitled to a partial or even a full refund of the withholding tax if either the country in which such recipient resides for tax purposes has entered into a bilateral treaty for the avoidance of double taxation with Switzerland or the bilateral treaty between Switzerland and the European Community regarding measures equivalent to the parent subsidiary directive is applicable and the further conditions of the respective treaty are met.

Holders of Syngenta shares not resident in Switzerland should be aware that the procedures for claiming treaty benefits (and the time frame required for obtaining a refund) may differ from country to country. Holders of Syngenta shares not resident in Switzerland should consult their own legal, financial or tax advisors regarding the procedures for claiming a refund of the withholding tax.



As of January 1, 2017, Switzerland had entered into bilateral treaties for the avoidance of double taxation with respect to income taxes with the following countries:

Albania	France	Lithuania	Singapore
Algeria	Georgia	Luxembourg	Slovakia
Argentina	Germany	Macedonia	Slovenia
Armenia	Ghana	Malaysia	South Africa
Australia	Greece	Malta	Spain
Austria	Hong Kong	Mexico	Sri Lanka
Azerbaijan	Hungary	Moldova	Sweden
Bangladesh	Iceland	Mongolia	Tadzhikistan
Belarus	India	Montenegro	Taiwan
Belgium	Indonesia	Morocco	Thailand
Bulgaria	Iran	Netherlands	Trinidad and Tobago
Canada	Ireland	New Zealand	Tunisia
Chile	Israel	Norway	Turkey
China	Italy	Oman	Turkmenistan
Colombia	Ivory Coast	Pakistan	Ukraine
Croatia	Jamaica	Peru	United Arab Emirates
Cyprus	Japan	Philippines	United Kingdom
Czech Republic	Kazakhstan	Poland	United States
Denmark	Kyrgyzstan	Portugal	Uruguay
Ecuador	Kuwait	Qatar	Uzbekistan
Egypt	Republic of Korea	Romania	Vietnam
Estonia	Latvia	Russia	Venezuela
Finland	Liechtenstein	Serbia	

By exchange of notes, the 1954 Treaty with the United Kingdom applies to Antigua, Barbados, Belize, British Virgin Islands, Dominica, Gambia, Grenada, Malawi, Montserrat, St. Christopher, Nevis and Anguilla, St. Lucia, St. Vincent and Zambia. By exchange of letters, the 1973 Treaty with Denmark applies to the Faroe Islands.

Switzerland has also concluded bilateral treaties which are not aimed primarily at avoiding double taxation but which govern the exchange of tax related information. Such tax information exchange agreements are in force with Guernsey, Isle of Man, Jersey, Andorra, Belize, Greenland, Grenada, San Marino and the Seychelles. Another agreement which is not yet in force has been concluded with Brazil.

Besides these bilateral treaties Switzerland has entered into an agreement with the European Community providing for measures equivalent to those laid down in Council Directive 2003/48/EC on taxation of savings income in the form of interest payments. This agreement contains in its Article 15 provisions on taxation of dividends which apply with respect to European Union member states.

*Residents of the United States.* A non-resident holder who is a resident of the United States for purposes of the United States-Switzerland tax treaty, the “Treaty”, is eligible for a reduced rate of withholding tax on dividends equal to 15 percent of the dividend, provided that such holder (i) qualifies for benefits under the Treaty, (ii) holds, directly and indirectly, less than 10 percent of Syngenta voting stock and (iii) does not conduct business through a permanent establishment or fixed base in Switzerland to which the shares or ADSs are attributable. Such an eligible holder must apply for a refund of the amount of the withholding tax in excess of the 15 percent Treaty rate. The claim for refund must be filed on Swiss Tax Form 82 (82C for corporations; 82I for individuals; 82R for regulated investment companies; 82E for other entities), which may be obtained from any Swiss Consulate General in the United States or from the Federal Tax Administration of Switzerland at the address below, together with an instruction form. The original form and three copies of the form must be duly completed, signed before a notary public of the United States, and sent to the Federal Tax Administration of Switzerland, Eigerstrasse 65, CH-3003 Berne, Switzerland. The form must be accompanied by suitable evidence of deduction of Swiss tax withheld at source, such as certificates of deduction, signed bank vouchers or credit slips. The form should be filed no later than December 31 of the third year following the calendar year in which the dividend became payable.

***Income and Profit Tax on Dividends and Similar Distributions***

<i>Individuals</i>	<p>An individual who is a Swiss resident for tax purposes, or is a non-Swiss resident holding Syngenta shares as part of a Swiss business operation or Swiss permanent establishment, is required to report the receipt of taxable distributions received on the Syngenta shares in his relevant Swiss tax returns. Furthermore, the Direct Federal Tax on dividends, shares in profits, liquidation proceeds and pecuniary benefits from shares (including bonus shares) is reduced to 60 percent (if shares are held as private assets) or 50 percent (if shares are held as business assets) of regular taxation (<i>Teilbesteuerung</i>), if the investment amounts to at least 10 percent of nominal capital of the participation. All cantons have introduced a similar partial taxation on cantonal and communal level. A reduction of the shares' nominal value by means of a capital reduction or a repayment out of qualifying reserves from capital contributions does not represent a taxable distribution received on the Syngenta shares to be reported in his relevant tax return for Swiss resident individuals for tax purposes holding Syngenta shares as private assets.</p>
<i>Legal entities</i>	<p>Legal entities resident in Switzerland or non-Swiss resident legal entities holding Syngenta shares as part of a Swiss establishment are required to include taxable distributions received on the Syngenta shares in their income subject to Swiss corporate income taxes. Payments received under a share capital reduction of Syngenta also qualify as taxable distributions received on the Syngenta shares, as far as the capital reduction is not considered as a (partial) disinvestment (reduction of the book value) in the statutory annual accounts of the legal entity holding Syngenta shares. A Swiss corporation or co-operative or a non-Swiss corporation or co-operative holding Syngenta shares as part of a Swiss permanent establishment may, under certain circumstances, benefit from a tax reduction with respect to dividends and income on capital repayments (participation relief / <i>Beteiligungsabzug</i>).</p>
<i>Non-resident recipients</i>	<p>Recipients of dividends and similar distributions on shares who are neither residents of Switzerland for tax purposes nor hold Syngenta shares as part of a Swiss business operation or a Swiss permanent establishment are not subject to Swiss income taxes in respect of such distributions.</p>

***Tax Treatment of Capital Gains Realized on Syngenta Shares***

<i>Individuals</i>	<p>Swiss resident individuals who hold Syngenta shares as part of their private property generally are exempt from Swiss federal, cantonal and communal taxes with respect to capital gains realized upon the sale or other disposal of Syngenta shares, unless such individuals are qualified as security trading professionals for income tax purposes. Gains realized upon a repurchase of Syngenta shares by Syngenta for the purpose of the capital reduction are recharacterized as taxable distributions. The same is true for gains realized upon a repurchase of Syngenta shares if Syngenta were not to dispose of the repurchased shares within six years after the repurchase. In principle, the taxable income would be the difference between the repurchase price and the nominal value of the shares.</p>
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Individuals who are Swiss residents for tax purposes and who hold the Syngenta shares as business assets, or are non-Swiss residents holding Syngenta shares as part of a Swiss business operation or Swiss permanent establishment, are required to include capital gains realized upon the disposal of Syngenta shares in their income subject to Swiss income tax. Certain reductions or partial taxations similar to those mentioned above for dividends (*Teilbesteuerung*) might be available if certain conditions are met (e.g. holding period of at least one year). Whether shareholders are entitled to these reductions needs to be assessed on an individual basis and shareholders should consult their own legal, financial or tax advisor.

*Legal entities* Legal entities resident in Switzerland or non-Swiss resident legal entities holding Syngenta shares as part of a Swiss permanent establishment are required to include capital gains realized upon the disposal of Syngenta shares in their income subject to Swiss corporate income tax. Under certain circumstances including either a minimum holding of 10 percent or an entitlement to at least 10 percent of the profits and reserves of the issuer and cumulatively a holding period of at least 1 year of the Syngenta shares, they benefit from relief from taxation with respect to gains realized upon the disposal of shares (qualified participation) (*Beteiligungsabzug*).

*Non-resident individuals and legal entities* Individuals and legal entities which are not resident in Switzerland for tax purposes and do not hold Syngenta shares as part of a Swiss business operation or a Swiss permanent establishment are not subject to Swiss income taxes on gains realized upon the disposal of the shares.

### ***Net Worth and Capital Taxes***

*Individuals* Individuals who are Swiss residents for tax purposes, or are non-Swiss residents holding Syngenta shares as part of a Swiss business operation or Swiss permanent establishment are required to include their Syngenta shares in their wealth which is subject to cantonal and communal net worth tax.

*Legal entities* Legal entities resident in Switzerland or non-Swiss resident legal entities holding Syngenta shares as part of a Swiss permanent establishment are required to include their Syngenta shares in their assets which are subject to cantonal and communal capital tax.

*Non-resident individuals and legal entities* Individuals and legal entities which are not resident in Switzerland for tax purposes and do not hold Syngenta shares as part of a Swiss business operation or a Swiss permanent establishment are not subject to Swiss cantonal and communal net worth and capital taxes.

### ***Gift and Inheritance Tax***

Transfers of Syngenta shares may be subject to cantonal and/or communal inheritance or gift taxes if the deceased or the donor or the recipient were resident in a Canton levying such taxes and, in international circumstances where residency requirements are satisfied, if the applicable tax treaty were to allocate the right to tax to Switzerland.

### ***Stamp Tax upon Transfer of Securities (Umsatzabgabe)***

The transfer of Syngenta shares, whether by a Swiss resident or non-resident holder, may be subject to a Swiss securities transfer tax in the amount of half of 0.15 percent of the sales proceeds for the seller if the sale occurs through or with a Swiss bank or other professional securities dealer as defined in the Swiss Federal Stamp Tax Act.

## United States

The following discussion is a summary of the material United States federal income tax considerations relevant to the ownership by United States Holders described below of Syngenta shares or Syngenta ADSs, but it does not purport to be a comprehensive description of all of the tax considerations that may be relevant to a particular investor's decision to acquire such securities. For purposes of this discussion, "United States Holders" are beneficial owners of Syngenta shares or Syngenta ADSs that, for United States federal income tax purposes are (i) United States citizens or residents, (ii) corporations, or other entities taxable as corporations, created or organized in or under the laws of the United States or any political subdivision thereof, or (iii) estates or trusts the income of which is subject to United States federal income taxation regardless of its source. In general, if you are the beneficial owner of Syngenta ADSs, you will be treated, for United States federal income tax purposes, as the beneficial owner of the Syngenta shares represented by those ADSs. Accordingly, no gain or loss will be recognized if you exchange Syngenta ADSs for the Syngenta shares.

The United States Treasury has expressed concerns that parties to whom American depositary shares are pre-released may be taking actions that are inconsistent with the claiming of foreign tax credits by United States Holders. Such actions would also be inconsistent with the claiming of the reduced rate of tax, described below, applicable to dividends received by certain non-corporate holders. Accordingly, the creditability of Swiss withholding taxes and the availability of the reduced tax rate for dividends received by certain non-corporate holders, each described below, could be affected by actions taken by parties to whom the ADSs are pre-released.

This summary does not address all of the United States federal income tax considerations that may be relevant to the particular circumstances of a United States Holder of Syngenta shares or Syngenta ADSs, and does not discuss any aspect of state, local or non-United States tax law. Moreover, this summary deals only with United States Holders that will hold Syngenta shares or Syngenta ADSs as capital assets for United States federal tax purposes (generally, property held for investment), and it does not describe all of the US federal income tax considerations that may be relevant to United States Holders that are subject to special tax rules, such as certain financial institutions, insurance companies, dealers and traders in securities and foreign currencies, tax-exempt organizations, investors liable for alternative minimum tax, persons that hold Syngenta shares or Syngenta ADSs as part of a hedge or any similar transaction, partnerships or other entities classified as partnerships for US federal income tax purposes, persons owning, directly, indirectly or constructively, 10 percent or more of the voting stock of Syngenta and persons whose "functional currency" is not the US dollar. This summary is based on the United States Internal Revenue Code of 1986, as amended (the "Code"), Treasury regulations promulgated thereunder, and administrative and judicial interpretations thereof, all as of the date hereof, and all of which are subject to change, possibly with retroactive effect. It is also based in part on representations by the Depositary and assumes that each obligation under the Deposit Agreement and any related agreements will be performed in accordance with their terms. Syngenta believes that it was not a Passive Foreign Investment Company (a "PFIC") for United States federal income tax purposes for 2016. The following discussion assumes that Syngenta is not, and will not become, a PFIC. However, since PFIC status depends on the composition of a company's income and assets and the market value of its assets from time to time, there can be no assurance that Syngenta will not be considered a PFIC in any taxable year. Shareholders should consult their own tax advisors as to the tax considerations relevant to the ownership of Syngenta shares or ADSs in light of their particular

circumstances, including the effect of any state, local or non-United States laws and including their eligibility for benefits under the Treaty.

*Distributions*

A distribution received by a United States Holder in respect of Syngenta shares or Syngenta ADSs other than certain pro rata distributions of common shares, generally will be considered a taxable dividend to the extent paid out of Syngenta's current or accumulated earnings and profits (as determined for United States federal income tax purposes). Because Syngenta does not maintain calculations of its earnings and profits under US federal income tax principles, it is expected that distributions will generally be reported to United States Holders as dividends.

United States Holders must include the gross amount of any taxable dividend (including any amount withheld in respect of Swiss income taxes) in gross income. The dividend will be subject to United States federal income tax as ordinary, foreign-source dividend income. Subject to certain limitations, and the discussion above regarding concerns expressed by the US Treasury, dividends paid to certain non-corporate United States Holders may be taxable at favorable rates, provided that certain holding period and other requirements are met. Effective January 1, 2013, the American Taxpayer Relief Act raised the maximum rate to 20 percent for individuals whose dividend income would otherwise be taxed at the top US ordinary income tax rate of 39.6 percent. For the 2016 tax year, the 39.6 percent rate applies to US taxable income in excess of \$415,050 (or higher, depending on the filing status of the taxpayer) for most individuals. In addition, under the Patient Protection and Affordable Care Act, higher-income taxpayers must pay an additional 3.8 percent tax on net investment income to the extent certain threshold amounts of income are exceeded. The holders should consult their own tax advisors regarding the availability of the reduced rate of tax based upon their particular situation. Dividends will not be eligible for the dividends-received deduction generally available to United States corporations under the Code. Such dividends will constitute foreign source dividend income for foreign tax credit purposes.

Taxable dividends paid in Swiss or other foreign currency will be included in a United States Holder's gross income in a US dollar amount calculated by reference to the exchange rate in effect on the date the dividend is received by the United States Holder, in the case of Syngenta shares, or by the depository, in the case of Syngenta ADSs, regardless of whether the payment is in fact converted into US dollars. If the dividend is converted into US dollars on the date of receipt, US holders should not be required to recognize foreign currency gain or loss in respect of the dividend income. United States Holders may have foreign currency gain or loss if any such Swiss or foreign currency is converted into US dollars after the date of receipt. United States Holders should consult their own tax advisors concerning the possibility of foreign currency gain or loss if any such Swiss or other foreign currency is not converted into US dollars on the date of receipt.

Subject to certain conditions and limitations under United States federal income tax law, and subject to the discussion above regarding concerns expressed by the US Treasury, a United States Holder will be eligible to claim a foreign tax credit for Swiss withholding taxes imposed at the rate provided by the Treaty on distributions by Syngenta in respect of its Syngenta shares or Syngenta ADSs. Swiss taxes withheld in excess of a rate provided in the Treaty will not be eligible for credit against a United States Holder's federal income tax liability. The limitation on foreign taxes eligible for credit is calculated separately with respect to specific classes of income. In lieu of claiming a foreign tax credit, a United States Holder may choose to deduct such Swiss withholding taxes in computing its United States federal taxable income (but only if such holder does not elect to claim a foreign tax credit in respect to any foreign income taxes paid or incurred for the taxable year). The United States federal income tax rules relating to foreign tax credits are extremely complex. United States Holders should consult their own tax advisors concerning the availability of foreign tax credits based upon their particular situations.

### *Dispositions*



Upon a sale or other taxable disposition of Syngenta shares or Syngenta ADSs, a United States Holder will generally recognize gain or loss in an amount equal to the difference between the amount realized on the disposition and the United States Holder's tax basis in the Syngenta shares or Syngenta ADSs. Such gain or loss will be capital gain or loss, and will be long-term capital gain or loss if the United States Holder held the Syngenta shares or Syngenta ADSs for more than one year at the time of disposition. A long-term capital gain of a non-corporate United States Holder is generally taxed at a rate of up to 20 percent plus the net investment income rate of 3.8 percent, based on specific income thresholds, for a maximum rate of 23.8 percent. The deduction of capital losses is subject to certain limitations under the Code. Any gain recognized by a United States Holder on a sale or other taxable disposition of Syngenta shares or Syngenta ADSs generally will be treated as derived from United States sources for United States foreign tax credit purposes.

### ***Backup Withholding and Information Reporting***

Information reporting requirements may apply to a United States Holder with respect to the interest in specified foreign financial assets with a value above the applicable reporting threshold in addition to distributions by Syngenta, or to the proceeds of a sale or redemption of Syngenta shares or Syngenta ADSs. Backup withholding may apply to these payments if the United States Holder fails to furnish its correct taxpayer identification number and certify that such holder is not subject to backup withholding, or to otherwise comply with the applicable requirements of the backup withholding rules. Any amounts withheld under the backup withholding rules will be allowed as a credit against such holder's United States federal income tax liability, and may entitle the holder to a refund, provided that the required information is furnished to the Internal Revenue Service.

### ***Foreign Account Tax Compliance Act***

On March 18, 2010, the United States enacted provisions commonly referred to as the Foreign Account Tax Compliance Act (FATCA), which introduce reporting and withholding requirements for Foreign Financial Institutions (FFIs) with respect to certain accounts and payments effective as from July 1, 2014. On February 14, 2013, Switzerland and the United States signed an Intergovernmental Agreement (IGA) regarding the implementation of FATCA with respect to Swiss Financial Institutions. Syngenta has conducted a FATCA impact analysis and has concluded that Syngenta AG is not a FFI and the Syngenta group affiliates should not be materially impacted by FATCA.

### **Where You Can Find More Information**

Syngenta is subject to the informational reporting requirements of the Securities Exchange Act of 1934, as amended. Accordingly, Syngenta will file reports and other information with the Commission. Such reports and other information may be inspected without charge, and copies thereof may be obtained at prescribed rates from, the public reference room of the Commission's principal office at 100 F Street, N.E., Washington, DC 20549, United States. The public may obtain information on the operation of the Commission's public reference room by calling the Commission in the United States at 1-800-SEC-0330. In addition, this report and other information Syngenta files with the Commission are available on the website maintained by it at <http://www.sec.gov>. Copies of reports and other information concerning Syngenta are also available for inspection at the offices of the New York Stock Exchange, 11 Wall Street, New York, NY 10005, United States.

## Item 11 — Quantitative and Qualitative Disclosures About Market Risk

### Overview

The nature of Syngenta's business and its global presence exposes it to a range of financial risks. These risks include (i) market risks, which include potential unfavorable changes in foreign exchange rates, interest rates, commodity prices and other market prices (equities, credit spreads etc.), (ii) counterparty risk and (iii) liquidity and refinancing risk.

A financial risk management framework is in place in the form of a Treasury policy approved by the Board of Directors. This policy provides guidance over all Treasury and finance related matters, is underpinned by delegated authority guidelines and is additionally supported by detailed procedures in place across Syngenta. In accordance with its Treasury policy, Syngenta actively monitors and manages financial risk with the objectives of reducing fluctuations in reported earnings and cash flows from these risks and providing economic protection against cost increases. These objectives are achieved through (a) a monthly assessment of the impact of market risks against defined risk limits (see following section), which take into account the risk appetite of Syngenta and (b) the use of a variety of derivative and non-derivative financial instruments.

Financial instruments available for use to mitigate these risks are selected by Syngenta according to the nature of the underlying risk. These instruments are designed to economically hedge underlying risks arising from operational activities and from funding and investment positions. Syngenta does not enter into any speculative financial transactions.

### Assessment of the impact of market risks

The impact of market risks is assessed using a variety of Value-at-Risk (VaR) and Earnings-at-Risk (EaR) methods. These methods are adjusted to reflect the nature of the exposures and the impact of the exposures on profit or loss of the financial year. The specific methods used to assess the impact of financial risks are described below:

Risk	Method	Exposure (financial statement item)	Time horizon (months)
Foreign exchange risk			
Trading transaction – committed	VaR	Monetary asset and liability carrying amounts	1
Trading transaction – uncommitted	EaR	Operating income	12
Issued financial debt and interest	VaR	Monetary liability carrying amounts	1
Translation	VaR	Cumulative translation adjustment in OCI	1
Interest rate risk	EaR	Interest expense	12

Commodity price risk

EaR Operating income

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VaR and EaR calculations are risk management tools designed to statistically estimate with a pre-set probability the maximum amount of potential losses in value (VaR) or earnings (EaR) over a specific (holding) time period given current and forecast positions and possible movements in market prices. The VaR and EaR methods used by Syngenta estimate the gross impact on the consolidated financial statements if the underlying items were not hedged and the net impact of the combined underlying hedged items and the related hedging instruments. VaR and EaR calculations attempt to recognize that holding different assets and liabilities or incurring different future cash flow exposures may reduce portfolio risk through diversification. Such diversification effects are captured within the calculations, which aim to present the risk based on Syngenta's currency exposure as a whole, rather than the sum of the exposures to the individual currency pairs within the portfolio of exposures. Using historical data, the VaR and EaR calculations are designed to predict possible changes in the markets in the future at a 99 percent confidence level, with a 1 percent probability that actual results will be worse than calculated. The time horizon used to calculate the VaR figures for each risk is determined by the time period over which management forecasts and monitors changes in the risk and in Syngenta's exposure to it and takes mitigating actions in response to those changes.

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The assessment of the impact of market risks is performed monthly and the results are compared against annually defined risk limits. In cases where the net impact is higher than a risk limit, Syngenta enters into derivative financial instrument transactions in order to stay within the risk limits approved in the risk management policy. Breaches of risk limits, should they occur, are immediately reported to senior management.

Syngenta cannot predict future movements in risk variables precisely, therefore calculations of the impact of market risks neither represent actual losses nor consider the effects of potential favorable movements in underlying risk variables. Accordingly, these calculations may only be an indication of future movements to the extent the historic market patterns repeat in the future.

### **Foreign exchange risk**

Operating worldwide exposes Syngenta to foreign exchange transaction and translation risk at both the Group and subsidiary level. Syngenta's policy is to hedge the effect of foreign exchange translation risk on shareholders' equity only in specific circumstances, for example to protect the value of temporary excess foreign currency denominated cash positions.

### **Foreign exchange transaction risk - committed**

Syngenta's individual subsidiaries predominantly transact their operational activities in their respective functional currencies. However, the globally integrated nature of Syngenta's business results in its subsidiaries bearing some amount of transactional balance sheet risk, because some monetary items (including financial liabilities) are denominated in foreign currencies.

Such committed foreign currency exposures are largely generated by the routing of products from Syngenta's central manufacturing sites to its foreign locations. The risk management strategy is to ensure that these committed exposures are fully hedged, unless otherwise approved by Group Treasury, for example where not deemed cost-effective or where there is no forward market for a specific currency.

The derivative instruments that Syngenta's risk management policy allows to be used to manage the risk are foreign exchange forward contracts and cross currency swaps with the same risk (foreign exchange currency index), where the fair value movements of the hedges and the retranslation of the underlying committed exposures are largely offset in profit or loss.

The derivative instruments are placed with the same maturity as the expected cash flows of the hedged transactions so that the timing of the cash flows of the items within the hedged exposure effectively matches the timing of the cash

flows of the derivative instrument.

Net committed transactional currency exposures are identified and reported on a monthly basis by business units. The impact of the hedging program can be illustrated in the VaR calculations for committed exposures, which relate to the revaluation of exposures relative to spot rates over a monthly period. The impact of interest differentials and other factors is not included in these calculations.

(\$m, except risk reduction %)	December 31, 2016			December 31, 2015		
	Value-at-Risk			Value-at-Risk		
Underlying currency (1-month holding period)	Gross impact	Net impact	Risk reduction	Gross impact	Net impact	Risk reduction
Swiss franc	88	8	90%	40	20	50%
Brazilian real	119	2	99%	96	–	100%
British pound sterling	23	-	99%	24	8	68%
Russian ruble	39	-	99%	23	–	99%
Rest of world	92	22	77%	83	24	71%
Total undiversified	361	32	91%	266	52	80%
Diversification	(207)	(24)	89%	(155)	(32)	79%
Net VaR	154	8	95%	111	20	82%

At December 31, 2016, the Value-at-Risk for a one month holding period, after hedges, at a 99 percent confidence level was \$8 million (December 31, 2015: \$20 million).

The largest exposures arise in Brazilian real, Swiss franc, British pound sterling and Russian ruble. Switzerland and Great Britain house large research and manufacturing sites. In recent years, due to the growth of Syngenta sales, exposures in emerging markets (particularly Brazil) have become significant.

The average Value-at-Risk, after hedges, at a 99 percent confidence level, for the year ended December 31, 2016 was \$8 million (December 31, 2015: \$13 million) and, before hedges, was \$159 million (December 31, 2015: \$111 million).

#### **Foreign exchange transaction risk – uncommitted**

Uncommitted transactions are expected, highly probable future transactions for which Syngenta does not yet have a contractual right or obligation (mainly sales and costs).

The US dollar represents the biggest single currency for both sales and costs. However, currency mismatches arise from Syngenta having a centralized cost base, denominated mainly in Swiss francs, British pounds and US dollars, against a local selling base, denominated mainly in US dollars, Euros and various other currencies, including those in emerging markets. In addition, due to the seasonality of Syngenta's business, the majority of sales occur during the first half of the year whereas costs tend to occur more linearly throughout the year.

The risk management objective is to minimize the impact of changes in foreign exchange rates on the operating income forecasted to result from these transactions. Syngenta considers hedging this exposure unless it can reliably expect that operating income could, without significant adverse economic impact, be protected by adjusting the pricing of forecast transactions for changes in foreign exchange rates before those transactions occur. Hedging transactions are managed to minimize the potential adverse movement for the entire portfolio of the net transactional flows, rather than on an individual currency basis. Transactions in a specific calendar year are managed cumulatively in separate portfolios.

The cumulative diversified risk of the whole portfolio can be reduced by entering into derivative transactions for a portion or the full amount of the individual transactions so that the remaining risk of the whole portfolio is at acceptable levels within clearly defined risk limits. The risk management objective is applicable for transactions in the following 24 months. Currently transactions for the next 12 month period are being hedged.

The derivative instruments that Syngenta's risk management policy allows to be used to manage the risk are:

foreign exchange forward contracts and net purchased currency options with the same risk (foreign exchange currency index) which are eliminating or reducing the uncertainty in the cash flows.

placed mainly with the same or (to a lesser extent) with shorter maturity than the timing of the cash flows being hedged so that the timing of the cash flows of the hedged transactions effectively matches the timing of the cash flows of the derivative instrument.



The impact of the hedging program on operating income can be illustrated in the Earnings-at-Risk calculation performed for anticipated net transactional currency flows for the following year taking into account related currency hedges.

(\$m, except risk reduction %)	December 31,			December 31,		
	2016			2015		
	Earnings-at-Risk			Earnings-at-Risk		
Underlying currency (12-month holding period)	Gross impact	Net impact	Risk reduction	Gross impact	Net impact	Risk reduction
Swiss franc	161	67	58%	199	90	55%
Argentine peso	27	27	-	500	500	-
Brazilian real	112	112	-	94	94	-
Russian ruble	29	13	56%	10	8	-
Euro	44	44	-	40	39	3%
British pound sterling	51	32	37%	40	25	38%
Rest of world	206	188	9%	191	159	17%
Total undiversified	630	483	23%	1,074	915	15%
Diversification	(445)	(355)	20%	(498)	(387)	22%
Net EaR	185	128	31%	576	528	8%

At December 31, 2016, the total potential adverse movement for 2017 net transactional flows after hedges relative to year-end, at a 99 percent confidence level, was \$128 million (December 31, 2015: \$528 million).

The net resulting Earnings-at-Risk figures at December 31, 2016 decreased by \$400 million compared with December 31, 2015 mainly due to the large reduction in the risk of the Argentine peso (December 31, 2015: \$500 million vs. December 31, 2016: \$27 million). This reduction is a product of the Argentine peso stabilizing through the year after the sharp devaluation in December 2015 which occurred due to the election of the new government in Argentina.

The risk is similar to the levels seen at the end of 2014 with the greatest exposures being the Swiss franc, where Syngenta has a significant cost base in Switzerland with no material offsetting sales, and the Brazilian real, where a significant cost base is only partially offset by sales because sales in Brazil are largely dollarized.

#### Foreign exchange transaction risk – issued financial debt and interest

Syngenta has a funding strategy which involves securing a diversification of funding sources in different markets and maintaining an optimal currency mix of debt.

This additional foreign currency exposure arises from the debt issuances in Euro and in Swiss franc under the Euro Medium Term Note (EMTN) program. The risk management objective is to minimize the impact of changes in

foreign exchange rates on these foreign currency denominated debt interest and principal repayments.

The foreign exchange risk on the foreign currency denominated debt is managed mostly by derivative instruments, and to a lesser extent within a portfolio of other committed transactions, so that no material foreign currency risk remains as a result of the foreign currency denominated debt.

The derivative instruments which Syngenta's risk management policy allows to be used to manage the risk are:

\_ cross currency swaps designated as hedges of foreign exchange risk of future interest and principal payments on foreign currency financial debt which are eliminating or reducing the uncertainty in the cash flows.

\_ placed mainly with the same terms as the items being hedged so that the timing of the interest and principal repayments of the hedged transactions effectively matches the timing of the cash flows of the derivative instrument.

**Foreign exchange translation risk**

Translation exposure arises from the consolidation of foreign currency denominated financial statements of Syngenta's subsidiaries. This is reported as currency translation effects in OCI.

Translation risk can be significant; however, Syngenta regards its equity base to be of sufficient magnitude generally to absorb the short- to medium-term impact of exchange rate movements.

Syngenta can use both foreign currency denominated debt and net investment hedging to manage this exposure. The latter incorporates specific actions to protect the value of temporary excess foreign currency denominated cash positions. No hedging was undertaken for exposures of this type during the years ended December 31, 2016 or 2015. The exposure is deemed to be mitigated by the large net asset base of Syngenta and consequently no additional management of the exposure was undertaken in 2016 or 2015.

The table below presents the 1-month translation Value-at-Risk:

(\$m)	December 31, 2016	December 31,
	Value-at-Risk	2015
	Gross	Gross
Currency of net investment in subsidiary (1-month holding period)	impact	impact
Brazilian real	156	164
Swiss franc	145	287
Euro	44	56
British pound sterling	59	61
Rest of world	135	128
Total undiversified	539	696
Diversification	(204)	(277)
Net VaR	335	419

At December 31, 2016, the Value-at-Risk for a one month holding period at a 99 percent confidence level was \$335 million (December 31, 2015: \$419 million). The Value-at-Risk at December 31, 2016 is lower than as of December 31, 2015 mainly driven by an increased Swiss franc volatility in 2015 due to the removal by the Swiss Central Bank of the cap of the Swiss franc against the Euro.

The two largest single currency exposures arise in the Brazilian real and Swiss franc, driven by the large operations and investments in facilities in Switzerland and Brazil.

The average Value-at-Risk, after hedges, at a 99 percent confidence level, for the year ended December 31, 2016 was \$343 million (December 31, 2015: \$341 million).

### **Interest rate risk**

Syngenta is exposed to fluctuations in interest rates on its borrowings (including forecasted borrowings) and excess cash. While the majority of Syngenta's borrowings have fixed interest rates, portions of Syngenta's net borrowings, including its short-term commercial paper program and local borrowings, are subject to changes in short-term interest rates.

Syngenta monitors its interest rate exposures and analyzes the potential impact of interest rate movements on net interest expense. The risk management strategy involves ensuring an efficient fixed/floating mix of total debt within approved interest rate limits.

The derivative instruments allowed to manage the risk are interest rate swaps relating to future interest payments of financial debt liabilities. The derivative instruments are placed with the same maturity as the expected cash flows of the hedged transactions so that the timing of the cash flows of the hedged transactions effectively matches the timing of the cash flows of the derivative instrument.

At December 31, 2016, the net amount of Earnings-at-Risk on floating rate debt due to potential changes in interest rates (a parallel shift of 100 bps was applied) was \$10 million (2015: \$10 million). The net amount of Earnings-at-Risk on net debt, as defined under “Capital structure” below, due to potential changes in interest rates was immaterial at December 31, 2016 and 2015.

### **Commodity price risks**

Operating in the agribusiness sector, changes in certain commodity prices affect Syngenta’s reported operating results and cash flows. On a limited basis, Syngenta enters into derivative transactions to hedge the exposure of its cost base to commodity prices. This activity comprises oil and natural gas hedging in the UK and USA, as well as soft commodity hedging for corn and soybean purchases by the Seeds business in the USA, Canada, Brazil and Argentina, where Syngenta contracts to purchase various seed crops from growers and hedges the cost of the purchases. In barter arrangements where Syngenta sells products in exchange for receiving a certain amount of a commodity crop, Syngenta hedges the value of the crop. At December 31, 2016 and 2015, there were no open hedging transactions for Brazil and Argentina corn and soybean price risk.

Syngenta has indirect exposure to oil price fluctuations mainly through the impact of oil prices on the cost of both raw materials, especially chemical intermediates in the Crop Protection business, and distribution activities. At December 31, 2016, there was no hedge protection in place for oil for 2017 (December 31, 2015: no hedge protection in place for oil for 2016). As the exposure to oil is indirect, Syngenta does not calculate the Earnings-at-Risk due to potential changes in oil prices.

Natural gas exposure occurs in Syngenta’s primary manufacturing sites and Syngenta is managing the exposure by hedging the main risk component, which is the natural gas market price, contractually linked to the NYMEX natural gas benchmark price. The other risk components within the exposure are immaterial.

The main objective of managing commodity price risk is to reduce the impact of commodity price changes on operating income and to provide economic protection against future cost increases. Syngenta uses fixed price contracts and derivatives (both Over-the-Counter (OTC) and exchange traded instruments, including commodity option and futures contracts) to achieve this objective. The derivative instruments are placed with the same maturity as the expected cash flows of the hedged transactions so that the timing of the cash flows of the hedged transactions effectively matches the timing of the cash flows of the derivative instrument.

At December 31, 2016, the net amount of Earnings-at-Risk due to potential changes in natural gas prices was not material. Earnings-at-Risk due to potential changes in prices of soft commodities, principally corn and soybean, assuming a 12-month holding period are presented below.

(\$m, except risk reduction %)	December 31, 2016			December 31, 2015		
	Earnings-at-Risk			Earnings-at-Risk		
	Gross impact	Net impact	Risk reduction	Gross impact	Net impact	Risk reduction
Soft commodities						
Total undiversified <sup>1</sup>	36	28	23%	40	16	60%

1 As the main soft commodities are largely correlated to each other, the impact of diversification is immaterial

The Earnings-at-Risk of soft commodities is driven by their high price volatility compared to other asset classes. The hedging program reduces overall 12-month Earnings-at-Risk at December 31, 2016 to \$28 million (December 31, 2015: \$16 million). The increase in net risk in 2016 is mainly due to lower hedge ratios.

**Item 12 — Description of Securities Other Than Equity Securities**

**Fees and Charges for Holders of American Depositary Receipts**

The Bank of New York Mellon, as depositary for the ADSs (the depositary) collects its fees for delivery and surrender of ADSs directly from investors depositing shares or surrendering ADSs for the purpose of withdrawal or from intermediaries acting for them. The depositary collects fees for making distributions to investors by deducting those fees from the amounts distributed or by selling a portion of distributable property to pay the fees. The depositary may collect its annual fee for depositary services by deductions from cash distributions or by directly billing investors or by charging the book-entry system accounts of participants acting for them.

**Persons depositing or withdrawing shares must pay:**

\$5.00 (or less) per 100 ADSs (or portion of 100 ADSs)

\$0.02 (or less) per ADS

A fee equivalent to the fee that would be payable if securities distributed had been shares and the shares had been deposited for issuance of ADSs

\$0.02 (or less) per ADS per calendar year

Registration or transfer fees

Expenses of the depositary

Taxes and other governmental charges the depositary or the custodian have to pay on any ADS or share underlying an ADS, for example, stock transfer taxes, stamp duty or withholding taxes

Any charges incurred by the depositary or its agents for servicing the deposited securities

**For:**

- Issuance of ADSs, including issuances resulting from a distribution, sale or exercise of shares or rights or other property

- Cancellation of ADSs for the purpose of withdrawal including if the deposit agreement terminates
- Any cash distribution to ADS holders
- Distribution of securities distributed to holders of deposited securities which are distributed by the depositary to ADS holders
- Depositary services
- Transfer and registration of shares on the Company's share register to or from the name of the depositary or its agent when shares are deposited or withdrawn
- Cable, telex and facsimile transmissions, etc. (when expressly provided in the deposit agreement)

- Converting foreign currency to US dollars

- As necessary

- As necessary

### **Fees Paid by Depositary to the Company**

The Bank of New York Mellon, as depositary, has agreed to reimburse Syngenta for certain expenses it incurs that are related to the administration and maintenance expenses of the ADS program. The depositary has also agreed to pay the standard out-of-pocket maintenance costs for the ADSs, which consist of the expenses of postage and envelopes for mailing annual and interim financial reports, printing and distributing dividend checks, electronic filing of US federal tax information, mailing required tax forms, stationery, postage, facsimile, and telephone calls. It has also agreed to reimburse the Company annually for certain investor relationship programs or special investor relations promotional activities. In certain instances, the depositary has agreed to provide additional payments to Syngenta based on any applicable performance indicators relating to the ADS facility.

From January 1, 2016, to December 31, 2016, Syngenta received from the depositary \$723,514 as payment for the above-mentioned fees, costs and expenses.



**PART II**

**Item 13 — Defaults, Dividend Arrearages and Delinquencies**

None.

**Item 14 — Material Modifications to the Rights of Security Holders and Use of Proceeds**

None.

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## Item 15 — Controls and Procedures

Syngenta's Chief Executive Officer and Chief Financial Officer, after evaluating the effectiveness of the design and operation of the Company's disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) as at December 31, 2016, have concluded that the Company's disclosure controls and procedures (i) were effective in recording, processing, summarizing and reporting, on a timely basis, information required to be disclosed by the Company in the reports that it files or submits under the Securities Exchange Act of 1934, as amended (the "Exchange Act") and (ii) ensured that information required to be disclosed in the reports that the Company files or submits under the Exchange Act is accumulated and communicated to management, including the Chief Executive Officer and Chief Financial Officer, to allow timely decisions regarding required disclosure.

Syngenta's Board of Directors and management are responsible for establishing and maintaining adequate internal control over financial reporting. Syngenta's internal control system was designed to provide reasonable assurance to Syngenta's management and Board of Directors regarding the reliability of financial reporting and the preparation and fair presentation of its published consolidated financial statements.

All internal control systems, no matter how well designed, have inherent limitations. Therefore, even those systems determined to be effective may not prevent or detect misstatements and can provide only reasonable assurance with respect to financial statement preparation and presentation. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Syngenta's management assessed the effectiveness of Syngenta's internal control over financial reporting as of December 31, 2016. In making this assessment, it used the criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on this assessment, management has concluded that, as of December 31, 2016, Syngenta's internal control over financial reporting was effective based on those criteria.

KPMG AG, Switzerland, an independent registered public accounting firm, has issued an opinion on the effectiveness of Syngenta's internal control over financial reporting which is included in this annual report.

See the audit report of KPMG AG, an independent registered public accounting firm, included under Item 18 on page F-1.

There have been no changes in Syngenta's internal controls over financial reporting that occurred during the period covered by this Form 20-F that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.



**Item 16 — [Reserved]**

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**Item 16A — Audit Committee Financial Expert**

Syngenta's Audit Committee consists of at least three independent non-executive members of the Board; the Chairman of the Board is not eligible as a member of the Audit Committee. Currently, the Committee is composed of Gunnar Brock (Chairman), Stefan Borgas and David Lawrence. Syngenta's Board of Directors has carefully considered the definition of "audit committee financial expert" adopted by the United States Securities and Exchange Commission and has determined that, while each of the directors on the Audit Committee satisfies certain aspects of that definition, none of such directors, individually, qualifies as an audit committee financial expert. Syngenta's Board believes that the collective experience of such members enables them, as a group, to act as an effective Audit Committee and that the Audit Committee has functioned, and can continue to function, effectively without appointing an additional member who would qualify as an audit committee financial expert.

**Item 16B — Code of Ethics**

Syngenta has adopted a Code of Ethics applicable to its Chairman, Chief Executive Officer, Chief Financial Officer, Group Financial Controller, Head of Financial and IS Compliance, Head of Internal Audit, Head of Group Treasury and all members of the Syngenta Executive Committee. A copy of Syngenta's Code of Ethics has been filed with the Securities and Exchange Commission and is included as Exhibit 11.1 to this annual report. During 2016, no amendments were made to a provision of the Code of Ethics that applies to any of the above-mentioned officers and / or members of the Syngenta Executive Committee and no waivers were explicitly or implicitly granted to any of them, in each case that would be required to be disclosed herein.

**Item 16C — Principal Accountant Fees and Services****Fees Paid to the Independent Registered Public Accounting Firm**

The Annual General Meeting engaged KPMG AG ("KPMG") to perform an annual audit of the Company's financial statements in 2016 and 2015. The following table presents information concerning fees paid to KPMG in each of those years.

(\$m)	2016	2015
Audit fees <sup>1</sup>	7.9	9.1
Audit-related fees <sup>2</sup>	0.7	0.1
Tax fees <sup>3</sup>	0.3	1.2
All other fees <sup>4</sup>	0.2	0.3
Total	9.1	10.7

<sup>1</sup> Audit services are defined as the audit work required to allow the external auditor to issue an opinion on the statutory and regulatory filings of the Group and its subsidiaries. This category therefore includes services such as statutory and other legally required audits, attest services, comfort letters, consents and assistance with and review of documents filed with the US Securities and Exchange Commission.

<sup>2</sup> Audit-related services include audits of pension funds and employee benefit plans, due diligence and related audits, internal control reviews and consultation concerning financial accounting and reporting standards.

<sup>3</sup> Tax services include all services performed by the external auditor's tax department except those services related to the audit. It includes tax compliance services.

<sup>4</sup> Other services/additional fees include advice relating to process improvements, training and subscription fees for accounting and reporting updates.

**Pre-Approval of Services Provided by KPMG AG**

The Audit Committee has adopted policies and procedures for pre-approving all audit and non-audit work performed by KPMG in 2016 and 2015. Specifically, the policies and procedures prohibit KPMG from performing any services for the Company or its subsidiaries during the years when they are Syngenta's auditor without the prior approval of the Audit Committee.

All of the services provided by KPMG in 2016 and 2015 were approved by the Audit Committee pursuant to the approval policies described above, and none of such services were approved pursuant to the procedures described in Rule 2-01(c)(7)(i)(C) of Regulation S-X, which waives the general requirement for pre-approval in certain circumstances.

**Item 16D — Exemptions From the Listing Standards for Audit Committees**

Not applicable.

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**Item 16E — Purchases of Equity Securities by the Issuer and Affiliated Purchasers**

None.

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**Item 16F — Change in Registrant’s Certifying Accountant**

Not applicable.

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**Item 16G — Corporate Governance**

As permitted by section 303A of the New York Stock Exchange (NYSE) Listed Company Manual, Syngenta’s corporate governance practices differ from those of domestic companies in the following ways:

**NYSE Corporate Governance Standards (Rules)**

According to paragraph 8 of section 303A (Corporate Governance Standards) of the NYSE Listed Company Manual, shareholders must be given the opportunity to vote on all equity-based compensation plans and material revisions thereto (with limited exemptions).

**Practice at Syngenta**

Syngenta’s Articles of Incorporation specify the basic principles relating to performance-based compensation and the award or allocation of equity securities to members of the Board of Directors and the Executive Committee. Details of the compensation plans are disclosed in the annual Compensation Report.

The maximum total compensation for members of the Board of Directors and the Executive Committee is submitted for approval to the General Meeting of shareholders every year. However, the decisions on the elements and the structure of the performance-based compensation plans and any revisions thereto are made by Syngenta’s Compensation Committee.

**Item 16H — Mine Safety Disclosure**

Not applicable.

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## **PART III**

### **Item 17 — Financial Statements**

Syngenta has responded to Item 18 in lieu of responding to this item.

### **Item 18 — Financial Statements**

The following financial statements, together with the Report of Independent Registered Public Accounting Firm thereon of February 7, 2017 are filed as part of this annual report:

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Report of Independent Registered Public Accounting Firm	F-1
Report of Independent Registered Public Accounting Firm	F-2
Consolidated Income Statement	F-3
Consolidated Statement of Comprehensive Income	F-4
Consolidated Balance Sheet	F-5
Consolidated Cash Flow Statement	F-6
Consolidated Statement of Changes in Equity	F-7
Notes to the Syngenta Group Consolidated Financial Statements	F-8

**Item 19 — Exhibits**

The following documents are exhibits to this annual report:

<b>Exhibit Number</b>	<b>Description of Document</b>
1.1	English Translation of the Articles of Incorporation of Syngenta AG, as amended April 26, 2016
1.2	English Translation of the Regulations Governing the Internal Organization of Syngenta AG, as amended January 1, 2016
2.1	Deposit Agreement between The Bank of New York Mellon and Syngenta AG**
2.2	Amended and Restated Trust Deed dated September 30, 2008 among Syngenta Finance N.V., Syngenta Finance AG, Syngenta AG and BNY Corporate Trustee Services Limited, as Trustee***
2.3	Indenture dated as of March 28, 2012 among Syngenta N.V., Syngenta AG and The Bank of New York Mellon****
4.3	Environmental Matters Agreement dated September 12, 2000 between Syngenta AG and AstraZeneca PLC*****
4.4	Environmental Matters Agreement dated September 12, 2000 between Syngenta AG and Novartis AG*****
4.5	Environmental Matters Agreement dated September 12, 2000 among Zeneca AG Products Holdings Inc. and Zeneca Holdings Inc. and Stauffer Management Company*****
4.6	Environmental Matters Agreement dated September 12, 2000 among Syngenta Crop Protection Inc., Novartis Corporation and Novartis Agribusiness Holding, Inc.*****
4.11	License of Intellectual Property Rights Excluding Rights in Trade Marks and Software dated January 4, 2000 between AstraZeneca UK Limited and Zeneca Limited*****
4.12	License of Intellectual Property Rights Excluding Rights in Trade Marks and Software dated January 4, 2000 between Zeneca Limited and AstraZeneca UK Limited*****
4.13	Trade Mark License dated January 4, 2000 between AstraZeneca UK Limited and Zeneca Limited*****
4.14	Software License dated January 4, 2000 between AstraZeneca UK Limited and Zeneca Limited*****
4.15	General Principles for the Separation of Intellectual Property between Novartis and Novartis Agribusiness (Syngenta)*****
4.19	Master Sharing Agreement dated September 12, 2000 between AstraZeneca UK Limited and Zeneca Limited*****
4.20	Multicurrency Revolving Facilities Agreement dated November 2, 2012 for Syngenta AG and the companies named therein as Borrowers, arranged by Banc of America Securities Limited, Banco Santander, S.A., Citigroup Global Markets Limited, Credit Suisse AG, Deutsche Bank AG, HSBC Bank PLC, UBS AG and Unicredit Bank AG, with Banc of America Securities Limited acting as agent and the financial institutions set forth in Schedule I thereto (“the Multicurrency Revolving Facilities Agreement”) ‡
4.21	First Extension Request dated September 16, 2013 and Lenders Consent dated October 18, 2013 under the Multicurrency Revolving Facilities Agreement‡‡
4.22	Second Extension Request dated September, 2014 and Lenders Consent dated October 20, 2014 under the Multicurrency Revolving Facilities Agreement*
4.23	Syngenta Long-Term Incentive Plan - USA (Stock Options and Restricted Stock Units)‡
4.24	Syngenta Deferred Share Plan (Share Awards)‡
4.25	Syngenta Corporation Employee Stock Purchase Plan‡
4.26	Syngenta Share Plan for Non-Executive Directors‡‡‡



- 4.27 Syngenta 2015 Executive Long-Term Incentive Plan (Stock Options and Performance Stock Units)\*
- 4.28 Notice of Establishment of Uncommitted Revolving Facility Commitments dated January 29, 2016<sup>1</sup>
- 4.29 Transaction Agreement, dated February 2, 2016 between China National Chemical Corporation and China National Agrochemical Corporation and Syngenta AG<sup>2</sup>
- 8.1 Subsidiaries of Syngenta AG§
- 11.1 Syngenta Code of Ethics for Senior Executive Officers‡‡‡‡‡
- 12.1 Certification by CEO pursuant to Section 302
- 12.2 Certification by CFO pursuant to Section 302
- 13.1 Certification by CEO pursuant to Section 906
- 13.2 Certification by CFO pursuant to Section 906
- 15.1 Consent of Independent Registered Public Accounting Firm

1 Exhibit incorporated by reference to Annual Report on Form 20-F filed February 11, 2016 (File No. 001-15152)

2 Exhibit incorporated by reference to Exhibit 99(D) of Form SC TO-T filed on March 23, 2016 (File No. 005-79659)

\* Exhibit incorporated by reference to Annual Report on Form 20-F filed February 12, 2015 (File No. 001-15152).

\*\* Exhibit incorporated by reference to the Registration Statement on Form F-6 filed November 20, 2008 (File No. 333-155523).

\*\*\* Exhibit incorporated by reference to Annual Report on Form 20-F filed February 18, 2009 (File No. 001-15152).

\*\*\*\* Exhibit incorporated by reference to Exhibit 4.1 of Report on Form 6-K filed on March 29, 2012 (File No. 001-15152).

\*\*\*\*\* Exhibit incorporated by reference to the Registration Statement on Form F-4 filed September 12, 2000 (File No. 333-125222).

‡ Exhibits incorporated by reference to Annual Report on Form 20-F filed February 14, 2013 (File No. 001-15152).



⌘⌘ Exhibits incorporated by reference to Annual Report on Form 20-F filed February 13, 2014 (File No. 001-15152)

⌘⌘⌘ Exhibit incorporated by reference to Annual Report on Form 20-F filed February 16, 2012 (File No. 001-15152).

⌘⌘⌘⌘ Exhibit incorporated by reference to Annual Report on Form 20-F filed March 25, 2004 (File No. 001-15152).

§ The subsidiaries of Syngenta are set forth in Item 4 of this annual report.

Syngenta hereby agrees to furnish copies of certain long-term debt instruments to the Securities and Exchange Commission upon request of the Commission; therefore such instruments are not being filed as exhibits to this Form 20-F for the year ended December 31, 2016. The amount of debt authorized under each long-term debt instrument does not exceed 10 percent of Syngenta's total assets.

SIGNATURES

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this annual report on its behalf.

Syngenta AG

By: /s/ Erik Fyrwald  
Name: Erik Fyrwald  
Title: Chief Executive Officer

Dated: February 16, 2017

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SIGNATURES

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this annual report on its behalf.

Syngenta AG

By: /s/ Mark Patrick

Name: Mark Patrick

Title: Chief Financial Officer

Dated: February 16, 2017

Report of Independent Registered Public Accounting Firm

**The Board of Directors and Shareholders**

**Syngenta AG, Basel:**

We have audited Syngenta AG's internal control over financial reporting as of December 31, 2016, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Syngenta AG's Board of Directors and management are responsible for maintaining effective internal control over financial reporting and management is responsible for its assessment of the effectiveness of internal control over financial reporting, included in Item 15 (b) of Syngenta AG's Annual Report on Form 20-F for the year ended December 31, 2016. Our responsibility is to express an opinion on Syngenta AG's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, Syngenta AG maintained, in all material respects, effective internal control over financial reporting as of December 31, 2016, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of Syngenta AG and subsidiaries as of December 31, 2016 and 2015, and the related consolidated income statements, consolidated statements of comprehensive income, consolidated cash flow statements and consolidated statements of changes in equity for each of the years in the three-year period ended December 31, 2016, and our report dated February 7, 2017 expressed an unqualified opinion on those consolidated financial statements.

/s/ KPMG AG

Basel, Switzerland

February 7, 2017

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Report of Independent Registered Public Accounting Firm

## **The Board of Directors and Shareholders**

### **Syngenta AG, Basel:**

We have audited the accompanying consolidated balance sheets of Syngenta AG and subsidiaries (the Company) as of December 31, 2016 and 2015, and the related consolidated income statements, consolidated statements of comprehensive income, consolidated cash flow statements and consolidated statements of changes in equity for each of the years in the three-year period ended December 31, 2016. These consolidated financial statements are the responsibility of the Syngenta AG's Board of Directors and management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2016 and 2015, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2016, in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the Company's internal control over financial reporting as of December 31, 2016, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO), and our report dated February 7, 2017 expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting.

/s/ KPMG AG

Basel, Switzerland

February 7, 2017

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## Syngenta Group Consolidated Financial Statements

### Consolidated Income Statement

(for the years ended December 31, 2016, 2015 and 2014)

(\$m, except share and per share amounts)	Notes	2016	2015	2014
Sales	4, 5	12,790	13,411	15,134
Cost of goods sold		(6,507)	(7,042)	(8,192)
Gross profit		6,283	6,369	6,942
Marketing and distribution		(2,117)	(2,210)	(2,497)
Research and development		(1,299)	(1,362)	(1,430)
General and administrative:				
Restructuring	6	(407)	(388)	(193)
Other general and administrative		(813)	(568)	(717)
Operating income		1,647	1,841	2,105
Income from associates and joint ventures	5	7	7	7
Interest income	28	181	150	152
Interest expense	28	(200)	(169)	(195)
Other financial expense		(19)	(22)	(35)
Currency gains/(losses), net	28	(253)	(215)	(139)
Financial expense, net		(291)	(256)	(217)
Income before taxes		1,361	1,592	1,895
Income tax expense	7	(180)	(248)	(273)
Net income		1,181	1,344	1,622
Attributable to:				
Syngenta AG shareholders	8	1,178	1,339	1,619
Non-controlling interests	3	5	5	3
Net income		1,181	1,344	1,622
Earnings per share (\$):				
Basic	8	12.80	14.57	17.66
Diluted	8	12.79	14.52	17.60
Weighted average number of shares:				
Basic		92,020,494	91,908,128	91,674,127
Diluted		92,092,649	92,206,535	92,007,089

The accompanying notes form an integral part of the consolidated financial statements.

All activities were in respect of continuing operations.



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**Syngenta Group Consolidated Financial Statements**

## Consolidated Statement of Comprehensive Income

(for the years ended December 31, 2016, 2015 and 2014)

(\$m)	Notes	2016	2015	2014
Net income		1,181	1,344	1,622
Components of other comprehensive income (OCI)				
Items that will not be reclassified to profit or loss:				
Losses on equity investments at fair value through OCI	28	-	(3)	(33)
Actuarial losses of defined benefit post-employment plans	14, 22	(520)	(61)	(511)
Income tax relating to items that will not be reclassified to profit or loss	7	114	10	127
		(406)	(54)	(417)
Items that may be reclassified subsequently to profit or loss:				
Unrealized gains/(losses) on derivatives designated as cash flow and net investment hedges and related hedging costs	27	34	38	(37)
Currency translation effects		(301)	(698)	(625)
Income tax relating to items that may be reclassified subsequently to profit or loss	7	37	(74)	(65)
		(230)	(734)	(727)
Total OCI		(636)	(788)	(1,144)
Total comprehensive income		545	556	478
Attributable to:				
Syngenta AG shareholders		543	553	475
Non-controlling interests		2	3	3
Total comprehensive income		545	556	478

The accompanying notes form an integral part of the consolidated financial statements.

All activities were in respect of continuing operations.

## Syngenta Group Consolidated Financial Statements

### Consolidated Balance Sheet

(at December 31, 2016 and 2015)

(\$m, except share amounts)	Notes	2016	2015
<b>Assets</b>			
Current assets:			
Cash and cash equivalents	28	1,284	1,141
Trade receivables	9, 28	4,543	4,128
Other accounts receivable	9, 28	570	721
Inventories	11	3,884	4,345
Derivative and other financial assets	28	500	401
Other current assets	10	386	338
Income taxes recoverable		189	124
Total current assets		11,356	11,198
Non-current assets:			
Property, plant and equipment	12	3,298	3,383
Intangible assets	13	2,863	3,040
Deferred tax assets	7	941	783
Financial and other non-current assets	14, 28	440	396
Investments in associates and joint ventures	14	170	177
Total non-current assets		7,712	7,779
Total assets		19,068	18,977
<b>Liabilities and equity</b>			
Current liabilities:			
Trade accounts payable	15, 28	(3,338)	(3,311)
Current financial debt and other financial liabilities	16, 28	(1,047)	(730)
Income taxes payable		(526)	(444)
Other current liabilities	17, 28	(1,174)	(983)
Provisions	19	(182)	(193)
Total current liabilities		(6,267)	(5,661)
Non-current liabilities:			
Financial debt and other non-current liabilities	18, 28	(3,077)	(3,501)
Deferred tax liabilities	7	(610)	(668)
Provisions	19	(1,143)	(727)
Total non-current liabilities		(4,830)	(4,896)
Total liabilities		(11,097)	(10,557)
Shareholders' equity:			
Issued share capital: 2016: 92,578,149 ordinary shares (2015: 92,945,649)	20	(6)	(6)
Retained earnings		(6,018)	(6,500)
Reserves		(2,051)	(2,316)
Treasury shares: 2016: 357,658 ordinary shares (2015: 1,161,397)	20	125	421

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Total shareholders' equity	(7,950)	(8,401)
Non-controlling interests	(21)	(19)
Total equity	(7,971)	(8,420)
Total liabilities and equity	(19,068)	(18,977)

The accompanying notes form an integral part of the consolidated financial statements.

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## Syngenta Group Consolidated Financial Statements

### Consolidated Cash Flow Statement

(for the years ended December 31, 2016, 2015 and 2014)

(\$m)	Notes	2016	2015	2014
Income before taxes		1,361	1,592	1,895
Reversal of non-cash and other reconciling items	21	1,300	1,203	808
Cash (paid)/received in respect of:				
Interest received		174	138	138
Interest paid		(179)	(163)	(197)
Other financial receipts		189	334	139
Other financial payments		(505)	(460)	(286)
Income taxes		(219)	(482)	(330)
Restructuring costs	19	(73)	(125)	(26)
Contributions to pension plans, excluding restructuring costs	19	(150)	(156)	(184)
Other provisions	19	(55)	(80)	(70)
Operating cash flow before change in net working capital		1,843	1,801	1,887
Change in net working capital:				
Change in inventories		252	32	326
Change in trade and other working capital assets		(374)	(868)	(332)
Change in trade and other working capital liabilities		86	225	50
Cash flow from operating activities		1,807	1,190	1,931
Additions to property, plant and equipment	12	(425)	(453)	(600)
Proceeds from disposals of property, plant and equipment		30	74	39
Purchases of intangible assets	13	(132)	(90)	(82)
Purchases of investments in associates and other financial assets		(71)	(29)	(38)
Proceeds from disposals of intangible and financial assets		17	46	39
Business acquisitions (net of cash acquired) and business divestments		60	(10)	(87)
Cash flow used for investing activities		(521)	(462)	(729)
Proceeds from increase in third party interest-bearing debt		400	1,098	2,272
Repayments of third party interest-bearing debt		(586)	(1,174)	(1,556)
Sales of treasury shares and options over own shares	23	92	85	53
Purchases of treasury shares		-	(119)	(157)
Distributions paid to shareholders		(1,040)	(1,078)	(1,032)
Cash flow used for financing activities		(1,134)	(1,188)	(420)
Net effect of currency translation on cash and cash equivalents		(9)	(37)	(46)
Net change in cash and cash equivalents		143	(497)	736
Cash and cash equivalents at the beginning of the year		1,141	1,638	902
Cash and cash equivalents at the end of the year		1,284	1,141	1,638

Of total cash and cash equivalents of \$1,284 million (2015: \$1,141 million; 2014: \$1,638 million), \$123 million (2015: \$157 million; 2014: \$166 million) is required to meet insurance solvency requirements of the Group's insurance subsidiaries. These amounts therefore were not readily available for the general purposes of the Group. There are no other significant restrictions on Syngenta's ability to use assets or settle liabilities.

At December 31, 2016, cash equivalents totaled \$931 million (2015: \$839 million; 2014: \$1,218 million) and consisted of bank and money market fund deposits.

The accompanying notes form an integral part of the consolidated financial statements.

## Syngenta Group Consolidated Financial Statements

## Consolidated Statement of Changes in Equity

(for the years ended December 31, 2016, 2015 and 2014)

(\$m)	Attributable to Syngenta AG shareholders					Retained earnings	Total share-holders equity	Non-controlling interests	Total equity
	Par value of ordinary shares	Additional paid-in capital	Treasury shares, at cost	Fair value reserves	Cumulative translation adjustment				
January 1, 2014	6	3,437	(481)	(35)	413	6,151	9,491	13	9,504
Net income						1,619	1,619	3	1,622
OCI				(61)	(695)	(388)	(1,144)		(1,144)
Total comprehensive income	-	-	-	(61)	(695)	1,231	475	3	478
Transactions with owners as owners:									
Share based compensation			109			7	116		116
Dividends paid						(1,032)	(1,032)		(1,032)
Share repurchases			(157)				(157)		(157)
Cancellation of treasury shares		(7)	71			(64)	-		-
Income taxes on share based compensation						(4)	(4)		(4)
December 31, 2014	6	3,430	(458)	(96)	(282)	6,289	8,889	16	8,905
Net income						1,339	1,339	5	1,344
OCI				24	(760)	(50)	(786)	(2)	(788)
Total comprehensive income	-	-	-	24	(760)	1,289	553	3	556
Transactions with owners as owners:									
Share based compensation			171			(10)	161		161
Dividends paid						(1,078)	(1,078)		(1,078)
Share repurchases			(134)				(134)		(134)
Income taxes on share based						10	10		10

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compensation									
December 31, 2015	6	3,430	(421)	(72)	(1,042)	6,500	8,401	19	8,420
Net income						1,178	1,178	3	1,181
OCI				23	(274)	(384)	(635)	(1)	(636)
Total comprehensive income	-	-	-	23	(274)	794	543	2	545
Transactions with owners as owners:									
Share based compensation			168			(102)	66		66
Dividends paid						(1,040)	(1,040)		(1,040)
Cancellation of treasury shares		(14)	128			(114)	-		-
Income taxes on share based compensation						(20)	(20)		(20)
December 31, 2016	6	3,416	(125)	(49)	(1,316)	6,018	7,950	21	7,971

The accompanying notes form an integral part of the consolidated financial statements.

The amount available for dividend distribution is based on Syngenta AG's shareholders' equity determined in accordance with the legal provisions of the Swiss Code of Obligations. In 2014, a dividend of CHF 10.00 (\$11.25) per share was paid in respect of 2013. In 2015, a dividend of CHF 11.00 (\$11.73) per share was paid in respect of 2014. In 2016, a dividend of CHF 11.00 (\$11.32) per share was paid in respect of 2015.

Included within the fair value reserves are (i) cash flow hedge reserves, which comprise the effective portion of the cumulative net change in the fair value of cash flow hedging instruments related to hedged items that have not yet been recognized in profit or loss, and (ii) fair value reserves, which comprise the cumulative net change in the fair value of investments at fair value through OCI. Movements in the cash flow hedge reserves are shown in Note 27. Movements in the fair value reserves for equity investments are shown in Note 28. Amounts within OCI related to actuarial gains and losses of defined benefit post-employment plans are presented within retained earnings.

The cumulative translation adjustment comprises all foreign currency differences arising from the translation of the financial statements of foreign operations, as well as from the translation of long-term monetary items that are part of net investments in foreign subsidiaries.



## Notes to the Syngenta Group Consolidated Financial Statements

### 1. Basis of preparation of the consolidated financial statements

These consolidated financial statements have been prepared in accordance with International Financial Reporting Standards (IFRS or IFRSs) as issued by the International Accounting Standards Board (IASB). The consolidated financial statements have been prepared on an historical cost basis, except for items that are required by IFRSs to be measured at fair value, principally certain financial instruments and biological assets, which are valued at fair value less costs to sell.

The consolidated financial statements incorporate the financial statements of Syngenta AG, a company domiciled and incorporated in Switzerland, and all of its more than 150 subsidiaries globally (together referred to as “Syngenta”) and Syngenta’s interests in associates and joint ventures. Approximately 40 subsidiaries are considered to be significant legal entities. There are no material non-controlling interests or structured entities. Syngenta’s main research and development facilities are located in Switzerland, UK and USA and its main production sites are in Switzerland, UK, USA, France, China and Brazil. Syngenta AG’s principal executive offices are at Schwarzwaldallee 215, 4058 Basel, Switzerland.

The consolidated financial statements are presented in United States dollars (“\$”) as this is the major currency in which revenues are denominated. “\$m” refers to millions of United States dollars. The functional currency of Syngenta AG is the Swiss franc (“CHF”).

Syngenta is a world leading agribusiness operating in the crop protection, seeds and lawn and garden markets. Crop protection chemicals include herbicides, insecticides, fungicides and seed treatments to control weeds, insects and diseases in crops, and are essential inputs enabling growers around the world to improve agricultural productivity and food quality. In Seeds, Syngenta operates in the high value commercial sectors of field crops (including corn, oilseeds, cereals and sugar beet) and vegetables. The Lawn and Garden business provides professional growers and consumers with flowers, turf and landscape, and professional pest management products.

The preparation of financial statements requires management to exercise judgment when applying accounting policies and to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimated. Note 2 below includes further discussion of certain critical accounting estimates.

The consolidated financial statements were approved for issue by the Board of Directors on February 7, 2017 and are subject to approval by the 2017 Annual General Meeting of Syngenta AG shareholders.

## 2. Significant accounting policy judgments and estimates

This note describes the impact on Syngenta's consolidated financial statements of significant accounting judgments made when applying IFRSs and critical assumptions and accounting estimates.

### Application of critical accounting policies

#### Royalty and license income

Individual agreements licensing to third parties the right to use Syngenta technology can and do have unique terms and, consequently, the accounting judgments required to apply IAS 18 "Revenue" to each such agreement can differ significantly.

In 2015, Syngenta entered into license agreements with KWS SAAT SE ("KWS"), Vilmorin & Cie S.A. ("Limagrain") and their joint ventures AgReliant Genetics LLC, AgReliant Genetics Inc. (collectively "AgReliant") and Genective S.A. ("Genective"), granting worldwide non-exclusive rights to its corn germplasm and traits portfolio, including in-licensed third party traits. Syngenta received a \$200 million non-refundable license payment in 2015 in accordance with the agreement. Syngenta determined that it had no substantive future performance obligations in respect of this amount and therefore recognized it in full as revenue in 2015. No further revenue was recognized from this agreement in 2016. Further contingent milestone payments may become receivable, and would be recognized at that time as license income, dependent upon future regulatory approvals and agreements. Additional sales-based royalties may also become receivable if sales of licensed products exceed thresholds defined in the agreement, and would be recognized as revenue at the time that the licensees make the related sales.

#### Impairment

For purposes of testing goodwill for impairment, goodwill is allocated to cash generating units (CGUs). Syngenta generally defines each crop protection product active ingredient and each seed crop as a CGU. However, where one active ingredient is sold in mixture with other active ingredients to a significant extent, the active ingredients concerned are grouped together into a single CGU because independent cash inflows only exist at this higher level. Each CGU is generally defined on a global basis, reflecting the international nature of the business, and contains tangible assets such as plant and equipment as well as intangible assets such as product and patent rights.

North America corn and soybean seeds are defined as a single CGU because of common intellectual property and other interdependencies between these two crops, which do not apply to other crops. Goodwill on certain major acquisitions, principally Zeneca agrochemicals business goodwill of \$548 million, was allocated to each Syngenta operating segment in proportion to each such segment's relative value at the time Syngenta established its current basis of segmentation, and is tested for impairment at those levels by relating the allocated amount for each segment to the total cash flows of the respective segment. The goodwill amounts allocated to segments and significant other CGUs are disclosed in Note 13.

For CGUs to which no goodwill is allocated, a reduction in forecast sales within management's five year forecast horizon compared with the previous year's five year forecast cycle, combined with a reduction in latest forecasts of current year sales compared with the current year budget, is generally considered an indicator of market related impairment and results in the performance of detailed impairment tests. Syngenta also performs detailed impairment tests when there are asset specific indicators of impairment such as withdrawal of or restrictions placed upon product registrations, plans to divest products or, for property, plant and equipment, plans to restructure or close a site. Higher discount rates are used to test property, plant and equipment for impairment in the case of restructuring because of the higher risk associated with remaining cash flows when operations are being physically relocated. The value in use calculation takes account of cash flows from the remaining period of operations and includes decommissioning costs.

If a CGU becomes impaired, the impairment loss is allocated first to any goodwill in the CGU, and then to reduce the CGU's other assets pro rata.

#### Classification of assets and liabilities to be divested

IFRS 5 requires non-current assets and liabilities that are to be divested to be classified as held-for-sale in the consolidated balance sheet if they are immediately available for sale in their current condition and the divestment transaction is highly probable and is expected to occur within one year of the balance sheet date. Such classification leads to significant changes in how assets are measured and how assets and liabilities are presented in the consolidated financial statements, and requires significant judgement to estimate the probability and timing of completing a divestment transaction. While significant uncertainty still exists whether a business unit will be divested, retained or closed, Syngenta does not reclassify assets and liabilities as held for sale.

On August 18, 2015, Syngenta announced that it intended to divest its Flowers seeds business, which is reported as part of its Lawn and Garden operating segment. On September 3, 2015, Syngenta announced actions to accelerate shareholder value creation, including an intention to divest its global Vegetables seeds business, which is reported within the regional operating segments of its Crop Protection and Seeds business, as a means to demonstrate the value of its global seeds portfolio. At December 31, 2015, Syngenta had initiated an internal review of the proposed divestments to take account of market conditions and the complexity of separating the businesses from Syngenta. In view of this, Syngenta concluded that a sale of these businesses was no longer highly probable and therefore did not classify them as held-for-sale at December 31, 2015. On February 2, 2016, Syngenta formally decided not to pursue the proposed divestments of Flowers and Vegetables.

#### Share based payment

Syngenta's application of share based payment accounting in 2016 is described in Note 3.

#### Critical accounting estimates

#### Foreign currency translation

As Syngenta moves its inventories through a complex international supply chain, several group entities incur related purchase, manufacturing and distribution costs during the inventory holding period, which may be up to nine months for crop protection chemicals and longer for certain crop seeds. The amounts of consolidated cost of goods sold in the consolidated income statement and of inventories in the consolidated balance sheet include all relevant costs incurred from the time raw materials are purchased until the finished products reach their final location and condition before sale to third party customers or their location and condition at the balance sheet date, respectively, after eliminating profits and losses arising from intercompany transactions. In 2015, following the removal by the Swiss National Bank of the cap on the Swiss franc value versus the Euro, Syngenta refined the method it uses to translate inventories. Syngenta determines historical inventory cost in US dollars by translating original currency amounts of cost directly into US dollars using the exchange rates that applied when those costs were incurred, and upon sale to third parties, determines consolidated cost of goods sold by translating these amounts to US dollars at the average exchange rates of the period in which the sale occurs. Inventories at each period end are measured by translating these amounts directly into US dollars at the exchange rates at the balance sheet date. Foreign currency translation gains and losses that result from these translations are recognized in OCI. Prior to 2015, Syngenta translated costs into US dollars indirectly via

the currencies of the Syngenta entities which had held the inventories over the period since their initial recognition. Under that method, reported product costs varied according to the route the products had taken through Syngenta's supply chain. In the opinion of Syngenta, the refined method it adopted in 2015 better reflects economic reality when currency exchange rates fluctuate during the inventory holding period, because it ensures that inventories sourced with the same cost profile and which are at the same stage of manufacture are valued consistently regardless of which Syngenta entity purchases and holds them. Syngenta applied this refined method prospectively as a change in estimate. Had Syngenta applied its current method during 2014, 2014 net income would have been approximately \$20 million higher than reported. Had Syngenta continued to apply its previous method, 2016 and 2015 net income would have been approximately \$6 million and \$73 million lower than reported, respectively, with the 2015 impact being largely due to the removal of the Swiss franc cap.

#### Adjustments to revenue and trade receivables

Syngenta's products are consumed mainly by growers, but Syngenta invoices the majority of its sales to distributors. The timing and amount of cash inflows received by growers is impacted by a broad range of economic and political risks, including crop yields and prices, the availability of credit, and the cost of agricultural inputs such as the products sold by Syngenta and its competitors. The cash flows of distributors that supply Syngenta's products to growers and represent the majority of Syngenta's customers are also impacted by these factors. These distributors vary in size and nature from large publicly owned entities to small or medium sized owner-managed businesses. Syngenta's customer base reflects the geographical diversity of its operations, which encompass more than 90 countries and all significant agriculture areas. Considerable management effort and judgment is applied to actively manage and mitigate the risks to Syngenta from these factors and to determine the accounting estimates associated with them, which are set out below:

the estimated cost of incentive programs that provide rebates and discounts dependent upon achievement of sales targets, as well as cash discounts for punctual payment of accounts receivable. Syngenta records the estimated cost of these programs when the related sales are made, based on the programs' terms, market conditions and historical experience. At December 31, 2016, trade accounts payable includes \$1,366 million (2015: \$1,371 million) of accruals for customer rebates and incentive programs.

-commercial terms in certain markets also provide a right of return, subject to eligibility restrictions by product and either an annual cap equal to a percentage of sales in the immediately prior year, or a return period typically extending up to the end of the agricultural season in which the product was originally sold, which can be 9 months. Accruals for estimated product returns are based on contractual sales terms and on historical experience of actual returns where Syngenta considers these to be reliable estimates of future returns. At December 31, 2016, trade accounts payable includes \$160 million (2015: \$177 million) of accruals for sales returns. Actual returns can vary significantly from estimates in market segments where the distribution channel holds several months' sales of Syngenta products at the reporting date, forecast consumption of those products by growers could be materially affected if market or weather conditions after the reporting date were significantly different from those expected and the volume of products returned by distributors varies with changes in grower consumption. This is especially relevant to Brazil and certain other markets in the southern hemisphere given the Group's financial reporting year-end falls in the middle of the peak demand season for the Group's crop protection products. Until Syngenta changed contractual sales terms for crop protection products in Brazil in 2015 and in Argentina and Paraguay in 2016, Syngenta judged that sales returns could not be estimated reliably at the time of sale to distributors in those markets and deferred recognition until distributors had sold the related Syngenta products to growers. Syngenta used to estimate the amounts to be deferred by collecting from its distributors data that shows the quantities of Syngenta

products held by them at the reporting date and applying average actual sales prices to those quantities.

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At January 1, 2015, \$437 million of revenue and trade receivables was deferred, of which \$372 million related to Brazil. Because the changes made to contractual sales terms reduced the flexibility of distributors in those markets to return crop protection products and thus reduced uncertainty about the amount of sales returns, amounts deferred under this method reduced to \$35 million at December 31, 2015 and \$nil at December 31, 2016. The effect of earlier revenue recognition due to the change in contractual sales terms to distributors in Brazil, as measured by the difference between the \$345 million balance of receivables that had not yet been recognized as sales at the date Syngenta announced the change to customers and the \$106 million sales returns provision at December 31, 2015, was to increase reported 2015 sales by \$239 million. Syngenta has estimated that the consequent effect on 2015 net income was \$80 million. No comparable changes were made to contractual sales terms in Brazil in 2016. Sales made after the changes in terms have been recognized in accordance with contractual delivery terms, subject to allowances for returns. However, accruals for estimated product returns still require judgement and estimation by management and actual returns may vary from such estimates. Actual sales returns in 2016 in Brazil of crop protection products Syngenta sold during 2015 were \$161 million, which exceeded the \$106 million provided at December 31, 2015, mainly due to the severe drought conditions in parts of northern Brazil during February and March 2016. At December 31, 2016, the allowance for sales returns of crop protection products in Brazil was \$87 million, reflecting the more stable market conditions observed at the end of 2016 compared to 2015, with higher prices in several commodities, lower exchange rate volatility and normal disease pressure levels, together with reduced channel inventories held by distributors in northern Brazil.

allowances for doubtful receivables, which are estimated by critically analyzing individual receivable account balances, taking into account historical levels of recovery and the value of any security held, the economic condition of individual customers, and the overall economic and political environment in relevant countries. As shown in Note 9 below, the provision for doubtful receivables at December 31, 2016 amounted to \$396 million, or 8 percent (2015: \$319 million or 7 percent) of total trade receivables, of which \$168 million, \$44 million and \$60 million (2015: \$140 million, \$47 million and \$10 million) related to sales made to the Brazilian, Argentinian and Venezuelan markets respectively. In 2016, Syngenta reported \$67 million bad debt expense (2015: \$75 million). In 2015, bad debt expense arose principally because oil and commodity price and local currency weakness led to constraints on the availability of credit and foreign currency at both customer and country level in Brazil, Argentina and Venezuela, as well as from general changes in local crop conditions in those markets, as mitigated by barter programs and appropriate security. In 2016, \$49 million bad debt expense related to further deterioration in the economic position in Venezuela.

Syngenta records these estimates as separate allowances, but its estimation process recognizes their interdependency, as the level of credits to accounts receivable for discounts and product returns may affect the probability of receiving full payment of the net receivable balances.

#### Deferred tax assets

At December 31, 2016, Syngenta's deferred tax assets are \$941 million (2015: \$783 million), as further analysed in Note 7. Included in this balance are deferred tax assets for unused tax losses and tax credits of \$35 million (2015: \$40 million), of which \$19 million (2015: \$25 million) relates to tax losses. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the periods in which those temporary differences become deductible or in which tax losses can be utilized. The tax effect of unused tax losses is recognized as a deferred tax asset when it becomes probable that the tax losses will be utilized. In making assessments regarding deferred tax assets, management considers the scheduled reversal of deferred tax liabilities, projected future taxable

income and tax planning strategies. At December 31, 2016, based upon the level of historical taxable income and projections for future taxable income over the periods in which deferred tax assets are deductible, management believes that it is more likely than not that Syngenta will realize the benefits of these deductible differences. The amount of deferred tax assets considered realizable could however be reduced in subsequent years if estimates of future taxable income during their carry forward periods are reduced, or rulings by the tax authorities are unfavorable. Estimates are therefore subject to change due to both market related and government related uncertainties, as well as Syngenta's own future decisions on restructuring and other matters. Syngenta is unable to accurately quantify the future adjustments to deferred income tax expense that may occur as a result of these uncertainties.

The principal jurisdictions where deferred tax assets have not been recognized at December 31, 2016 and 2015 are Argentina, Belgium and Brazil. For Argentina, no net deferred tax assets have been recognized. Non recognition in Belgium relates to the impact of the post-acquisition integration of Devgen on actual tax losses and expected future taxable profits. At December 31, 2016, Syngenta has recognized \$160 million (2015: \$167 million) of net deferred tax assets in Brazil and has not recognized \$24 million (2015: \$46 million) of deferred tax assets. Local profitability in Brazil was reduced in 2015 and 2016 by challenging weather and market conditions, which included falls in commodity prices and credit restrictions, and local currency weakness. The amount of deferred tax assets Syngenta has recognized for Brazil at December 31, 2016 assumes moderate recovery in market conditions in 2017 and future years, resulting in local profitability similar to the historical average. Syngenta also plans a legal merger of its two principal Brazilian entities during 2017. As Brazilian tax regulations assess each entity under common ownership separately, the ability to combine the taxable profits of the entities after their merger increases the amount of deferred tax assets that can be recognized. However, future taxable profits are still not sufficient to recognize the deferred tax asset in full. In making this assessment, the forecast horizon used for taxable profits is 5 years. Taxable profits that may arise beyond the 5 year horizon are subject to greater uncertainty and have not been considered.

#### Uncertain tax positions

Syngenta estimates and accrues taxes that will ultimately be payable when reviews or audits by tax authorities of tax returns are completed. These estimates include significant management judgments about the eventual outcome of the reviews and audits of all open years based on the latest information available about the positions expected to be taken by each tax authority. Actual outcomes and settlements may differ significantly from the estimates recorded in these consolidated financial statements. This may affect income tax expense reported in future years' consolidated income statements.

Syngenta has a global supply chain, and intellectual property rights owned by Syngenta are used internationally within the Group. Transfer prices for the delivery of goods and charges for the provision of services, which include contract research and development, contract manufacturing and internal financing arrangements, by one Syngenta subsidiary to another may be subject to challenge by the national tax authorities in any of the jurisdictions in which Syngenta operates. Syngenta has a global transfer pricing policy in place and applies, to the maximum extent possible, a consistent methodology on a global basis. Transfer pricing determination in general, and the benchmarking process in particular, involve significant judgment and therefore a certain level of uncertainty remains as to whether tax authorities will challenge the pricing applied in the light of the new, complex transfer pricing guidelines in connection with the Base Erosion and Profit Shifting (BEPS) initiative.





At December 31, 2016, Syngenta's balance sheet includes assets of \$189 million (2015: \$124 million), and liabilities of \$526 million (2015: \$444 million), for current income taxes. These liabilities include \$400 million in respect of the uncertain tax positions described above (2015: \$382 million).

Releases of uncertain tax liabilities during 2016 related to favorable tax court decisions in India (among others taxation of so called location specific advantages and tax deduction of royalties). The liability for uncertain income tax positions that Syngenta expects will be resolved in 2017 is approximately 10 percent of total recognized current income tax liabilities.

In Brazil, Syngenta received an adverse ruling at administrative court level in a transfer pricing dispute for fiscal year 2003, and has filed an appeal at civil court level. Syngenta believes its appeal will succeed and has recognized no liability for the estimated \$74 million contingent liability in this dispute, or for the estimated \$19 million contingent liability in a similar transfer pricing dispute relating to fiscal year 2011 which is still at administrative court level and is expected to have a similar outcome.

#### Seeds inventory valuation and allowances

Inventories of \$3,884 million (2015: \$4,345 million) reported in Note 11 include \$1,146 million (2015: \$1,252 million) of seeds, which are subject to the risk of loss through physical deterioration at all stages of the operating cycle. Syngenta accounts for normal losses that occur during production, both in the pre-harvest growing and the post-harvest processing stages, as part of the cost of inventories of in-process and finished seeds. Normal losses in production, which include the cost of seeds discarded before processing because they do not meet Syngenta's quality standards, are therefore expensed when the related finished seed is sold to customers. Losses of finished seeds are expensed as incurred. Syngenta records allowances against the cost of seeds inventories for both quality and obsolescence. Syngenta records allowances for quality for finished seed which is currently of defective quality and for finished seed which is expected to deteriorate physically before sale, based on past experience. Syngenta records allowances for obsolescence for excess seed for which there is insufficient forecast customer demand over the expected remaining commercial life of each seed variety. For excess seeds that Syngenta is likely to be able to sell in the commodity market, the allowance is the cost of the seed minus its net realizable value, which is estimated as the expected net proceeds of commodity sale. If commodity sale is not probable, the allowance is the full cost of the excess seed inventories.

To determine the allowances required, management effort and judgment is applied to analyze at crop, variety and batch level seed inventory quantity, quality and forecast sales data, developing commercial practices, available markets and the speed of expected product portfolio changes. The rapidly evolving combination of corn seed genetics and trait stacks in North America and Latin America result in shorter commercial lives of a typical hybrid seed variety than in other crops and regions, with variation between actual and previously forecast sales and consequent greater risk of excess seed at individual hybrid level. Excess seed quantities are also affected by harvest yield, which is influenced by unpredictable weather and growing conditions. Seeds inventory allowance expense for 2016 was \$170 million (2015: \$181 million), and the allowance balance at December 31, 2016 was \$263 million (2015: \$279 million), with decreased provisions in North America corn and soybean and Latin America corn and sunflower.

## Impairment review

At December 31, 2016, Syngenta has reported intangible assets of \$1,627 million (2015: \$1,639 million) for goodwill and \$1,236 million (2015: \$1,401 million) for intangible assets other than goodwill, as reported in Note 13. The recoverable amount for goodwill has been determined based on value in use of the relevant operating segment, CGU or group of CGUs to which the goodwill is allocated, except where mentioned below. The recoverable amounts of all material intangible assets and property, plant and equipment (PP&E) have also been based on their value in use, except where mentioned below.

The main assumptions used in determining the recoverable amounts for operating segments and other CGUs include market size and Syngenta's market share, future sales prices and volumes, future development expenditures required to maintain products' marketability and registration in the relevant jurisdictions, and products' lives. At operating segment level, the key assumptions related to sales volume and value are expressed separately for each product line, market segment and crop, and assumptions related to expenses are expressed by region. At CGU level, assumptions are expressed by product. The assumptions are reviewed annually as part of management's budgeting and strategic planning cycles. These assumptions can be subject to significant adjustment from such factors as changes in crop growing patterns in major markets (for example, as a result of movements in crop prices), changes in product registration, or pressure from competitor products. Estimated cash flows for operating segments and other CGUs are based on Syngenta management forecasts, cover a five year horizon except where a longer horizon is required to reflect cash flows from the development and introduction of new products due to the length of the product development cycle, and include a terminal value which assumes a 2.0 percent long-term growth rate (2015: 2.0 percent). Syngenta's forecasts for the North America corn and soybean seed CGU also include the following key assumptions for revenue from seed sales:

for each of the two crops, market size expressed as acres planted, Syngenta's market share, crop commodity prices, and licensing revenues;

for new genetic traits, the timing of regulatory approval and marketing launch, and seed pricing compared with existing products.

Management believes, based on recent and expected future growth in agricultural markets, that there are long-term prospects for continued growth in Syngenta's business.

The key inputs used to calculate the pre-tax discount rates used to discount the estimated future cash flows included in the value in use calculations are as follows:

-post-tax weighted average cost of capital: 6.5 percent (2015: 7.1 percent)

risk-free rate: 2.3 percent (2015: 2.9 percent) equal to market yields on 30-year government bonds at the date of performing the annual impairment test

-equity risk premium 5.0 percent (2015: 5.0 percent).

The discount rate determined in this way is considered to include market estimates of industry sector risk premium. Syngenta's CGUs generally reflect the global nature of its Crop Protection and Seeds product sales, and a country risk premium is applied only to those CGUs where the geographical scope of operations and cash flows is limited. The pre-tax discount rates used for all segments, CGUs and groups of CGUs ranged from 7.4 percent to 14.6 percent (2015: 8.2 percent to 14.3 percent).

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At December 31, 2016 and 2015, the largest amounts of goodwill were allocated to the Asia Pacific operating segment (2016: \$325 million; 2015: \$338 million) and the North America corn and soybean CGU (2016 and 2015: \$315 million). The pre-tax discount rate used to test Asia Pacific goodwill for impairment was 8.3 percent (2015: 8.8 percent) and the forecast terminal growth rate was 2.0 percent (2015: 2.0 percent), except where mentioned below. The pre-tax discount rate used to test the North America corn and soybean CGU for impairment was 8.1 percent (2015: 8.5 percent) and the forecast terminal growth rate was 2.0 percent (2015: 2.0 percent).

In the opinion of Syngenta, the outcomes of the impairment tests are not sensitive to reasonably likely changes in any of the assumptions underlying the cash flow projections used for the impairment tests or in the discount rate in the periods presented for any segment, CGU or group of CGUs for which the carrying amount of goodwill is significant.

For the year ended December 31, 2016, impairment losses for intangible assets were \$65 million, relating mainly to a crop protection product CGU which has been affected by reduced demand due to low commodity prices and by manufacturing issues which have delayed achievement of targeted savings in production costs. Based on an updated cash flow forecast covering a 10 year horizon and an annual 5 percent decline in sales thereafter, the recoverable amount and remaining carrying amount of non-current assets in this CGU is \$12 million. For the year ended December 31, 2015, impairment losses for intangible assets were \$22 million, relating to a discontinued trademark, a termination of distribution rights and one CGU where expectation of future profitability reduced during 2015. The \$77 million (2015: \$68 million) recoverable amount of this CGU at December 31, 2016 was determined based on fair value less selling costs, which is higher than value in use because the latter does not take into account the cost and revenue benefits from potential future restructuring of the business (2015: recoverable amount was based on value in use). The recoverable amount was measured using a 13.0 percent pre-tax discount rate (2015: 8.2 percent), resulting in recognition of a further \$10 million impairment loss which reduced the carrying amount to \$14 million (2015: \$17 million). The other key assumption in determining the fair value less selling costs for this CGU at December 31, 2016 is the value of achievable future cost and revenue benefits. This represents a level 3 measurement in the fair value hierarchy. Reasonably possible changes in this assumption or in the discount rate could result in full impairment of the \$14 million remaining carrying amount of non-current assets in the CGU or reversal of part of the impairment losses recognized in 2016 and 2015. Impairments of property, plant and equipment were \$69 million (2015: \$43 million) as a result of decisions to restructure operations at several sites, including sites in the USA, Switzerland, China, India and Israel. In 2016, \$47 million of this impairment relates to land, buildings and other PP&E items at three sites with a recoverable amount of \$24 million, measured at fair value less selling costs based on offers received from potential buyers. This is equivalent to a level 3 fair value measurement. These assets have been classified as held-for-sale at December 31, 2016 and are presented in Note 10, Other current assets.

#### Environmental provisions

At December 31, 2016, Syngenta reported in Note 19 provisions for environmental remediation of \$194 million (2015: \$210 million). Remediation of environmental damage at sites with which Syngenta is associated typically takes a long time to complete due to the substantial amount of planning and regulatory approvals normally required before remediation activities can begin. The assumptions used by Syngenta to estimate its environmental provisions may change significantly before or during the remediation period due to changes in the extent of remediation required or the method used to remediate the damage. In addition, increases in or releases of environmental provisions may be necessary whenever new developments occur or additional information becomes available. The major uncertainties that impact the outcome of remediation are:

the extent of the contaminated land area, which is not always limited to land occupied by the Syngenta site. Ongoing monitoring or remediation work may identify changes in the area believed to be contaminated.

the nature of the work Syngenta will be obliged to perform or pay for. This depends upon the current or proposed use of contaminated land, substantively enacted legislation, and land zoning by and negotiation with the relevant regulatory authorities. In Switzerland, proposed remediation plans at certain sites may be subject to public referenda.

sharing of costs with other past and present occupiers of Syngenta's sites. At certain shared sites, Syngenta is responsible for an agreed proportion of remediation costs, which may change following discussions with authorities and the affected third parties. At other sites, third parties have agreed to reimburse Syngenta for some or all of the costs it incurs.

Consequently, environmental provisions can change significantly. Because of the inherent uncertainties in estimating such long-term future obligations, Syngenta periodically supplements its internal expertise with external expertise when determining environmental provisions.

In 2016 and 2015, except for \$16 million (2015: \$28 million) of cash outflows reflecting remediation activity, there were no significant changes to environmental provisions.

Proposals have been made suggesting remediation of the existing contamination on certain shared sites in preference to monitoring and containment. Syngenta will negotiate the proposals with the relevant authorities but the final adopted solution is subject to regulatory uncertainty and the ultimate liability may be higher or lower than the amount provided. Taken together, the provisions at December 31, 2016, for these shared sites comprise approximately 25 percent of total environmental provisions. The top ten exposures at the end of 2016 comprise approximately 80 percent of the total environmental provisions. In the opinion of management, reasonably possible increases in the provisions related to these top 10 exposures would not exceed 70 percent of the total environmental provision recognized at December 31, 2016.

At Syngenta's Monthey, Switzerland, production site, the work needed to remediate groundwater and soil contamination that exists under and around the site, including investigation, assessment, control and monitoring activities, is ongoing. The responsibility for these activities lies with Syngenta and one other chemical enterprise. In management's opinion, based on its current knowledge, Syngenta's environmental provisions are adequate to cover Syngenta's share of the expected costs to perform this remediation and no significant change to the provision has been made in 2016 or 2015. However, the extent of the remediation work required, the cost estimates and their allocation are subject to uncertainty.

Defined benefit post-employment benefits

At December 31, 2016, Syngenta has reported other non-current assets of \$nil (2015: \$21 million) and provisions of \$833 million (2015: \$408 million) as net defined benefit (DB) pension assets and liabilities, respectively, as set out in Note 22. These amounts may change significantly from one accounting period end to another due not only to expense recognized in profit and loss and cash payments, but also to changes in the actuarial assumptions used to measure the defined benefit obligation (DBO) and to variances between those assumptions and actual outcomes (“experience variances”), both of which are recognized in OCI. Significant judgment is required when selecting key assumptions for measuring post-employment benefit expense for a period and the DBO at the period end for each defined benefit plan. The specific assumptions used and experience variances are disclosed in Note 22. These variances were caused principally by external financial market movements in corporate bond yields used to benchmark the discount rate, and in asset prices affecting the actual return on assets. These factors are outside Syngenta’s direct control, and it is reasonably possible that future variances will be at least as great as past variances.

At December 31, 2016 and 2015, for each of Syngenta's three largest defined benefit pension plans, the sensitivity of the DBO to a change in each significant actuarial assumption is as follows:

(\$m)	2016			2015		
	Switzerland	UK	USA	Switzerland	UK	USA
Increase (decrease) in DBO						
Discount rate – 25 basis point decrease in rate	100	133	19	102	111	18
Discount rate – 25 basis point increase in rate	(93)	(130)	(19)	(96)	(109)	(17)
Pension increase – 25 basis point increase in rate	n/a	105	n/a	n/a	83	n/a
Pension increase – 25 basis point decrease in rate	n/a	(103)	n/a	n/a	(81)	n/a
Interest credit rate – 25 basis point increase in rate	19	n/a	n/a	22	n/a	n/a
Interest credit rate – 25 basis point decrease in rate	(19)	n/a	n/a	(21)	n/a	n/a
Life expectancy <sup>1</sup>	60	119	9	70	91	8

The life expectancy sensitivity is calculated using the difference between the reported DBO amount and the DBO amount projected using a one year increase, compared with the assumptions actually used, in the life expectancy for each plan member. This alternative projection is calculated using mortality rates that produce an immediate increase of one year for a plan member at normal retirement date, with corresponding changes at other ages.

Each sensitivity amount is calculated assuming that all other assumptions are held constant. It should be noted that economic factors and conditions often affect multiple assumptions simultaneously. For the UK pension plan, the discount rate and pension increase sensitivities shown are relative to price inflation, because limited price indexation of pensions in payment and deferred pension rights is required both by the Syngenta UK pension plan rules and by UK statutory pension regulations. For Syngenta's Swiss and US plans, the sensitivities are for changes in the nominal discount rates, because the rules and statutory regulations applicable to those plans contain no inflation linkage and indexation of benefits to inflation is not general market practice in those countries. Syngenta is not able to predict the extent of likely future changes in the discount rate or life expectancy assumptions, but based on past experience, the discount rate for each plan could change by up to 150 basis points (bp) within a twelve month period. Pensionable pay is now permanently frozen for the UK DB pension plan as explained below, and the sensitivity of the DBO to the assumed rate of increase in pensionable pay is not material for the Swiss or US plans.

To select the discount rate, Syngenta uses yields of AA rated corporate bonds. The relevant yield is determined either by analyzing a population of bonds whose cash flows collectively approximate the estimated cash flow profile of benefit payments by a Syngenta plan (UK and USA), or by using the yield of a published bond index and adjusting it in line with the relevant market yield curve to the extent that the average maturity of the bonds in the index is different from that of the relevant Syngenta benefits (Switzerland). Nominal discount rates at December 31, 2016 are as follows:

Switzerland	0.71 percent (2015: 0.75 percent)
UK	2.52 percent (2015: 3.70 percent)
USA	3.95 percent (2015: 4.35 percent)



In valuing the UK DBO at December 31, 2016, the UK long-term rate of retail price inflation (RPI) is assumed to be 3.28 percent (2015: 3.05 percent). Future statutory pension increases are based on consumer price inflation (CPI). Most Syngenta UK pension plan members have benefits specifically linked to RPI in accordance with the plan rules, but some members will see increases linked to CPI. CPI is assumed to be 100 basis points (2015: 100 basis points) below RPI.

In recent years, life expectancy has increased in all major countries in which Syngenta sponsors pension plans. Syngenta sets mortality assumptions after considering the most recent statistics practicable. Syngenta uses generational mortality tables to estimate probable future mortality improvements. These tables assume that the trend of increasing life expectancy will continue, resulting in pension benefit payments to younger members being likely to be paid for longer time periods than older members' pensions, given that assumed retirement ages are those defined in the rules of each plan. At December 31, 2016 and 2015, the UK DBO was estimated using mortality rates based on the UK Institute and Faculty of Actuaries' CMI SAPS Pensioner Amounts Light tables reflecting long cohort improvements from 2002-2012, with assumed future improvement of 1.25 percent per annum in line with the CMI Core Projections model 2015 (2015: CMI Core Projections model 2015). Syngenta's adoption of these mortality assumptions in 2015 reduced the benefit obligation by \$17 million (less than one percent).

At December 31, 2016 Syngenta valued the benefit obligation for its Swiss pension plan using mortality, disability and employee turnover assumptions from the BVG 2015 generational table (2015: BVG 2010 generational table). In 2016, changes to demographic assumptions, largely resulting from adoption of this table, increased the Swiss DBO by \$75 million (3.4 percent). At December 31, 2016 and 2015, Syngenta valued the benefit obligation for its US pension plan using mortality assumptions from the RP-2014 generational mortality table published in October 2014 with modified Scale MP-2014 mortality improvements using a 0.5 percent per annum long-term improvement rate for all purposes other than calculation of lump sums.

Syngenta's major pension plans give members lump sum or annuity benefit payment options. Syngenta values its pension liabilities on the assumption that the choices made by members who will retire in the future will be consistent with choices made by members who have retired recently. For the US pension plan, the benefit obligation has been valued assuming that current eligible members will take the lump sum option at normal retirement or other permissible commencement dates. This assumption is consistent with historical and expected future member choices.

Syngenta amended the benefits of the UK plan so that pensionable pay will remain frozen at January 1, 2016 levels. The plan remains open to benefit accrual for existing members, and pay increases awarded after January 1, 2016, which are not part of defined benefit pensionable pay, are pensionable under the Syngenta Group Personal Pension (GPP), a separate defined contribution plan, for those who choose to join. Employees who choose to leave the defined benefit section of the UK pension plan will also be able to join the GPP. As a result of this amendment, Syngenta recognized a \$143 million past service gain in its 2014 consolidated income statement. Syngenta estimated this gain using the following key actuarial assumptions at the date of the change to revalue its existing defined benefit obligation (DBO) and to measure the DBO for the amended benefit:

Discount rate: 3.8 percent

Inflation: 3.1 percent (RPI), 2.1 percent (CPI)

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Mortality assumptions were the same as those used at December 31, 2014, described above except that assumed future improvement at that reporting date was in line with the CMI Core Projections model 2014.

Opt-outs from defined benefit under the amended plan: 15 percent of members

Opt-outs were estimated by modeling and comparing for each individual member, based on the data held for pension administration, the benefits that will be payable to them if they opt out of and if they remain in defined benefit membership. This comparison was based on the following assumptions:

- amounts excluded from defined benefit pensionable pay are pensionable under the GPP;

-GPP annual investment returns are 4 percent;

-each member chooses the alternative that gives the highest benefit.

This gain amount is sensitive to the opt-out assumption. Had Syngenta assumed zero opt-outs, it would have recorded an additional \$14 million gain in the 2014 consolidated income statement. Actual member decisions may vary from the estimate and any variance is accounted for as an actuarial gain or loss in OCI. At December 31, 2016 and 2015, Syngenta reduced the opt-out assumption to 10 percent because during 2015 it agreed to increase benefit accrual rates for service in 2016 and future years, thus providing an additional incentive for existing members to remain in the defined benefit section of the plan. The effect of this change was not material. Numbers of members who opted out during 2016 were not significant; however, members retain the right to opt out at any future time.

### 3. Acquisitions, divestments and other significant transactions

The following significant transactions occurred during 2016, 2015 and 2014.

2016

On March 15, 2016, Syngenta completed the divestiture of Syngenta Bioline Ltd. (“Bioline”), its beneficial insect breeding business. On June 1, 2016, Syngenta completed the divestiture of its manufacturing operations in Goa, India to Deccan Fine Chemicals India Private Ltd. Neither transaction had individually material proceeds nor led to a

material gain or loss; the aggregate net gains on these divestments were \$12 million.

Payments and receipts in 2016 of deferred and contingent consideration related to acquisitions and divestments completed in prior periods are not material.

#### Public tender offer for Syngenta AG shares by CNAC Saturn (NL) B.V. (“the Offeror”)

As of March 23, 2016, CNAC Saturn (NL) B.V. (“the Offeror”), a subsidiary of China National Chemical Corporation (ChemChina), a state-owned enterprise of the People’s Republic of China, launched public tender offers in Switzerland and the United States to acquire all the publicly held Ordinary Shares and, in the U.S. offer, also all American Depositary Shares (ADSs) of Syngenta AG (“the ChemChina Tender Offer”) for \$465 per Ordinary Share in cash. Syngenta and its Board of Directors have agreed to support the ChemChina Tender Offer. ChemChina has announced that, as of 5:00 p.m., New York City time, on December 16, 2016, approximately 19,222,302 Syngenta AG Ordinary Shares (including those represented by ADSs) had been validly tendered in, and not withdrawn from, the ChemChina Tender Offer. The Main Offer Period has been extended until March 2, 2017, with further extension likely to follow until all offer conditions are fulfilled, in particular regulatory approval by all competent merger control and other authorities, but excluding the Minimum Acceptance Rate condition. At such time, the Offeror will extend the ChemChina Tender Offer for the last time by a period of up to 20 trading days. The ChemChina Tender Offer is conditional, among other things, on acceptance by shareholders owning 67 percent of Syngenta AG issued shares and on regulatory approval by the competent merger control and other authorities.

The Transaction Agreement between ChemChina and Syngenta AG may be terminated in specified circumstances, including by either party if all conditions are not satisfied by June 30, 2017, provided the Swiss Takeover Board no longer requires the ChemChina Tender Offer to remain open. Pursuant to the Transaction Agreement, ChemChina has agreed to pay Syngenta an amount equal to \$3 billion if, despite all other conditions of the ChemChina Tender Offer having been satisfied or still being capable of being satisfied, the ChemChina Tender Offer does not become unconditional and/or is terminated as a result of the failure to obtain Chinese regulatory approvals or antitrust approvals, subject to certain exceptions. In certain circumstances, including if the Syngenta AG Board of Directors were to withdraw its support for the ChemChina Tender Offer and as a result the ChemChina Tender Offer is not successful or does not become unconditional, Syngenta would be required to pay ChemChina \$848 million.

Regulatory approval for the transaction was received from the Committee on Foreign Investment in the United States (CFIUS) on August 19, 2016. At December 31, 2016, clearance for the transaction had been received from antitrust authorities in respect of Australia, COMESA (Common Market for Eastern and Southern Africa), Israel, Japan, Kenya, Macedonia, Pakistan, Russia, Serbia, the Republic of South Africa, South Korea, Turkey and Ukraine.

If the ChemChina Tender Offer becomes unconditional, Syngenta AG will pay a special dividend of CHF 5.00 per share immediately before the first settlement of the ChemChina Tender Offer. The offer price will not be adjusted for this dividend. The Transaction Agreement provides that after the first settlement, 4 out of 10 members of Syngenta’s board of directors shall be persons who have no affiliation with ChemChina or its affiliates (each, an Independent Director). Certain matters will require the affirmative vote of at least two Independent Directors, including, among

others, (i) any change in the location of Syngenta's headquarters, (ii) any raising of new debt or making of distributions which would lower the rating of Syngenta to a level below investment grade (by Moody's and Standard & Poor's), (iii) any reduction in Syngenta's Research and Development budget in any given year to a level below 80 percent of the average Research and Development spend in the years 2012-2015, (iv) any material change in the agricultural sustainability programs or reduction of funding of the Syngenta Foundation for Sustainable Agriculture to a level below 80 percent of the average funding per year 2012-2015, (v) any material change to Syngenta's Health, Safety and Environment Policy and Standards and (vi) any material change to Syngenta's Code of Conduct. Approval by the Independent Directors will also be required, subject to certain exceptions, for any transaction between any member of the ChemChina group, on the one hand, and any member of the Syngenta group, on the other hand, if the transaction is not made at market terms. The above corporate governance arrangements shall remain in place until the earlier of (i) 5 years following the first settlement of the ChemChina Tender Offer and (ii) a re-listing of Syngenta Shares through an initial public offering.

In the event that ChemChina and/or its Subsidiaries hold between 90 percent and 98 percent of the voting rights in Syngenta after the second settlement of the ChemChina Tender Offer, ChemChina intends to merge Syngenta with a Swiss company directly or indirectly controlled by ChemChina in accordance with articles 8 para. 2 and 18 para. 5 of the Swiss Merger Act, whereby the remaining public shareholders of Syngenta will be compensated (in cash or otherwise) and not receive any shares in the surviving company. In the event that ChemChina and/or its Subsidiaries hold more than 98 percent of the voting rights in Syngenta after the second settlement, the Offeror intends to request the cancellation of the remaining publicly held Syngenta Shares in accordance with article 137 of the Financial Markets Infrastructure Act (FMIA).

#### Impact of the ChemChina Tender Offer on the consolidated financial statements

Given the conditional status of the ChemChina Tender Offer at December 31, 2016, accounting judgments have been required as to the likelihood that the ChemChina Tender Offer will complete and how its completion may affect the presentation, classification or measurement of the financial statement items referred to below. Syngenta has considered the possible scenarios in which the ChemChina Tender Offer might not complete successfully, which include failure to obtain those regulatory approvals that are still outstanding. While there can be no certainty that one or more of these scenarios will not occur, in the opinion of Syngenta, successful completion of the ChemChina Tender Offer is probable, and Syngenta has no indications that the ChemChina Tender Offer could not be successfully executed, before June 30, 2017.

Transaction Costs incurred by Syngenta in 2016 in connection with the ChemChina Tender Offer were \$50 million and have been expensed as incurred within Restructuring in the consolidated income statement, as further disclosed in Note 6.

#### Change of control

Syngenta has identified the following material items where completion of the ChemChina Tender Offer could trigger an impact:

#### Special dividend

Completion of the ChemChina Tender Offer will require Syngenta to obtain financing to pay the CHF 5.00 per share special dividend immediately before the first settlement. Because the approval given by the Syngenta AG Annual General Meeting on April 26, 2016 is conditional on the ChemChina Tender Offer being declared unconditional, no liability has been recognized for the dividend in the consolidated balance sheet at December 31, 2016. Based on the total number of shares in issue including Treasury shares held by Syngenta AG at that date, the special dividend would amount to \$454 million at the December 31, 2016 exchange rate.

## Financial debt

Syngenta has the following long-term debt instruments outstanding which have change of control clauses under which holders may require early repayment if the credit rating of Syngenta falls below Investment grade:

Two US (SEC registered) bonds issued in March 2012 (face values \$250 million and \$500 million); on occurrence of a change of control, holders have the right to require Syngenta to purchase all or a portion of the outstanding notes at a price equal to 101 percent of the principal amount plus accrued and unpaid interest to the date of purchase if -Syngenta's credit rating according to at least two out of the three rating agencies (Moody's, Standard & Poors and Fitch) has fallen below investment grade on any date during the period starting 60 days prior to the first public announcement of any change of control and ending 60 days following consummation of the change of control and upon the confirmation that the changed rating is attributable to the change of control.

Three US private placements issued in December 2005 (face values \$75 million, \$75 million and \$100 million); holders have the option to require Syngenta to prepay its notes at par together with interest thereon to the prepayment date selected by Syngenta if within 90 days after the public announcement of the change of control having occurred, any of Moody's, Standard & Poor's, or any other rating agency of equivalent international standing specified from time to time by Syngenta (i) withdraws the rating, (ii) changes the rating so that it falls below investment grade or (iii) in case the rating is already below investment grade, the rating is lowered by one full rating category.

At December 31, 2016 no such fall in credit rating had occurred, and the above instruments have been presented within non-current financial debt in the December 31, 2016 consolidated balance sheet.

The current syndicated committed loan facility of \$2,500 million (which serves as a backstop facility for the \$2,500 million Global Commercial Paper program) has a change of control clause that allows each lender to cancel its commitment unless renegotiated terms are agreed within 30 days of a change of control occurring. In order to address the risk of early termination, ChemChina has provided cover for the backstop facility and also for other financing needs arising from the change of control, via a committed Target Facilities Agreement that Syngenta expects to be able to access on successful completion of the ChemChina Tender Offer.

## Non-current assets

In prior years, Syngenta entered into certain agreements which give the respective counterparties early termination rights on a change of control of Syngenta. Syngenta has recognized payments made under certain agreements as intangible assets. Exercise of termination rights on change of control could result in impairment losses or changes to amortization in future periods. Syngenta does not believe that such losses or changes will have a material impact on its consolidated income statement and balance sheet.

Regulatory authorities who are still considering the ChemChina Tender Offer may impose conditions which require Syngenta to divest as yet unspecified intangible assets or property, plant and equipment, and the proceeds that Syngenta can obtain from their disposal may not be sufficient to cover the carrying amount of these assets at

December 31, 2016. This could lead to Syngenta recognizing additional asset impairments or divestment losses in 2017. Syngenta cannot reasonably determine the assets impacted (if any) or estimate the amounts of such impairments or divestment losses until it is informed of the decisions of the regulatory authorities.

#### Amendments to Syngenta's Equity Plans

On February 1 and 2, 2016 the Syngenta Board of Directors and the Compensation Committee of the Board of Directors, amended Syngenta's Equity Plans for Directors and Employees, respectively. Under the amended terms of the Equity Plans, on the ChemChina Tender Offer being declared unconditional, all blocking and holding periods for vested shares held in the plans will be waived to enable holders of these shares, if they wish, to tender them into the ChemChina Tender Offer during the Additional Acceptance Period. Effective as of the ChemChina Tender Offer becoming successful (i.e., pursuant to the Transaction Agreement, withdrawal rights of shareholders have lapsed and the minimum acceptance condition has been satisfied), all outstanding share awards and Restricted Share Units will be converted into Syngenta shares and deferral and vesting periods will be waived and matching shares will be granted, Performance Share Units will vest at target levels of performance and will be converted into Syngenta shares, options will vest and their exercise periods will lapse, and performance options will vest at target levels of performance and their exercise periods will lapse. Phantom awards and ADSs will be treated in an analogous way to the above. Syngenta AG and, if applicable, its respective subsidiary will settle all outstanding awards, other than Syngenta shares to which the Equity Plan participants have acquired valid title before the ChemChina Tender Offer became unconditional, in cash instead of Syngenta shares on the date of the second settlement.



In order to determine the appropriate accounting treatment of its equity plans in the light of these amendments, Syngenta is required to estimate at each reporting date whether it is more likely than not that outstanding awards will be equity-settled or cash-settled, and apply the corresponding accounting treatment in accordance with IFRS 2. Under equity-settled share based payment accounting, the fair value of awards granted is determined at grant date and this value is recognized on a straight-line basis over the vesting period, so that the expense recognized in each period varies according to the extent to which the service and performance conditions applicable to each award are expected to be met by the end of the vesting period. On settlement of the awards, the cumulative expense recognized for awards that vest is equal to their fair value when granted. Under cash-settled share based payment accounting, a fair valuation of outstanding awards is carried out using current assumptions at each reporting date, so that the expense recognized in each period also varies according to changes in the Syngenta share price and other valuation assumptions during the period. This results in greater fluctuation in expense recognized from one period to another than under equity-settled accounting. On settlement of the awards, the cumulative expense recognized since grant is equal to the cash paid on settlement. Because of the requirement for Syngenta AG to settle outstanding awards in cash on completion of the ChemChina Tender Offer, and having judged that successful completion of the ChemChina Tender Offer is probable, Syngenta changed the accounting for all outstanding awards made under its Equity Plans, except for awards of Syngenta shares that have vested or will equity vest before the ChemChina Tender Offer is expected to complete, from equity-settled share based payment arrangements to cash-settled share based payment arrangements with effect from February 2, 2016, and has continued to account for them as cash-settled awards at December 31, 2016.

The effect of this change in accounting for the plans was as follows:

\$47 million credited to equity under equity-settled share based payment accounting up to February 2, 2016 in respect of those outstanding awards which Syngenta would settle in cash assuming the ChemChina Tender Offer completes on March 31, 2017, has been reclassified as a liability;

In respect of those awards, \$70 million share based payment expense was recognized as a liability and recorded in function expenses according to where the related personnel costs are charged for the year ended December 31, 2016, in addition to the \$71 million charge that would have been made under equity-settled share based payment accounting, had the change to cash-settled share based payment accounting not occurred;

at December 31, 2016, \$178 million share based payment liabilities (2015: \$2 million) were presented within Other current liabilities

The principal assumptions used to measure the share based payment expense and the fair value of the share based payment liability at December 31, 2016 were as follows:

-Syngenta AG share price at December 31, 2016: ordinary shares: CHF 402.50; ADS: \$79.04

-Vesting period remaining at December 31, 2016: 3 months

-Expected option term remaining at December 31, 2016: 3 months

-Risk-free interest rate: CHF: -0.63%; \$: 0.48%

-Share price volatility: 17.91%

-Dividend yield: 0.0%

Under cash-settled share based payment accounting, the fair value of the awards is charged to profit or loss and no equity instruments are assumed to be issued on settlement. Therefore, for the purposes of calculating diluted earnings per share in respect of those awards which have been accounted for as cash-settled, basic and diluted numbers of shares are the same.

The expected amount to be paid by Syngenta AG to settle awards on completion of the ChemChina Tender Offer is \$318 million at December 31, 2016 exchange rates, which would result in a further \$140 million expense being recognized in the 2017 consolidated income statement for awards outstanding at December 31, 2016.

## 2015

On October 15, 2015, Syngenta acquired 100 percent of the shares of Land.db Enterprises Inc. in exchange for cash, including contingent consideration. The primary reason for the acquisition was to gain exclusive control of the AgriEdge Excelsior® farm management software program, which integrates products, services, risk management and technology for growers. The assets, liabilities, acquisition-date fair value of consideration and related costs for the acquisition were not material.

Payments and receipts in 2015 of deferred and contingent consideration related to acquisitions and divestments completed in prior periods were not material.

## 2014

On April 4, 2014, Syngenta acquired 100 percent of the shares of Società Produttori Sementi S.p.A. ("PSB") in exchange for cash. PSB is one of Italy's oldest seed companies and a leader in durum wheat breeding and production.

The primary reasons for the acquisition were to gain access to PSB's durum wheat breeding expertise and its links to the food industry, which will be complemented by Syngenta's cereals research and development and global presence. Goodwill was \$6 million, which represents commercial and research and development synergies resulting from integrating PSB's business into Syngenta's operations and the enabling of expansion in the cereals seed market.

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On July 21, 2014, Syngenta acquired the German and Polish winter wheat and winter oilseed rape breeding and business operations of Lantmännen, the Swedish food, energy and agriculture group, in exchange for cash. The acquired business consists of 100 percent of the shares of Lantmännen SW Seed Hadmersleben GmbH, Lantmännen SW Seed GmbH, SW Winter Oilseed AB and certain sites in Germany. The primary reasons for the acquisition were to give Syngenta access to high-quality germplasm, a seeds pipeline and commercial varieties which complement Syngenta's portfolio and will support the continued development of hybrid cereals for growers worldwide. Goodwill was \$12 million and mainly represents synergies expected in combining operations for the breeding and commercialization of high performing cereals and oilseed rape varieties. Measurement period adjustments to the provisional asset and liability amounts recognized at December 31, 2014 were not material.

The assets, liabilities and acquisition-date fair value of consideration recognized for these 2014 acquisitions were as follows:

(\$m)	
Property, plant and equipment	56
Intangible assets	46
Other assets	37
Deferred tax liabilities	(19)
Other liabilities	(54)
Net assets acquired	66
Purchase price	84
Goodwill	18

Costs related to these acquisitions were not material.

Cash flow from these 2014 acquisitions was as follows:

(\$m)	
Total cash paid for shares	84
Net cash acquired	(4)
Net cash outflow	80

Payments and receipts in 2014 of deferred and contingent consideration related to acquisitions and divestments completed in prior periods were not material.

## 4. Segmental breakdown of key figures for the years ended December 31, 2016, 2015 and 2014

Syngenta is organized on a worldwide basis into five operating segments: the four geographic regions, comprising the Crop Protection and Seeds businesses, and the global Lawn and Garden business. Income and expense transactions in the regional business have been attributed to the geographic regions based on the market destination to which they relate, rather than on the region in which they originated. Some costs do not relate to a geographic destination and are unallocated. Segment performance is managed based on segment operating income, which is the measure of segment profit or loss presented, and is based on the same accounting policies as consolidated operating income. No operating segments have been aggregated to form the reportable segments.

2016 (\$m)	Europe, Africa, Middle East	North America	Latin America	Asia Pacific	Un-allocated	Total regional	Lawn and Garden	Group
Product sales - to third parties	3,752	3,062	3,265	1,834	-	11,913	660	12,573
Royalty and license income - from third parties	41	140	28	5	-	214	3	217
Total segment sales	3,793	3,202	3,293	1,839	-	12,127	663	12,790
Cost of goods sold	(1,801)	(1,720)	(1,766)	(986)	48	(6,225)	(282)	(6,507)
Gross profit	1,992	1,482	1,527	853	48	5,902	381	6,283
Marketing and distribution	(554)	(528)	(492)	(279)	(102)	(1,955)	(162)	(2,117)
Research and development	-	-	-	-	(1,247)	(1,247)	(52)	(1,299)
General and administrative:								
Restructuring	(98)	(55)	(43)	(24)	(178)	(398)	(9)	(407)
Other general and administrative	(136)	(106)	(59)	(42)	(429)	(772)	(41)	(813)
Operating income/(loss) - continuing operations	1,204	793	933	508	(1,908)	1,530	117	1,647
Included in the above operating income from continuing operations are:								
Personnel costs	(534)	(455)	(435)	(268)	(1,040)	(2,732)	(152)	(2,884)
Depreciation of property, plant and equipment					(309)	(309)	(19)	(328)
Amortization of intangible assets					(183)	(183)	(17)	(200)
Impairment of property, plant and equipment, intangible and financial assets	(12)	(25)	(3)	(3)	(91)	(134)	-	(134)
Other non-cash items including charges in respect of provisions					(170)	(170)	(14)	(184)
Gains/(losses) on hedges reported in operating income	7	(7)	38	-	(62)	(24)	(3)	(27)

Segment operating income/(loss) reconciles to consolidated income before taxes as follows:

2016 (\$m)

Segment operating income	1,647
Income from associates and joint ventures	5
Financial expense, net	(291)
Income before taxes	1,361

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2015 (\$m)	Europe, Africa, Middle East	North America	Latin America	Asia Pacific	Un-allocated	Total regional	Lawn and Garden	Group
Product sales - to third parties	3,843	3,117	3,569	1,830	-	12,359	645	13,004
Royalty and license income - from third parties	41	293	63	7	-	404	3	407
Total segment sales	3,884	3,410	3,632	1,837	-	12,763	648	13,411
Cost of goods sold	(1,889)	(1,779)	(2,118)	(1,012)	54	(6,744)	(298)	(7,042)
Gross profit	1,995	1,631	1,514	825	54	6,019	350	6,369
Marketing and distribution	(586)	(537)	(557)	(286)	(83)	(2,049)	(161)	(2,210)
Research and development	-	-	-	-	(1,310)	(1,310)	(52)	(1,362)
General and administrative:								
Restructuring	(128)	(37)	(28)	(20)	(168)	(381)	(7)	(388)
Other general and administrative	(126)	(84)	(39)	(35)	(274)	(558)	(10)	(568)
Operating income/(loss) - continuing operations	1,155	973	890	484	(1,781)	1,721	120	1,841
Included in the above operating income from continuing operations are:								
Personnel costs	(590)	(446)	(469)	(267)	(1,042)	(2,814)	(158)	(2,972)
Depreciation of property, plant and equipment					(332)	(332)	(17)	(349)
Amortization of intangible assets					(175)	(175)	(15)	(190)
Impairment of property, plant and equipment, intangible and financial assets	(3)	(11)		(1)	(51)	(66)	-	(66)
Other non-cash items including charges in respect of provisions					(270)	(270)	(15)	(285)
Gains/(losses) on hedges reported in operating income	1	(14)	30	-	(31)	(14)	24	10

Segment operating income/(loss) reconciles to consolidated income before taxes as follows:

2015 (\$m)	
Segment operating income	1,841
Income from associates and joint ventures	7
Financial expense, net	(256)
Income before taxes	1,592

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2014 (\$m)	Europe, Africa, Middle East	North America	Latin America	Asia Pacific	Un-allocated	Total regional	Lawn and Garden	Group
Product sales – to third parties	4,492	3,458	4,273	2,024	–	14,247	690	14,937
Royalty and license income – from third parties	55	124	6	9	–	194	3	197
Total segment sales	4,547	3,582	4,279	2,033	–	14,441	693	15,134
Cost of goods sold	(2,180)	(2,003)	(2,492)	(1,107)	(92)	(7,874)	(318)	(8,192)
Gross profit	2,367	1,579	1,787	926	(92)	6,567	375	6,942
Marketing and distribution	(720)	(564)	(615)	(314)	(110)	(2,323)	(174)	(2,497)
Research and development	–	–	–	–	(1,376)	(1,376)	(54)	(1,430)
General and administrative:								
Restructuring	(30)	(22)	(26)	(4)	(96)	(178)	(15)	(193)
Other general and administrative	(161)	(92)	(77)	(48)	(307)	(685)	(32)	(717)
Operating income/(loss) – continuing operations	1,456	901	1,069	560	(1,981)	2,005	100	2,105
Included in the above operating income from continuing operations are:								
Personnel costs	(651)	(473)	(536)	(304)	(696)	(2,660)	(144)	(2,804)
Depreciation of property, plant and equipment					(348)	(348)	(17)	(365)
Amortization of intangible assets					(227)	(227)	(16)	(243)
Impairment of property, plant and equipment, intangible and financial assets					(24)	(24)	(1)	(25)
Other non-cash items including charges in respect of provisions					(83)	(83)	(7)	(90)
Gains/(losses) on hedges reported in operating income	(1)	1	(11)	–	16	5	8	13

Segment operating income/(loss) reconciles to consolidated income before taxes as follows:

2014 (\$m)	
Segment operating income	2,105
Income from associates and joint ventures	7
Financial expense, net	(217)
Income before taxes	1,895

Revenues by product group for the years ended December 31, 2016, 2015 and 2014 are as follows:

(\$m)                      2016   2015   2014



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Crop Protection	9,470	9,925	11,286
Seeds	2,657	2,838	3,155
Lawn and Garden	663	648	693
Total	12,790	13,411	15,134

Summarized additional information on the nature of expenses for the years ended December 31, 2016, 2015 and 2014 is as follows:

(\$m)	2016	2015	2014
Salaries, short-term employee benefits and other personnel expense	2,549	2,685	2,733
Pension and other post-employment benefit expense	194	220	8
Share based payment expense	141	67	63
Total personnel costs	2,884	2,972	2,804
Depreciation of property, plant and equipment	328	349	365
Impairment of property, plant and equipment	69	43	21
Amortization of intangible assets	200	190	243
Impairment of intangible assets	65	22	–

There were no amendments or settlements of pension plans in 2016. Pension and other post-employment benefit expense for 2015 includes \$10 million of losses on amendment and settlement of pension plans (2014: gains of \$175 million), recognized within General and administrative and allocated across the segments (2014: Cost of goods sold \$93 million; Marketing and distribution \$11 million; Research and development \$49 million; and General and administrative \$22 million. These gains were included within Unallocated, except for immaterial amounts). Further information relating to these gains is given in Notes 2 and 22.

5. Regional breakdown of key figures for the years ended December 31, 2016, 2015 and 2014

The following countries individually accounted for more than 5 percent of one or more of the respective Syngenta totals for the years ended December 31, 2016, 2015 and 2014 or at December 31, 2016 and 2015.

Country	Sales <sup>1</sup>						Total non-current assets <sup>2</sup>			
	2016	%	2015	%	2014	%	2016	%	2015	%
Brazil	2,227	17	2,519	19	2,945	19	293	4	226	3
France	562	4	605	4	743	5	127	2	128	2
Switzerland	52	-	63	-	69	-	2,661	40	2,680	39
UK	185	2	204	2	239	2	439	7	530	8
USA	3,084	24	3,303	25	3,292	22	1,883	28	1,968	28
Rest of world	6,680	53	6,717	50	7,846	52	1,326	19	1,400	20
Total	12,790	100	13,411	100	15,134	100	6,729	100	6,932	100

1

Sales by location of third party customer

2

Excluding deferred tax assets, defined benefit pension assets and derivative financial assets

No single customer accounted for 10 percent or more of Syngenta's total sales.

## 6. Restructuring

Restructuring for the years ended December 31, 2016, 2015 and 2014, broken down into the main restructuring initiatives, consists of the following:

(\$m)	2016	2015	2014
Accelerating operational leverage programs:			
Cash costs			
Charged to provisions	54	166	7
Expensed as incurred	160	62	42
Non cash costs	9	12	14
Integrated crop strategy programs:			
Cash costs			
Charged to provisions	-	6	17
Expensed as incurred	1	21	44
Operational efficiency programs:			
Cash costs			
Charged to provisions	-	-	1
Expensed as incurred	-	-	17
Acquisition, divestment and related costs:			
Cash costs			
Associated with industry consolidation, including ChemChina	50	62	-
Other, expensed as incurred	24	29	27
Non-cash items	(12)	1	13
Other non-cash restructuring:			
Other non-current asset impairments	121	29	24
Total restructuring	407	388	206

Except for \$13 million reported in Cost of goods sold in 2014 relating to inventories fair valued in acquisition accounting, the above costs for the years ended December 31, 2016, 2015 and 2014 are presented within Restructuring in the consolidated income statement.

In addition to the above, of the \$141 million share based payment expense charged to the 2016 consolidated income statement, \$70 million (2015 and 2014: \$ nil) is the incremental effect of applying cash-settled share based payment accounting due to the share plan amendments related to the ChemChina Tender Offer, as described in Note 3. The \$70 million is presented as costs of the following functions: Cost of goods sold \$6 million, Marketing and distribution \$26 million, Research and development \$8 million, Other general and administrative \$30 million. Total share based payment expense charged to the consolidated income statement is disclosed in Note 23.

The total of the above material items is as follows by income statement line:

(\$m)	2016	2015	2014
Cost of goods sold	6	-	13
Marketing and distribution	26	-	-
Research and development	8	-	-
Other general and administrative	30	-	-
Restructuring	407	388	193
Total	477	388	206

#### Analysis of restructuring costs

2016

#### Accelerating operational leverage programs

Cash costs of \$214 million, including \$36 million of severance and pension charges and \$35 million of information systems projects, consist of \$95 million for initiatives to restructure marketing and commercial operations, \$61 million for projects to improve the effectiveness of back office support, \$30 million for Research and Development productivity projects, \$23 million for activity to optimize production and supply and \$5 million for project management.

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Non-cash costs include tangible asset write-downs associated with the above projects.

#### Integrated crop strategy programs

The integrated crop strategy programs announced in 2011 are substantially complete and final costs in 2016 relate to the completion of certain projects initiated before the end of 2015.

#### Acquisition, divestment and related costs

Cash costs include \$50 million of transaction costs related to the ChemChina Tender Offer. Other cash costs include \$13 million of transaction costs and \$11 million incurred for integration projects, including the divestment of the Goa manufacturing site and the Bioline beneficial insects breeding business and the subsequently canceled projects to divest the Flowers and Vegetables businesses.

Non-cash items consist of aggregate gains of \$12 million on sale of the Bioline beneficial insects breeding business and the manufacturing site in Goa.

#### Other non-cash restructuring

Other non-current asset impairments include \$61 million for the impairment of product rights where production challenges have increased the uncertainties of commercializing a product profitably, \$31 million for the impairment of two sites and \$16 million for the write-down of a building, both in the US and now classified as held-for-sale, \$10 million to impair the assets of a seeds crop where expectations of future operating profitability have reduced and various other small write-downs.

2015

#### Accelerating operational leverage programs

Cash costs of \$228 million, including \$127 million of severance and pension charges, consisted of \$77 million for initiatives to restructure marketing and commercial operations, \$43 million for projects to drive efficiencies in territory commercial operations, \$48 million to rationalize logistical operations and optimize production capacity, \$36 million for Research and Development productivity projects, \$17 million for projects to increase the effectiveness of back office support services and \$7 million for project management.

Non-cash costs of \$12 million included \$33 million of tangible asset write-downs at three sites resulting from projects to rationalize logistical operations and optimize production capacity and a \$21 million pension curtailment gain related to the Swiss defined benefit pension plan. The pension curtailment gain represents the difference between the cash costs for early retirements and the calculation of net pension curtailment costs according to IFRS. Cash costs for early retirements are included in the cash costs of various projects described above.

#### Integrated crop strategy programs

Cash costs of \$27 million included \$20 million of charges for the transfer of certain system and process management activities to the internal service center in India, including \$11 million for information system projects, \$1 million to restructure the integrated Research and Development function, \$1 million to restructure the Human Resource organization and \$5 million of corporate headquarter and other costs.

#### Acquisition, divestment and related costs

Costs associated with industry consolidation represented transaction charges related to transactions such as the proposals received from Monsanto Company and ChemChina. Further cash costs included \$21 million of transaction costs and \$8 million incurred to integrate previous acquisitions, mainly the German and Polish winter wheat and winter oilseed rape breeding and business operations of Lantmännen, PSB and MRI, as well as costs associated with the separation and planned divestments of the Flowers and Vegetables Seeds businesses announced during 2015, which were subsequently canceled. The non-cash cost was an impairment related to fixed assets acquired with the German and Polish winter wheat and winter oilseed rape breeding and business operations of Lantmännen.

#### Other non-cash restructuring

Other non-current asset impairments of \$29 million included \$20 million to impair the assets of a seeds crop where expectations of future operating profitability had reduced, \$7 million of impairment of exclusive distribution rights where the distribution agreement was terminated and \$2 million for two other intangible asset impairments.

2014

#### Accelerating operational leverage programs

In February 2014, Syngenta commenced the restructuring program to drive further improvements in operating income margins and accelerate delivery of operational leverage. 2014 cash costs of \$49 million included \$14 million for initiatives to restructure marketing and commercial operations, \$13 million for projects to drive efficiencies in territory commercial operations, particularly in Latin America, \$11 million to rationalize logistical operations and optimize production capacity, \$5 million for Research and Development productivity projects, and \$6 million for project management. Non-cash charges consisted of \$1 million for the impairment of a site, which is closed, and \$13 million for inventory write-downs due to a significant rationalization of the Vegetables product range.

#### Integrated crop strategy programs

Cash costs of \$61 million included \$24 million of charges for the transfer of certain system and process management activities to a new internal service center in India, including severance and pension costs of \$11 million, \$25 million for the development and rollout of processes and training programs for marketing the integrated Crop Protection and Seeds product offers and related commercial reorganization, \$4 million for information system projects, \$4 million to restructure the integrated Research and Development function, \$2 million to restructure the Human Resource organization and \$2 million for legal entity rationalization projects.

#### Operational efficiency programs

The operational efficiency restructuring programs announced in 2004 and 2007 were substantially complete. The final expenditures of \$18 million in 2014 largely related to the rollout of standardized and outsourced human resource support services.

#### Acquisition, divestment and related costs

Cash costs of \$27 million included \$21 million incurred to integrate previous acquisitions, mainly Devgen, MRI, PSB, and the Polish and German winter wheat and oilseed rape breeding and business operations of Lantmännen. A further \$6 million consisted of transaction costs, including those related to uncompleted transactions. Non-cash costs were reversals of inventory step-ups related to the MRI and PSB acquisitions.

## Other non-cash restructuring

Other non-cash restructuring consisted of \$20 million of fixed asset impairments, including \$14 million for plant and machinery in Brazil and Canada due to significant changes in production processes and \$6 million for development costs of major plant expansion projects that were subsequently aborted, and \$4 million for the impairment of loan notes related to strategic venture capital investments.

## 7. Income taxes

Income before taxes from continuing operations for the years ended December 31, 2016, 2015 and 2014 consists of the following:

(\$m)	2016	2015	2014
Switzerland	543	849	624
Foreign	818	743	1,271
Total income before taxes	1,361	1,592	1,895

Income tax (expense)/benefit on income from continuing operations for the years ended December 31, 2016, 2015 and 2014 consists of the following:

(\$m)	2016	2015	2014
Current income tax (expense):			
Switzerland	(65)	(47)	(99)
Foreign	(180)	(117)	(355)
Total current income tax (expense)	(245)	(164)	(454)
Deferred income tax (expense)/benefit:			
Switzerland	(4)	(4)	60
Foreign	69	(80)	121
Total deferred income tax (expense)/benefit	65	(84)	181
Total income tax (expense):			
Switzerland	(69)	(51)	(39)
Foreign	(111)	(197)	(234)
Total income tax (expense)	(180)	(248)	(273)

The components of current income tax (expense) on income from continuing operations for the years ended December 31, 2016, 2015 and 2014 are:



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(\$m)	2016	2015	2014
Current tax (expense) relating to current years	(334)	(271)	(521)
Adjustments to current tax for prior periods	81	90	10
Utilization of tax losses against taxable income	8	15	54
Benefit of previously unrecognized tax losses	-	2	3
Total current income tax (expense)	(245)	(164)	(454)

The components of deferred income tax (expense)/benefit on income from continuing operations for the years ended December 31, 2016, 2015 and 2014 are:

(\$m)	2016	2015	2014
Origination and reversal of temporary differences	34	27	272
Changes in tax rates or legislation	4	5	4
Other adjustments to deferred tax for prior periods	(4)	(50)	-
Utilization of tax losses previously recognized as deferred tax assets	(8)	(15)	(54)
Benefit of previously unrecognized deferred tax assets	43	34	22
Non-recognition of deferred tax assets	(4)	(85)	(63)
Total deferred income tax (expense)/benefit	65	(84)	181

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OCI and Income tax relating thereto, for each component of equity, for the years ended December 31, 2016, 2015 and 2014 is as follows:

(\$m)	2016			2015			2014		
	Pre-tax	Tax	Post-tax	Pre-tax	Tax	Post-tax	Pre-tax	Tax	Post-tax
Items that will not be reclassified to profit or loss:									
Fair value reserves: Equity investments at fair value through OCI	-	(2)	(2)	(3)	(1)	(4)	(33)	4	(29)
Retained earnings: Actuarial gains/(losses)	(520)	116	(404)	(61)	11	(50)	(511)	123	(388)
Items that may be reclassified to profit or loss:									
Fair value reserves: Cash flow and net investment hedges	34	(9)	25	38	(10)	28	(37)	5	(32)
Currency translation effects	(301)	46	(255)	(698)	(64)	(762)	(625)	(70)	(695)
Total	(787)	151	(636)	(724)	(64)	(788)	(1,206)	62	(1,144)

Income tax (charges)/credits recognized in OCI on cash flow and net investment hedges were \$5 million (2015: \$13 million; 2014: \$67 million). Income tax charges/(credits) reclassified to profit or loss were \$(14) million (2015: \$(23) million; 2014: \$(62) million).

The following tax was (charged)/credited to shareholders' equity for the years ended December 31, 2016, 2015 and 2014:

(\$m)	2016	2015	2014
Current tax <sup>1</sup>	-	12	(1)
Deferred tax <sup>1</sup>	(20)	(3)	(5)
Total income tax (charged)/credited to equity	(20)	9	(6)

1 Current and deferred tax related to share based payments

Analysis of tax rate

The table below presents the main elements causing Syngenta's effective tax rate to differ from the statutory tax rate for the years ended December 31, 2016, 2015 and 2014. Syngenta's statutory rate consists of the domestic Swiss tax rate. Syngenta applies the domestic Swiss tax rate as it is more meaningful than using the weighted average tax rate.

The domestic Swiss tax rate consists of the Swiss federal income tax rate (8.50 percent) and the income tax rate of the canton Basel (20.00 percent). Federal and canton tax rates are deductible from the tax basis, therefore the Swiss domestic tax rate is 22.18 percent in 2016, 2015 and 2014.

	2016 %	2015 %	2014 %
Statutory tax rate	22	22	22
Effect of income taxed at different rates	2	(8)	(4)
Tax deduction for amortization and impairments not recognized for IFRS	(1)	(2)	(3)
Effect of other non tax deductible expenditures and income not subject to tax	-	(3)	(1)
Effect of recognition of previously unrecognized deferred tax assets	(4)	(2)	(1)
Changes in prior year estimates and other items	(6)	4	(2)
Effect of non-recognition of deferred tax assets	-	5	3
Effective tax rate	13	16	14

Effect of income taxed at different rates includes rate differences from the domestic Swiss tax rate attributable to income generated from intellectual property that is taxed at reduced rates and the effect of lower tax rates in certain countries with regard to treasury, investment, group funding and regional management activities as well as logistical operations management. In most of these countries, Syngenta has entered into advanced pricing agreements.

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The movements in deferred tax assets and liabilities during the year ended December 31, 2016 are as follows:

2016 (\$m)	January 1	Recognized in net income	Recognized in equity and OCI	Currency translation effects	Other movements and acquisitions	December 31
Assets associated with:						
Inventories	413	16	51	3	-	483
Accounts receivable	179	25	-	6	-	210
Pensions and employee costs	161	6	96	(15)	-	248
Provisions	338	11	-	17	-	366
Unused tax losses and tax credits	40	(3)	-	(2)	-	35
Financial instruments, including derivatives	18	21	(7)	(4)	-	28
Other	36	7	-	-	-	43
Deferred tax assets	1,185	83	140	5	-	1,413
Liabilities associated with:						
Property, plant and equipment	(345)	30	-	7	-	(308)
Intangible assets	(277)	16	-	2	-	(259)
Inventories	(104)	(66)	-	7	-	(163)
Financial instruments, including derivatives	(42)	1	(14)	1	-	(54)
Other provisions and accruals	(195)	(15)	-	6	-	(204)
Other	(107)	16	-	(3)	-	(94)
Deferred tax liabilities	(1,070)	(18)	(14)	20	-	(1,082)
Net deferred tax asset	115	65	126	25	-	331

The movements in deferred tax assets and liabilities during the year ended December 31, 2015 are as follows:

2015 (\$m)	January 1	Recognized in net income	Recognized in equity and OCI	Currency translation effects	Other movements and acquisitions	December 31
Assets associated with:						
Inventories	544	5	(100)	(36)	-	413
Accounts receivable	264	(40)	-	(45)	-	179
Pensions and employee costs	161	9	8	(16)	(1)	161
Provisions	342	30	-	(32)	(2)	338
Unused tax losses and tax credits	38	-	-	4	(2)	40
Financial instruments, including derivatives	21	(5)	-	2	-	18
Other	24	6	-	(9)	15	36
Deferred tax assets	1,394	5	(92)	(132)	10	1,185
Liabilities associated with:						
Property, plant and equipment	(322)	(19)	-	5	(9)	(345)
Intangible assets	(293)	19	-	5	(8)	(277)

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Inventories	(147)	(24)	35	32	-	(104)
Financial instruments, including derivatives	(42)	(1)	1	-	-	(42)
Other provisions and accruals	(183)	(13)	-	1	-	(195)
Other	(64)	(51)	-	7	1	(107)
Deferred tax liabilities	(1,051)	(89)	36	50	(16)	(1,070)
Net deferred tax asset/(liability)	343	(84)	(56)	(82)	(6)	115

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The deferred tax assets and liabilities at December 31, 2016 and 2015 reconcile to the amounts presented in the consolidated balance sheet as follows:

(\$m)	2016	2015
Deferred tax assets	1,413	1,185
Adjustment to offset deferred tax assets and liabilities <sup>1</sup>	(472)	(402)
Adjusted deferred tax assets	941	783
Deferred tax liabilities	(1,082)	(1,070)
Adjustment to offset deferred tax assets and liabilities <sup>1</sup>	472	402
Adjusted deferred tax liabilities	(610)	(668)

Deferred tax assets and liabilities relating to income taxes levied by the same taxation authority on the same taxable entity or on entities which intend to settle current tax assets and liabilities on a net basis or to realize the assets and settle the liabilities simultaneously are offset for presentation on the face of the consolidated balance sheet where a legal right of set-off exists

The gross value at December 31, 2016 and 2015 of unused tax loss carry forwards for which no deferred tax asset has been recognized, by expiration date, is as follows:

(\$m)	2016	2015
One year	1	2
Two years	-	2
Three years	-	-
Four years	1	3
Five years	8	13
More than five years	623	772
No expiry	68	64
Total	701	856

The above losses consist mainly of US state tax loss carry forwards. The applicable tax rate for these US state tax carry forwards is 0.2 percent (2015: 5 percent) of the gross amounts.

Deferred tax assets, other than those related to unused tax losses, are not subject to expiry.

A deferred tax asset or liability has not been recognized at December 31, 2016 and 2015 on the following items:

(\$m)	2016	2015
Temporary differences for which no deferred tax assets have been recognized	197	342

Temporary differences associated with investments in subsidiaries for which deferred tax liabilities have not been recognized 795 695

There are no income tax consequences for Syngenta of paying a dividend to its shareholders.

## 8. Earnings per share

Basic earnings per share amounts are calculated by dividing net income for the year attributable to ordinary shareholders of Syngenta AG by the weighted average number of ordinary shares outstanding during the year.

Diluted earnings per share amounts are calculated by dividing the net income attributable to ordinary shareholders of Syngenta AG by the sum of the weighted average number of ordinary shares outstanding during the year plus the weighted average number of ordinary shares that would be issued on the conversion of all the dilutive potential ordinary shares into ordinary shares. For each year presented, unvested share awards subject to Syngenta specific performance conditions are included in potential ordinary shares only if those conditions would have been met based on cumulative actual performance from the start of the performance period up to December 31 in the year concerned.

Treasury shares are deducted from total shares in issue for the purposes of calculating earnings per share.

As disclosed in Note 3, the majority of outstanding awards under employee share participation plans were accounted for as cash-settled with effect from February 2, 2016. Under cash-settled share based payment accounting, the fair value of the awards is charged to profit or loss and no equity instruments are assumed to be issued on settlement. Therefore, 2016 adjustments for dilutive potential ordinary shares include only those shares that will vest prior to the cash settlement. The calculation of diluted earnings per share for the years ended December 31, 2016, 2015 and 2014 excluded nil, 713,803 and 588,865 of Syngenta AG shares and options granted to employees, respectively, as their inclusion would have been antidilutive.

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(\$m, except number of shares)	2016	2015	2014
Net income attributable to Syngenta AG shareholders	1,178	1,339	1,619
<b>Weighted average number of shares</b>			
Weighted average number of shares – basic	92,020,494	91,908,128	91,674,127
Adjustments for dilutive potential ordinary shares:			
Grants of options over Syngenta AG shares under employee share participation plans	-	120,317	116,338
Grants of Syngenta AG shares under employee share participation plans	72,155	178,090	216,624
Weighted average number of shares – diluted	92,092,649	92,206,535	92,007,089

9. Trade and other accounts receivable

Trade receivables at December 31, 2016 and 2015 are as follows:

(\$m)	2016	2015
Trade receivables, gross	4,939	4,447
Provision for doubtful trade receivables	(396)	(319)
Trade receivables, net	4,543	4,128

Movements in the provision for doubtful trade receivables for the years ended December 31, 2016 and 2015 are as follows:

(\$m)	2016	2015
January 1	(319)	(251)
Amounts charged to income	(67)	(75)
Amounts written off	9	7
Currency translation effects and other	(19)	-
December 31	(396)	(319)

The ages of trade and other accounts receivable at December 31, 2016 and 2015 that were past due, but not impaired, are as follows:

2016 (\$m)	Total past due	0–90 days	90–180 days	More than 180 days
Trade receivables, gross	960	391	131	438
Provision for doubtful trade receivables	(346)	(6)	(20)	(320)
Other accounts receivable	395	191	53	151
Total	1,009	576	164	269



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2015 (\$m)	Total past due	0–90 days	90–180 days	More than 180 days
Trade receivables, gross	670	277	109	284
Provision for doubtful trade receivables	(259)	(8)	(26)	(225)
Other accounts receivable	395	277	49	69
Total	806	546	132	128

At the reporting date there are no indications that debtors whose accounts are neither overdue nor impaired will not meet their payment obligations. The carrying amount of trade receivables includes \$13 million (2015: \$46 million) that are due more than one year from the balance sheet date.

The carrying amount of trade receivables transferred in full and partial recourse factoring arrangements, but not derecognized is \$136 million (2015: \$144 million). Related liabilities of \$132 million (2015: \$144 million) are disclosed in Note 16. The amount of these receivables before the transfer transactions was \$145 million (2015: \$151 million). Additionally, in 2015 Syngenta transferred \$102 million of trade receivables to a securitization entity and received \$81 million cash from third party investors in that entity. Those investors had recourse for repayment of their investment only to the cash flows from the securitized Syngenta receivables. Syngenta was exposed to expected losses on these receivables through its subordinated first loss interest in the securitization issuance and continued to recognize the full \$102 million carrying amount of the receivables at December 31, 2015. The net position of \$21 million represented Syngenta's maximum exposure to losses, subject to compliance with the terms of this arrangement. Syngenta recognized the \$81 million cash received in current financial debt. The fair value of these receivables and liabilities at December 31, 2015 was not significantly different from their carrying amounts. At December 31, 2016, amounts relating to this securitization have been fully settled.

The fair value of trade receivables containing embedded exchange rate options that Syngenta has classified as at fair value through profit or loss at December 31, 2016 was \$103 million (2015: \$105 million). These amounts represent Syngenta's maximum exposure to credit risk relating to these types of trade receivables. Amounts charged to profit or loss in relation to these trade receivables for the years ended December 31, 2016 and 2015 were not material.

## 10. Other current assets

Other current assets at December 31, 2016 and 2015 are as follows:

(\$m)	2016	2015
Prepaid expenses	245	168
Non-current assets classified as held-for-sale	29	39
Assets held under barter agreements	59	81
Other	53	50
Total	386	338

Non-current assets classified as held-for-sale relate to assets at two sites and a building in the US and two buildings in Europe, all of which are expected to be sold during 2017 (2015: one manufacturing site that was sold during 2016).

## 11. Inventories

Inventories at December 31, 2016 and 2015 are as follows:

(\$m)	2016	2015
Raw materials and consumables	582	895
Biological assets	30	29
Work in progress	1,112	1,019
Finished products	2,160	2,402
Total	3,884	3,345

Movements in inventory write-downs for the years ended December 31, 2016 and 2015 are as follows:

(\$m)	2016	2015
January 1	(333)	(422)
Additions charged to income	(233)	(285)
Reversals of inventory write-downs	34	74
Amounts utilized on disposal of related inventories	143	259
Currency translation effects and other	70	41
December 31	(319)	(333)

Reversals of inventory write-downs arise in the normal course of business when actual outcomes are more favorable than assumptions made in prior periods about Syngenta's future ability to sell inventories that are subject to risks of degradation and obsolescence, such as germination of seeds.

Movements in biological assets for the years ended December 31, 2016 and 2015 are as follows. These include amounts classified as other non-current assets.

(\$m)	2016	2015
January 1	31	32
Changes in fair value	136	135
Additions to cost	7	7
Sales and harvest	(143)	(140)
Currency translation effects and other	-	(3)
December 31	31	31
Of which: carried at fair value less costs to sell	29	29

Syngenta's inputs for measuring the fair value of those assets that are carried at fair value less costs to sell include both market data from actual sales and inputs based on the stage of growth of immature assets, which is not observable in the market. The fair values therefore represent a level 3 measurement in the fair value hierarchy as defined by IFRS 13. Their sensitivity to changes in the unobservable inputs is not material to the consolidated financial statements.

Quantities of biological assets in inventories at December 31, 2016 and 2015 are:

	2016	2015
(Millions of plants)		
Plants	78	65
Cuttings	547	530
(Thousands of hectares cultivated)		
Growing crops	1	1

## 12. Property, plant and equipment

Movements in property, plant and equipment for the year ended December 31, 2016 are as follows:

2016 (\$m)	Land	Buildings	Machinery and equipment	Assets under construction	Total
Cost					
January 1	178	2,011	4,885	412	7,486
Additions	-	37	148	267	452
Disposals	(8)	(67)	(105)	-	(180)
Classified as held-for-sale	(16)	(71)	(44)	-	(131)
Transfers between categories	5	131	185	(321)	-
Currency translation effects and other	(3)	(54)	(205)	2	(260)
December 31	156	1,987	4,864	360	7,367
Accumulated depreciation and impairment losses					
January 1	-	(1,080)	(3,023)	-	(4,103)
Depreciation charge	-	(66)	(262)	-	(328)
Impairment losses	-	(42)	(27)	-	(69)
Depreciation on disposals	-	68	92	-	160
Classified as held-for-sale	-	67	35	-	102
Currency translation effects and other	-	46	123	-	169
December 31	-	(1,007)	(3,062)	-	(4,069)
Net book value – December 31	156	980	1,802	360	3,298

Additions to property, plant and equipment of \$452 million (2015: \$478 million) comprise \$425 million (2015: \$453 million) of cash purchases and \$27 million (2015: \$25 million) of other additions, including business combinations, initial recognition of finance leases and capitalized borrowing costs.

The net book value of property, plant and equipment accounted for as finance lease assets at December 31, 2016 was \$63 million (2015: \$72 million) of which \$53 million is classified as Machinery and equipment (2015: \$61 million) and \$10 million is classified as Buildings (2015: \$11 million).

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Movements in property, plant and equipment for the year ended December 31, 2015 were as follows:

2015 (\$m)	Land	Buildings	Machinery and equipment	Assets under construction	Total
Cost					
January 1	181	2,012	4,961	552	7,706
Additions	2	47	200	229	478
Disposals	(2)	(8)	(130)	(4)	(144)
Classified as held-for-sale	(1)	(17)	(74)	(6)	(98)
Transfers between categories	6	75	222	(303)	-
Currency translation effects and other	(8)	(98)	(294)	(56)	(456)
December 31	178	2,011	4,885	412	7,486
Accumulated depreciation and impairment losses					
January 1	-	(1,072)	(3,072)	-	(4,144)
Depreciation charge	-	(66)	(283)	-	(349)
Impairment losses	-	(8)	(35)	-	(43)
Depreciation on disposals	-	6	113	-	119
Classified as held-for-sale	-	6	49	-	55
Currency translation effects and other	-	54	205	-	259
December 31	-	(1,080)	(3,023)	-	(4,103)
Net book value – December 31	178	931	1,862	412	3,383

### 13. Intangible assets

Movements in intangible assets for the year ended December 31, 2016 are as follows:

2016 (\$m)	Goodwill	Product rights	Trademarks	Patents	Software	Other intangibles	Total
Cost							
January 1	1,909	2,967	84	48	441	364	5,813
Additions	-	17	-	-	75	41	133
Retirements and disposals	-	(25)	(1)	-	(44)	1	(69)
Currency translation effects	(15)	(40)	(1)	(1)	(13)	(5)	(75)
December 31	1,894	2,919	82	47	459	401	5,802
Accumulated amortization and impairment losses							
January 1	(270)	(1,979)	(51)	(28)	(304)	(141)	(2,773)
Amortization charge	-	(129)	(4)	(3)	(33)	(31)	(200)
Impairment losses	-	(63)	(1)	-	-	(1)	(65)
Retirements and disposals	-	25	-	-	44	(1)	68
Currency translation effects	3	19	1	1	7	-	31
December 31	(267)	(2,127)	(55)	(30)	(286)	(174)	(2,939)
Net book value – December 31	1,627	792	27	17	173	227	2,863

Additions in 2016 and Other additions in 2015 include intangible assets arising from license agreements involving non-monetary exchanges or where the cash flows related to the acquisition of the asset are payable over several years. Internally developed intangible assets of \$104 million (2015: \$62 million) are included within Additions and Other additions, respectively. Cash paid to acquire and develop intangible assets was \$132 million (2015: \$90 million).

Amortization is included partly within cost of goods sold and partly within general and administrative expenses.

Other intangibles consist principally of values assigned to leases, supply contracts, production know-how and customer relationships acquired in business combinations.

Movements in intangible assets for the year ended December 31, 2015 were as follows:

2015 (\$m)	Goodwill	Product rights	Trademarks	Patents	Software	Other intangibles	Total
Cost							
January 1	1,934	2,958	85	52	399	358	5,786
Additions from business combinations	8	16	1	-	16	(16)	25
Other additions	-	13	-	-	41	38	92
Retirements and disposals	-	(2)	(1)	(4)	(10)	(10)	(27)
Currency translation effects	(33)	(18)	(1)	-	(5)	(6)	(63)
December 31	1,909	2,967	84	48	441	364	5,813
Accumulated amortization and impairment losses							
January 1	(274)	(1,858)	(38)	(27)	(289)	(114)	(2,600)
Amortization charge	-	(125)	(5)	(4)	(28)	(28)	(190)
Impairment losses	-	-	(9)	(3)	-	(10)	(22)
Retirements and disposals	-	-	1	5	10	8	24
Currency translation effects	4	4	-	1	3	3	15
December 31	(270)	(1,979)	(51)	(28)	(304)	(141)	(2,773)
Net book value – December 31	1,639	988	33	20	137	223	3,040

The net book value at December 31, 2016 and 2015 of goodwill is allocated to Syngenta's operating segments and other CGUs as summarized below:

(\$m)	2016	2015
Allocated to operating segments:		
Europe, Africa and Middle East (EAME)	235	235
North America	197	197
Latin America	173	173
Asia Pacific	325	338
Lawn and Garden	34	35
Total allocated to operating segments	964	978
Allocated to other individual CGUs:		
North America Corn and Soybean seed	315	315
Other, not individually significant	348	346
Total allocated to other individual CGUs	663	661
Total goodwill	1,627	1,639

#### 14. Financial and other non-current assets

Financial and other non-current assets at December 31, 2016 and 2015, are as follows:



(\$m)	2016	2015
Equity securities	76	73
Precious metal catalysts	72	75
Royalties receivable	113	54
Other non-current receivables	137	130
Defined benefit post-employment benefit asset (Note 22)	18	35
Long-term derivative financial assets (Note 28)	24	29
Total financial and other non-current assets	440	396
Investments in associates and joint ventures	170	177
Total	610	573

None of Syngenta's investments in associates and joint ventures are publicly quoted. At December 31, 2016, these investments consist mainly of \$94 million (2015: \$101 million) for a 50 percent ownership of the joint venture CIMO Compagnie Industrielle de Monthey SA, Switzerland (CIMO), which provides utility services to Syngenta and other occupants of the Monthey manufacturing site, \$40 million (2015: \$41 million) for a 49 percent ownership of the associate Sanbei Seeds Co. Ltd., China and \$25 million (2015: \$27 million) for a 40 percent ownership of the associate Maisadour Semences SA, France (Maisadour). The latter two entities produce and sell seeds. Maisadour sells seeds to Syngenta.

Effects on Syngenta's consolidated income statement for the periods presented, or any financial statement line items of the above associates and joint ventures themselves, are not material.

Transactions between Syngenta and its associates and joint ventures during the year ended December 31, 2016 are as follows:

Goods and services provided by Syngenta to its associates and joint ventures \$13 million (2015: \$14 million; 2014: \$6 million)

Goods and services provided by associates and joint ventures to Syngenta \$100 million (2015: \$117 million; 2014: \$120 million)

Non-current assets and research and development provided by Syngenta to an associate of \$2 million (2015: \$3 million; 2014: \$nil)

At December 31, 2016 Syngenta has accounts receivable and accrued income from associates and joint ventures of \$6 million (2015: \$4 million) and accrued liabilities to associates and joint ventures of \$5 million (2015: \$15 million).

A bank overdraft guarantee of \$8 million (2015: \$7 million) has been provided to an associate.

On November 12, 2013 Syngenta agreed to advance EUR 9 million (\$9 million at December 31, 2016 currency translation rates) to Maisadour for 7 years to help finance the planned expansion of corn seed processing capacity in Maisadour Ukraine LLC, a subsidiary of Maisadour, which is a supplier of corn seeds to Syngenta. This current account advance will be made in instalments when called by Maisadour and bears a market rate of interest. At December 31, 2016 the balance outstanding was \$6 million (2015: \$6 million). By a deed between Syngenta, Maisadour and the European Bank for Reconstruction and Development (EBRD), repayment of the principal is subordinated to a loan between the EBRD and Maisadour Ukraine LLC which is guaranteed by Maisadour.

#### 15. Trade accounts payable

The contractual maturities of trade accounts payable at December 31, 2016 and 2015 are as follows:

(\$m) Total 0–90 day 90–180 day 180 days–1 year

2016	3,382,131	160	1,047
2015	3,311,167	212	932

## 16. Current financial debt and other financial liabilities

Current financial debt at December 31, 2016 and 2015 is as follows:

(\$m)	2016	2015
Bank and other financial debt	359	308
Receivables factored with recourse	132	225
Current portion of financial debt (Note 18)	276	14
Total current financial debt	767	547
Short-term derivative and other financial liabilities	280	183
Total	1,047	730

The following table presents additional information related to short-term borrowings at December 31, 2016:

2016 (\$m)	Amount outstanding at December 31	Weighted average interest rate on outstanding balance	Average amount outstanding for the year	Weighted average interest rate on outstanding balance	Maximum month-end amount during the year
Bank and other financial debt	359	4.8%	1,509	3.0%	2,330
Receivables factored with recourse	132	4.5%	186	5.7%	268
Current portion of financial debt (Note 18)	276	0.7%	76	0.7%	282
Total	767	3.3%	1,771	3.2%	
2015	547	10.2%	1,117	5.2%	

The contractual maturities of current financial debt at December 31, 2016 and 2015 are as follows:

(\$m) Total	0–90 day	90–180 day	180 days–1 year
2016	767	324	99
2015	547	216	136
			195

The maturities of short-term derivative and other financial liabilities are presented in Note 27.

Information about fair values of financial liabilities is presented in Note 28.



## 17. Other current liabilities

Other current liabilities at December 31, 2016 and 2015 consist of the following:

(\$m)	2016	2015
Accrued short-term employee benefits	466	303
Taxes other than income taxes	112	132
Accrued utility costs	68	56
Social security and pension contributions	66	74
Liabilities related to barter agreements	145	73
Other payables	110	111
Other accrued expenses	207	234
Total	1,174	983

The maturities of other current liabilities are as follows. For liabilities without a contractual maturity date, the analysis represents the estimated timing of cash outflows.

(\$m) Total	0–90 days	90–180 days	180 days–1 year
2016	1,174	735	240
2015	983	644	192

## 18. Financial debt and other non-current liabilities

Financial debt and other non-current liabilities at December 31, 2016 and 2015 are as follows:

(\$m)	2016	2015
Floating Eurobond 2017	263	272
0.750% CHF bond 2019	344	353
\$ private placement notes	258	260
1.875% Eurobond 2021	526	543
3.125% \$ Notes 2022	515	519
1.625% CHF bond 2024	245	251
1.250% Eurobond 2027	523	540
2.125% CHF bond 2029	147	151
4.375% \$ Notes 2042	248	248
Unsecured bond issues and US private placement notes	3,069	3,137
Liabilities to banks and other financial institutions	1	1
Finance lease obligations	60	59

Total financial debt (including current portion)	3,1303,197
Less: current portion of financial debt (Note 16)	(276) (14)
Non-current derivative financial liabilities	190 267
Other non-current liabilities and deferred income	33 51
Total	3,0773,501

Information about fair values of financial liabilities is presented in Note 28.

Other non-current liabilities and deferred income relates to license and acquisition agreements with several counterparties. Related cash flows of \$2 million (2015: \$14 million) are payable between one and five years and \$31 million of deferred income at December 31, 2016 (2015: \$37 million) will be recognized in income as related licensed product sales occur.

The weighted average interest rate on non-current bank and other financial debt outstanding at December 31, 2016 is 3.1 percent per annum (2015: 3.2 percent).

The weighted average interest rate on the combined current and non-current bank and other financial debt outstanding at December 31, 2016 is 3.1 percent per annum (2015: 4.4 percent). The weighted average interest rates include the cost of financing emerging market borrowings.

Interest paid on non-current financial debt was \$66 million (2015: \$93 million; 2014: \$109 million). All non-current debt ranks equally.

Syngenta AG has fully and unconditionally guaranteed on a senior unsecured basis the due and punctual payment of the principal of and any premium and interest on the debt securities issued by Syngenta Finance N.V., which is an indirect, wholly-owned finance subsidiary. The guarantees will rank equally with all of Syngenta's other unsecured and unsubordinated debt. No other subsidiary of Syngenta guarantees such debt securities.

## 19. Provisions

Provisions at December 31, 2016 and 2015 are as follows:

(\$m)	2016	2015
Restructuring provisions	63	84
Employee benefits:		
Pensions (Note 22)	820	383
Other post-retirement benefits (Note 22)	18	20
Other long-term employee benefits	58	63
Environmental provisions	192	209
Provisions for legal and product liability settlements	113	108
Other provisions	61	53
Total	1,325	920

(\$m)	2016	2015
Current portion of:		
Restructuring provisions	58	72
Employee benefits	72	45
Environmental provisions	18	28
Provisions for legal and product liability settlements	22	27
Other provisions	12	21
Total current provisions	182	193
Total non-current provisions	1,143	727
Total	1,325	920

The timing of payment in respect of non-current provisions is, with few exceptions, not contractually fixed and cannot be estimated with certainty. Key assumptions and sources of estimation uncertainty are discussed in Note 2.

At December 31, 2016, Syngenta recognized \$16 million (2015: \$16 million) in Financial and other non-current assets in respect of virtually certain reimbursements related to the above provisions.

Syngenta has recorded provisions for environmental liabilities at some currently or formerly owned, leased and third party sites throughout the world. These provisions are estimates of amounts payable or expected to become payable and take into consideration the number of other potentially responsible parties at each site and the identity and financial positions of such parties in light of the joint and several nature of certain of the liabilities. The material components of Syngenta's environmental provisions are based on a risk assessment involving investigation of the various sites.

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Provisions for legal and product liability settlements, all of which are individually immaterial, relate to various legal proceedings incidental to the normal conduct of Syngenta's business, including proceedings involving product liability claims, commercial claims, employment and wrongful termination claims, patent infringement claims, competition law claims, tax assessment claims, regulatory compliance claims, waste disposal claims and tort claims relating to the release of chemicals into the environment. Other provisions mainly comprise provisions for long-term contractual obligations under license and other agreements.

Movements in provisions for the year ended December 31, 2016 are as follows:

(\$m)	January 1	Charged to income	Release of provisions credited to income	Payments	Actuarial (gains)/ losses	Transfers offset in defined benefit pension assets	Currency translation effects/ other	December 31
Restructuring provisions:								
Employee termination costs	75	45	(8)	(59)	-	-	(4)	49
Other third party costs	9	17	-	(14)	-	-	2	14
Employee benefits:								
Pensions	383	144	-	(150)	527	(21)	(63)	820
Other post-retirement benefits	20	2	(1)	-	(2)	-	(1)	18
Other long-term employee benefits	63	3	(2)	(5)	-	-	(1)	58
Environmental provisions	209	7	(3)	(16)	-	-	(5)	192
Provisions for legal and product liability settlements	108	27	(8)	(18)	-	-	4	113
Other provisions	53	27	(4)	(16)	-	-	1	61
Total	920	272	(26)	(278)	525	(21)	(67)	1,325



Provisions for employee termination costs include severance, pension and other costs directly related to affected employees.

Provisions for other third party costs principally include payments for early termination of contracts with third parties related to redundant activities.

## 20. Share capital

Each Syngenta ordinary share carries one vote at the shareholders' meetings of Syngenta. Voting rights may be exercised only after a shareholder has been registered in Syngenta's share register. Registration as a shareholder with voting rights is subject to certain declarations on the ownership of Syngenta shares. The number of ordinary shares of par value CHF 0.10 that were authorized, issued, fully paid and outstanding at, and the movements during the years ended, December 31, 2016 and 2015 are presented in the table below.

The Board of Directors of Syngenta AG was authorized on April 24, 2012 to repurchase registered shares up to a maximum value of 10 percent of the company's share capital, for the purpose of capital reduction. On the basis of this authorization, Syngenta established a second trading line on the SIX Swiss Exchange ("SIX"), which was closed on October 15, 2015. At that date, 303,000 shares, out of an authorized maximum of 9,312,614 registered shares, had been repurchased. None of the repurchases were made during 2015.

On September 3, 2015, Syngenta announced its intention to return more than \$2 billion of capital to shareholders through a new share repurchase program and consequently, Syngenta announced on October 16, 2015 the opening of a new second trading line on the SIX, which was closed on March 10, 2016. At that date, 231,500 shares had been repurchased through this new second trading line. None of the repurchases were made in 2016.

(Millions of shares)	2016		2015	
	Shares in issue	Treasury shares held	Shares in issue	Treasury shares held
January 1	92.9	(1.2)	92.9	(1.3)
Cancellation of treasury shares	(0.4)	0.4	–	–
Share repurchases	-	-	–	(0.4)
Issue of ordinary shares under employee share purchase and option plans	-	0.4	–	0.5
December 31	92.5	(0.4)	92.9	(1.2)

At December 31, 2016 and 2015 Syngenta had no open options accounted for as equity instruments.

## 21. Non-cash and other reconciling items included in income before taxes

The following table analyzes non-cash and other reconciling items included in income before taxes for the years ended December 31, 2016, 2015 and 2014:

(\$m)	2016	2015	2014
Depreciation, amortization and impairment of:			
Property, plant and equipment	397	392	386
Intangible assets	265	212	243
Financial assets	-	1	4
Deferred revenue and gains	(40)	(19)	(34)
Gains on disposal of non-current assets	(22)	(51)	(23)
Charges in respect of share based compensation	141	74	63
Charges in respect of provisions (Note 19)	246	355	(48)
Reduction in reimbursement receivable in respect of a provision	-	-	20
Financial expense, net	291	256	217
Losses/(gains) on hedges reported in operating income	27	(10)	(13)
Income from associates and joint ventures	(5)	(7)	(7)
Total	1,300	1,203	808

See Note 3 for a description of the change in accounting treatment of share based payment arrangements.

## 22. Post-employment benefits

Syngenta has, apart from legally required social security arrangements, numerous independent pension plans, which are either “defined contribution” plans where company contributions and resulting benefit costs are a set percentage of employees’ pay or “defined benefit” plans where benefits are generally based on employees’ length of service and pensionable pay. Syngenta’s contributions to defined contribution plans were \$48 million for the year ended December 31, 2016 (2015: \$53 million; 2014: \$42 million). Approximately 35 percent of Syngenta’s employees are members of defined benefit plans and a significant proportion of these are members of both defined benefit and defined contribution plans. All of Syngenta’s major defined benefit plans are funded through legally separate trustee administered funds. The cash funding of these plans, which may from time to time involve special payments, is designed to ensure that present and future contributions should be sufficient to meet future liabilities. Syngenta’s main defined benefit pension plans are in the UK, Switzerland and the USA.

### UK

In accordance with its rules, Syngenta’s UK Pension (the “UK Fund”) is governed by a company (the Trustee) that is controlled by a publicly listed independent professional trustee corporation. That corporation appoints the Trustee’s directors, including its own representative, Syngenta nominated and member nominated directors. The Trustee manages the UK Fund and appoints professional advisers independently to assist it in doing so. The UK Fund is subject to UK pensions legislation, is regulated by the UK Pensions Regulator and is exempt from most UK taxation through its registered status. The defined benefit section of the UK Fund has been closed to new members since 2002. New employees since 2002 instead join a defined contribution pension plan. The defined benefit section of the UK Fund is open to future accrual for employees who were members before that date; however, effective January 1, 2016, pensionable pay for these employees has been frozen, as described in Note 2. At retirement date, defined benefit members have the right to take up to 25 percent of the value of their benefits as a lump sum, with the balance being paid as an annuity. Alternatively, after taking appropriate advice, members may transfer their defined benefits to a different authorized pension arrangement.

The Trustee is required by the UK Fund’s rules to increase pensions in payment and accrued deferred pension rights each year by the lower of 5 percent and price inflation, as measured by the UK Retail Price Index (RPI) or Consumer Price Index (CPI), as applicable. An independent actuary is required to value the UK Fund’s liabilities in accordance with UK pension regulations and certify the required contributions, both for future service and elimination of any deficit, at least every three years. Following each such valuation, employer contribution amounts must be formally agreed between Syngenta and the Trustee, subject to review by the Pensions Regulator, and remain binding until re-assessed in the following valuation. The solvency of the UK Fund, defined as its ability to pay benefits as they fall due, is guaranteed by the sponsoring subsidiary, Syngenta Ltd. Syngenta AG has irrevocably and unconditionally undertaken to ensure Syngenta Ltd. will honor that guarantee. In addition, certain benefits under the UK Fund are guaranteed by the UK Pension Protection Fund.

The Trustee agrees the investment strategy for the UK Fund's assets and implements it through an investment sub-committee (the UK Investment Committee) it appoints from among the Trustee directors. The investment objectives are to ensure the assets are appropriately diversified and liquid to generate sufficient returns to meet the benefit liability and control the long term costs of the UK Fund. These objectives are achieved through appointing and monitoring a number of third party investment managers, each with specific investment mandates that collectively cover a wide range of investment classes and geographical markets and utilize both asset liability matching and return seeking strategies. Asset liability matching is achieved both through underlying investment class selection (e.g. fixed interest) and through using derivatives to limit the potential impact of changes in interest rates, price inflation and foreign currency exchange rates on the benefits payable by and assets of the UK Fund.

## Switzerland

The Swiss federal law on occupational old age, survivors' and disability pensions ("BVG") sets minimum standards for occupational pension plans, which Syngenta's Swiss pension fund (the Swiss Fund) exceeds. All employees having had an employment contract for more than three months with any of Syngenta's Swiss subsidiaries or with its CIMO joint venture entity (see Note 14) and whose age and income exceed the minimum stipulated by BVG are automatically insured in the Swiss Fund. The benefits payable on retirement are calculated according to the capital sums that each member accumulates through transfer of benefits from previous employments, employer and employee contributions during service with Syngenta, interest and member voluntary contributions. Disability and survivors' death in service benefits are defined on the basis of the member's insured remuneration. Leavers before retirement are required to transfer their accumulated retirement and capital savings to the occupational pension plan of their new employment. The Swiss Fund is governed by a twelve member Board of Trustees. Six members, including the President, are nominated by Syngenta (five members) and CIMO (one member), and six are elected by insured plan members from among the employees. Its decisions regarding certain items, including rates of retirement credits for service and interest credits, conversion rates on retirement and plan asset investment strategy require a two-thirds majority vote. Legal conformity of the Swiss Fund's regulations is verified by the Swiss Pension Inspectorate. Syngenta's legal obligations, including required employer contributions, are defined in the pension fund rules which are agreed by the Board of Trustees.

Employer and employee contributions are payable according to an age related scale of percentages of pay. Under BVG, the Swiss Fund guarantees the vested benefit amount as confirmed annually to members. Interest may be added to member balances at the discretion of the Board of Trustees. Members have the right to take their retirement benefit as a lump sum, an annuity or part as a lump sum with the balance converted to a fixed annuity at the rates defined in the Fund's rules. The Board of Trustees may increase the annuity at their discretion subject to the Swiss Fund's funded status including sufficient free funds as determined according to Swiss statutory valuation rules. Syngenta accounts for the Swiss Fund as a defined benefit pension plan.

An actuarial balance sheet is usually drawn up annually by the Swiss Fund's actuary. If the balance sheet reveals a deficit, the Board of Trustees defines appropriate measures to eliminate the deficit. If necessary, and after consultation with the actuary, the contributions payable by employees and by Syngenta may be increased or the benefits, including current pensions, may be adjusted to the funds available. The Board of Trustees manages the Swiss Fund's assets in conformity with the investment policy rules laid down by Swiss law, with the objectives of achieving investment that is secure, produces an appropriate yield and meets the liquidity needs of the Swiss Fund. This is implemented through

an investment sub-committee similar to the UK Investment Committee mentioned above.

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## USA

Syngenta's main US defined benefit pension plan (the US Plan) is a non-contributory defined benefit pension plan subject to the provisions of the Employee Retirement Income Security Act of 1974, as amended (ERISA) and the US Internal Revenue Code of 1986, as amended (Code). In addition, certain benefits under the US Plan are guaranteed by the US Pension Benefit Guaranty Corporation. The US Plan was closed to new members effective January 1, 2009. Employees joining Syngenta after that date participate in a defined contribution pension plan. The defined benefits of existing members of the US Plan were not affected by this change. The US Plan offers members the choice of taking their retirement benefits, which are generally based on their age, pay and years of service, as a full lump sum at retirement date or as a fixed annuity. In these financial statements, the benefit obligation has been valued assuming that current eligible members will take the lump sum option at normal retirement or other permissible commencement dates. This assumption is consistent with historical and expected future member choices.

US plan assets are held in a separate trust with State Street Bank and Trust Company as trustee and custodian. The assets must generally remain in the trust until all pension benefits are paid. An Investment Committee of Syngenta employees (the US Investment Committee), appointed by the Board of Directors of Syngenta Corporation, a wholly owned subsidiary of Syngenta AG, oversees the investment of the plan assets, either directly or through the appointment of investment managers. The US Investment Committee develops and implements an investment strategy that takes into account the liability profile of the US Plan. Asset classes are selected that include equities, fixed income and alternative assets. Interest rate derivatives may be used to hedge the interest rate risk of the US Plan. The Plan's key risks include interest rate risk that impacts the value of the liability and the fixed income assets of the US Plan, investment performance volatility, and to a lesser degree inflation and longevity risk. An actuarial valuation is required each year and is used to determine the valuation and characteristics of the liability of the US Plan.

Syngenta Corporation's funding policy is to contribute to the US Plan amounts necessary on an actuarial basis to at least satisfy the minimum funding requirements of the Code. Additional discretionary contributions above the minimum funding requirements can be made and are generally based on the annual service cost along with an adjustment for any over/under funding.

In 2015, the US Plan made a one-time lump sum payment offer to terminated vested participants who otherwise had no lump sum option, and made \$52 million in lump sum benefit payments to terminated vested participants as a result. Syngenta accounted for this as a settlement of these participants' DBO, which was \$57 million at the 4.25 percent discount rate at the settlement date.

## Other plans

The status of Syngenta's defined benefit plans at December 31, 2016 and 2015 using actuarial assumptions determined in accordance with IAS 19 is summarized below. The following tables provide reconciliations of benefit obligations,

plan assets and funded status of the defined benefit pension plans to the amounts recognized in the consolidated balance sheet at December 31, 2016 and 2015:

(\$m)	2016	2015
Benefit obligations		
January 1	5,932	6,198
Current service cost	139	147
Curtailments and settlements	-	(42)
Employee contributions	37	39
Interest cost	137	164
Actuarial losses/(gains):		
From changes in demographic assumptions	63	(20)
From changes in financial assumptions	695	54
From actual experience compared to assumptions	59	(130)
Benefit payments	(251)	(282)
Currency translation effects and other	(589)	(196)
December 31	6,225	5,932
Of which arising from:		
Funded plans	6,052	5,777
Wholly unfunded plans	170	155
(\$m)	2016	2015
Plan assets at fair value		
At January 1	5,608	5,841
Actual return on plan assets	378	59
Employer contributions	161	168
Employee contributions	37	39
Curtailments and settlements	-	(52)
Benefit payments	(251)	(282)
Currency translation effects and other	(534)	(165)
December 31	5,399	5,608

Actual return on plan assets can be analyzed as follows:

(\$m)	2016	2015
Interest on plan assets	133	156
Actuarial gains/(losses)	245	(97)
Total	378	59
Funded status	(823)	(324)
Effect of asset ceiling	(10)	(63)
Net accrued benefit liability	(833)	(387)
Amounts recognized in the balance sheet:		
Prepaid benefit costs (Note 14)	-	21
Accrued benefit liability	(833)	(408)
Net amount recognized	(833)	(387)

All material changes in the amount shown for the asset ceiling arose from the effect of applying the ceiling at each period end. The amount not recognized as an asset at December 31, 2015 related mainly to the UK pension plan. The maximum economic benefit available to Syngenta for that plan at that date consisted partly of future contribution savings and partly of the refund, net of applicable taxes, which will be unconditionally available to Syngenta when all liabilities have been settled. Changes in the asset ceiling amount due to interest and foreign currency translation during 2016 and 2015 were immaterial.

Of the accrued benefit liability for pensions of \$833 million at December 31, 2016, \$820 million is included in Note 19 as pension provisions and \$13 million as restructuring provisions (2015: \$383 million as pension; \$25 million as restructuring).

The following table shows the estimated undiscounted future defined benefit payments that are projected to occur within ten years from the balance sheet date. Actual payments may differ from those shown because of uncertain future events, including members' choice of benefit options as described above.

(\$m)	
2017	263
2018	264
2019	279
2020	281
2021	286
Years 2022-2026	1,491
Total 2017-2026	2,864



Syngenta's estimate of employer contributions to be paid to defined benefit plans in 2017 is \$150 million, excluding restructuring costs. Actual payments could differ materially from this estimate if any new funding regulations or laws are enacted or due to business and market conditions, which may result in Syngenta prepaying contributions. Additional contributions, the amount and timing of which are uncertain, may also be required as Syngenta's restructuring programs are implemented.

In accordance with UK pension regulations, during the 2015 valuation Syngenta agreed with the UK pension plan Trustee to pay fixed contributions of \$34 million per year from 2017 to 2019 and \$32 million in 2020 to meet the valuation deficit at March 31, 2015, administration costs and part of the costs of employee service in those years. The balance of the costs of employee service is payable as a percentage of pensionable pay in those years. In 2016 and 2015, \$36 million and \$40 million of fixed contributions were paid respectively. Additional variable contributions of up to \$57 million in 2018 and \$38 million in 2020 are also required to be paid if the actual percentage returns on plan assets for the respective actuarial periods ending March 31, 2018 and March 31, 2020 are less than the agreed assumption. In respect of the actuarial period up to March 31, 2015 no additional variable contributions were payable.

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The fair values of assets and liabilities of the major defined benefit pension plans, together with aggregated data for other defined benefit plans are as follows. Unquoted investments represent investments in pooled funds in which the underlying investments are unquoted or those where the pooled fund does not have liquidity on at least a weekly basis:

At December 31, 2016	Fair value (\$m, except assumptions)					%
	Switzerland	UK	USA	Other plans	Total	
Investments quoted in active markets:						
Equities	605	355	158	23	1,141	21
Real estate funds	238	-	-	-	238	4
Bonds	768	535	286	22	1,611	30
Other assets	37	136	-	14	187	4
Unquoted investments:						
Equities	40	363	40	-	443	8
Real estate	29	203	-	-	232	4
Bonds	-	390	-	-	390	7
Other assets	296	468	172	-	936	18
Cash and cash equivalents	118	67	33	3	221	4
Fair value of assets	2,131	2,517	689	62	5,399	100
Benefit obligation	(2,414)	(2,847)	(759)	(202)	(6,222)	
of which:						
Active members	(1,371)	(655)	(429)			
Deferred members	n/a	(649)	(81)			
Pensioners and dependants	(1,043)	(1,543)	(249)			
Funded status	(283)	(330)	(70)	(140)	(823)	
Effect of asset ceiling	-	-	-	(10)	(10)	
Net pension liability	(283)	(330)	(70)	(150)	(833)	
Net periodic benefit cost	89	19	22	15	145	
Significant actuarial assumptions:						
Discount rate (%)	0.7	2.5	4.0	-	2.6	
Inflation (RPI) (%)	n/a	3.3	n/a			
Pensionable pay increase (%)	1.4	-	4.0			
Pension increase (%)	-	3.3	n/a			
Interest credit rate (%)	1.0	n/a	n/a			
Remaining life expectancy (years)						
male aged 63 in 2016	24.2	26.0	22.8			
female aged 63 in 2016	26.3	27.5	24.9			
male aged 63 in 2036	26.1	27.7	24.5			
female aged 63 in 2036	28.2	29.3	26.6			
Weighted average duration of benefit obligation (years)	17	18	11			

Other assets include investments in private equity funds, diversified hedge funds, infrastructure funds, insurance funds and inflation, interest rate and foreign currency derivatives.

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At December 31, 2015	Fair value (\$m, except assumptions)					Total	%
	Switzerland	UK	USA	Other plans			
Investments quoted in active markets:							
Equities	559	331	154	22	1,066	19	
Real estate funds	229	-	-	-	229	4	
Bonds	774	628	267	25	1,694	30	
Other assets	32	104	1	15	152	3	
Unquoted investments:							
Equities	36	532	42	-	610	11	
Real estate	28	138	-	-	166	3	
Bonds	3	390	-	-	393	7	
Other assets	372	478	201	-	1,051	19	
Cash and cash equivalents	77	159	10	1	247	4	
Fair value of assets	2,110	2,760	675	63	5,608	100	
Benefit obligation	(2,343)	(2,717)	(655)	(217)	(5,932)		
of which:							
Active members	(1,402)	(554)	(371)				
Deferred members	n/a	(575)	(87)				
Pensioners and dependants	(941)	(1,588)	(197)				
Funded status	(233)	43	20	(154)	(324)		
Effect of asset ceiling	-		(52)	(11)	(63)		
Net pension asset/(liability)	(233)	(9)	20	(165)	(387)		
Net periodic benefit cost	103	25	16	21	165		
Significant actuarial assumptions:							
Discount rate (%)	0.8	3.7	4.4	-	2.5		
Inflation (RPI) (%)	n/a	3.0	n/a				
Pensionable pay increase (%)	1.5	-	4.0				
Pension increase (%)	-	3.0	n/a				
Interest credit rate (%)	1.0	n/a	n/a				
Remaining life expectancy (years)							
male aged 63 in 2015	23.0	25.9	22.7				
female aged 63 in 2015	25.5	27.4	24.8				
male aged 63 in 2035	23.4	27.6	24.4				
female aged 63 in 2035	25.7	29.2	26.5				
Weighted average duration of benefit obligation (years)	23	17	9				

The following table provides an analysis of the benefit costs recorded in the consolidated income statement for the defined benefit pension plans for the years ended December 31, 2016, 2015 and 2014:

(\$m)	2016	2015	2014
Current service cost	138	147	134
Past service cost/(gain)	1	-	(145)
Curtailments and settlements	-	10	(32)
Interest on the net defined benefit liability/(asset)	6	8	7
Net periodic benefit cost	145	165	(36)

Amounts recognized in OCI were as follows for the years ended December 31, 2016, 2015 and 2014:

(\$m)	2016	2015	2014
Actuarial (gains)/losses	574	1	488
Effect of asset ceiling	(47)	53	2

The sensitivity of the benefit obligation to the significant actuarial assumptions is discussed in the “Critical accounting estimates” section of Note 2.

#### Other post-retirement benefits

Syngenta’s most significant other post-retirement benefit plan is the retiree medical plan in the USA. The plan is self-insured and the principal benefit for the majority of eligible participants is a subsidy of their medical insurance premiums after retirement. The subsidy amount varies based on age and service at retirement. Retirees enroll in individual Medicare plans available in the open market or public exchange, and are responsible for paying the full cost of coverage in excess of the subsidy. The assumed healthcare cost trend rate for this plan at December 31, 2016 was 6.8 percent, decreasing in each successive year from 2016 onwards, to reach an ultimate rate of 5.0 percent in 2023 (December 31, 2015: 7.0 percent decreasing to 5.0 percent in 2022).

Syngenta had a net benefit asset for other post-retirement benefits at December 31, 2016 of \$18 million (2015: \$14 million) reported within Defined benefit post-employment benefit asset in Note 14 and a net benefit liability of \$18 million (2015: \$20 million) reported within Other post-retirement benefits provision in Note 19. Actuarial gains recognized in OCI for the period were \$7 million (2015: actuarial gains of \$5 million; 2014: actuarial losses of \$11 million). Expense recognized in the consolidated income statement, contributions to the other post-retirement benefit plans and benefit payments by the plans were not material for 2016, 2015 or 2014.

### 23. Employee share participation plans

Syngenta has offered the following employee share participation plans during 2016, 2015 and 2014. All significant plans were equity-settled until amended on February 2, 2016 to require Syngenta to cash settle all awards that are outstanding on completion of the ChemChina Tender Offer, as disclosed further in Note 3.

#### Syngenta Long-Term Incentive Plans (LTI)

The Syngenta Long-Term Incentive Plans provide selected executives and key employees of Syngenta with the opportunity to obtain the right to purchase shares of Syngenta AG, or the equivalent American Depositary Shares (ADS) that are offered to selected executives and key employees in the USA. The grant of share options for Syngenta shares is at the discretion of the Compensation Committee of Syngenta's Board of Directors ("Compensation Committee"), whose members are appointed by the Board of Directors of Syngenta ("Board").

In 2015, Syngenta created a new LTI plan for members of the Syngenta Executive Committee ("Executive Committee"). Except as described below, the terms of the Syngenta LTI plan and the Syngenta LTI plan for members of the Executive Committee have the same terms. With effect from the 2015 award, awards of share options granted to members of the Executive Committee are subject to additional performance conditions, as well as a required three year service period. The Compensation Committee sets the performance conditions before the grant date of the awards. The performance achieved during the three year performance period, which starts on January 1 in the year of grant and ends on the third December 31 following, determines the number of share options that vest, subject to the approval of the Compensation Committee. In the event that the financial results used to calculate the vesting of the share options need to be restated subsequently, Syngenta retains the right to claw back a portion of the awards.

Until the 2012 award, the exercise prices were equal to either the weighted average share price on the SIX for the five business days preceding the grant date, or the share price on the SIX at the grant date, with the Compensation Committee having determined which of the two exercise prices were used for each grant year. For subsequent awards, the closing share price on the SIX at the grant date was used to set the equity grant value and exercise price. Options over ADSs are converted to US dollars at the exchange rate at the grant date, which may vary from the exchange rate

at the exercise date. Standard options vest in full and are exercisable after completion of three years service and terminate after 10 years from the grant date. Vesting can occur after less than three years in particular circumstances including redundancy and retirement. None of the options vest on a pro rata basis during the vesting period.

For share option awards to Executive Committee members, the number of options vesting varies from 0 percent to 125 percent of the award, depending on the quartile in which Syngenta's Total Shareholder Return (TSR), defined as share price movement plus dividends, has ranked relative to the TSR of a comparator group of 16 public international quoted companies, including Syngenta and its major competitors. Performance is calculated in US dollars and share prices and dividends quoted in currencies other than US dollars are translated into US dollars using the average exchange rate in each year ending December 31. For the purposes of cash settlement on completion of the ChemChina Tender Offer, performance will be deemed to be at target.

The following table sets out share option activity under these plans during 2015, including the equivalent ADSs:

Share options	Exercise price (CHF)	Exercise price (\$ equivalent <sup>1</sup> )	Outstanding at January 1 (thousands of options)	Granted	Exercised	Forfeited/ other	Outstanding at December 31	Exercisable	Remaining contractual life (years)
Year ended December 31, 2015									
Awarded in 2004	89.3	90.0	7.3	-	(7.3)	-	-	-	-
Awarded in 2005	127.4	128.4	12.7	-	(12.6)	(0.1)	-	-	-
Awarded in 2006	185.0	186.4	34.4	-	(20.0)	-	14.4	14.4	0.25
Awarded in 2007	226.7	228.4	45.9	-	(14.1)	-	31.8	31.8	1.25
Awarded in 2008	301.5	303.8	64.8	-	(23.4)	-	41.4	41.4	2.25
Awarded in 2009	233.4	235.2	110.4	-	(28.2)	(0.1)	82.1	82.1	3.25
Awarded in 2010	283.7	285.9	70.1	-	(21.2)	-	48.9	48.9	4.25
Awarded in 2011	308.7	311.1	144.6	-	(51.2)	-	93.4	93.4	5.25
Awarded in 2012	300.4	302.7	248.2	-	(87.5)	(1.5)	159.2	159.2	6.25
Awarded in 2013	391.4	394.4	244.8	-	(5.7)	(12.3)	226.8	34.5	7.25
Awarded in 2014	325.9	328.4	340.2	-	(5.2)	(13.1)	321.9	43.7	8.25
Awarded in 2015	332.2	334.7	-	486.9	-	(6.4)	480.5	4.3	9.25

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Total for year ended December 31, 2015	1,323.4	486.9	(276.4)	(33.5)	1,500.4	553.7
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1 At the December 31, 2015 exchange rate

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In 2016, no further grants of share options were made, 244,012 share options were exercised and 34,273 share options were forfeited or expired. The normal vesting date of share options awarded in 2014, of which 260,051 were outstanding at December 31, 2016, is in February 2017 which is before the ChemChina Tender Offer is expected to complete. These awards will therefore vest in the normal way to participants who have met the vesting condition. For these and all vested share options, holders may choose to exercise the share options and tender the resulting shares into the ChemChina Tender Offer, or retain the share options for cash settlement by Syngenta if the ChemChina Tender Offer completes. At December 31, 2016, 1,222,636 share options were outstanding and have been accounted for on a cash-settled basis, assuming that no further share options will be exercised before completion of the ChemChina Tender Offer. The liability recognized for the fair value of the cash settlement obligation was \$79 million (2015: \$2 million). Share options outstanding at December 31, 2016, of which 480,197 were fully vested and exercisable, have a weighted average exercise price of \$352 per share.

The Long-Term Incentive Plan also grants selected executives and key employees of Syngenta restricted share units (RSUs) (or equivalent restricted ADSs for relevant Syngenta employees in the USA). RSUs (or equivalent restricted ADSs) are rights to receive the equivalent number of Syngenta AG shares for no payment at the end of a three-year vesting period. RSUs do not carry rights to dividends and the grant date fair value is reduced to reflect this. None of the RSUs or equivalent ADSs vest on a pro rata basis during the vesting period.

The Long-Term Incentive Plan 2015 for Executive Committee members granted Syngenta performance share units (PSUs). PSUs are rights to receive the equivalent number of Syngenta AG shares for no payment at the end of a three-year vesting period, subject to performance. PSUs do not carry rights to dividends and the grant date fair value is reduced to reflect this. The number of PSUs vesting varies from 0 percent to 100 percent of the award, depending on achievement of defined targets for four specified long term metrics relating to financial and non-financial performance, each of which carries equal weighting for on target performance. Each year the Compensation Committee assesses performance against the targets for each metric, and the weighted sum of the assessment outcome represents one third of the eventual payout, subject to completion of the required service period. In 2016, a variant of this plan was introduced, under which 50 percent of PSU awards granted in 2016 were subject to the ranking of Syngenta TSR compared to a comparator group of companies and the remaining 50 percent were subject to achievement of Syngenta performance targets for the four financial and non-financial metrics. Vesting for PSUs subject to the TSR condition varies from 0 percent to 200 percent of the award, depending on Syngenta ranking. The grant date fair value of these PSUs was measured using the Monte Carlo method. Vesting for PSUs subject to the Syngenta performance metrics varies from 0 percent to 100 percent of the award. For the purposes of cash settlement on completion of the ChemChina Tender Offer, performance will be deemed to be at target.

The following table sets out RSU and PSU activity under these plans during 2015 (including the equivalent restricted ADS for relevant Syngenta employees in the USA), and summarizes information about RSUs and PSUs outstanding at December 31, 2015.

RSUs and PSUs	Grant date fair value	Grant date fair value	Outstanding at January 1	Granted	Distributed	Forfeited/other	Outstanding at December 31	Remaining life
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Year ended	(CHF)	(\$ equivalent <sup>1</sup> )	(thousands of shares)					(years)
December 31, 2015								
Awarded in 2012	277.0	305.6	76.0	-	(75.4)	(0.6)	-	-
Awarded in 2013	359.7	389.0	69.5	-	(8.5)	(3.1)	57.9	0.25
Awarded in 2014	298.5	332.6	95.6	-	(7.6)	(4.3)	83.7	1.25
Awarded in 2015	303.6	323.3	-	108.1	(0.9)	(2.1)	105.1	2.25
Total for year ended December 31, 2015			241.1	108.1	(92.4)	(10.1)	246.7	

1 At the grant date exchange rate

In 2016, 65,889 RSUs were distributed and a total of 127,637 RSUs and PSUs were granted. The normal vesting date of RSUs awarded in 2014, of which 74,076 were outstanding at December 31, 2016, is in February 2017 which is before the ChemChina Tender Offer is expected to complete. These awards will vest in the normal way to participants who have met the vesting condition, and will therefore not be cash settled by Syngenta. Holders will decide whether to retain these shares or to tender them into the ChemChina Tender Offer to be settled. 223,109 RSUs and PSUs awarded in 2015 and 2016 were outstanding at December 31, 2016, would be cash settled by Syngenta on completion of the ChemChina Tender Offer on the date of the second settlement, and have been accounted for on a cash-settled basis. The liability recognized for the fair value of the cash settlement obligation was \$69 million (2015: \$nil). For the purposes of cash settlement on completion of the ChemChina Tender Offer, performance will be deemed to be at target.

#### Syngenta Deferred Share Plan

The Syngenta Deferred Share Plan provides selected senior executives with an opportunity to obtain shares of Syngenta AG. The plan entitles participants to defer part of their annual short-term incentive awards in favor of Syngenta shares and, subject to service throughout the three year deferral period, additionally to receive one matching share for each deferred share held at the end of that period. Deferred and matching shares do not carry rights to dividends during the deferral period and their grant date fair value is reduced to reflect this. A mandatory part of the short-term incentive is allocated as deferred shares. Additional voluntary deferrals within the limits of the plan can be made at the discretion of the participants. None of the shares vested on a pro rata basis during the vesting period.

The following table sets out activity under this plan during 2015 including the equivalent ADSs that are offered to Syngenta employees in the USA:

ADSs	Outstanding at January 1	Granted	Distributed	Outstanding at December 31	Matching shares Outstanding at December 31	Remaining life (years)
		(thousands of shares)				
Year ended December 31, 2015						
Awarded in 2012	45.9	-	(45.9)	-	-	-
Awarded in 2013	24.7	-	(6.2)	18.5	18.5	0.25
Awarded in 2014	1.2	-	(0.1)	1.1	1.1	1.25
Awarded in 2015	-	27.7	(3.1)	24.6	24.6	2.25
Total for year ended December 31, 2015	71.8	27.7	(55.3)	44.2	44.2	

In 2016, 36,434 deferred and matching shares were distributed on vesting of the 2013 awards, 44,457 deferred and matching shares were granted and 2,715 matching shares were forfeited. The normal release date of deferred shares and vesting date of matching shares awarded in 2014, of which 2,054 were outstanding at December 31, 2016, is in February 2017 which is before the ChemChina Tender Offer is expected to complete. The deferred shares awarded will therefore be released, and the matching shares awarded will vest, in the normal way to participants who have met the vesting condition, and will therefore not be cash settled by Syngenta. Holders will decide whether to retain these shares or to tender them into the ChemChina Tender Offer to be settled. 83,838 deferred and matching shares awarded in 2015 and 2016 were outstanding at December 31, 2016, would be cash settled on completion of the ChemChina Tender Offer on the date of the second settlement, and have been accounted for on a cash-settled basis. The liability recognized for the fair value of the cash settlement obligation was \$14 million (2015: \$nil).

#### Employee share purchase plans

Syngenta has employee share purchase plans in various countries, which entitle employees to subscribe for shares in Syngenta AG with the benefit of either discounts from market value varying between 33 percent and 50 percent or a matching share. Shares issued under the plans vest immediately and are subject to blocking periods of between two and three years, with the exception of the UK plan, for which completion of three years' service is required before vesting. Maximum annual subscription amounts per employee vary between \$500 and \$3,000. In 2016, a total of 75,023 (2015: 73,031) shares were subscribed under these plans and settled through a release of treasury shares.

#### Share option valuation assumptions

The grant date fair value of share options granted was measured using the Black-Scholes-Merton formula, except for the fair value of performance options awarded under the Executive Committee LTI plan 2015, which was measured using the Monte Carlo method, adjusting the fair value for the relative TSR market condition. Except for the TSR adjustment, the measurement of fair value was not adjusted for any other feature of the share option grant and, except for the Executive LTI plan 2015, no share option grant was subject to a market condition. The effect of early exercise was incorporated into the model by using an estimate of the share option's expected life rather than its contractual life.

The weighted average assumptions used in determining the grant date fair value of share options granted were as follows:

	2015	2014
Dividend yield	2.9%	2.8%
Volatility	19.2%	20.1%
Risk-free interest rate – shares (CHF)	0.0%	1.0%
Risk-free interest rate – ADSs (\$)	2.1%	2.8%
Risk-free interest rate – TSR adjustment	(0.8)%	n/a
Expected life	7 years	7 years
Exercise price (CHF per share)	332.2	325.9
Exercise price (\$ equivalent per share <sup>1</sup> )	353.7	363.1

1 At the grant date exchange rate

The above dividend yield and volatility were management estimates at grant date for the life of the respective option, as no warrants or options over Syngenta AG shares for this period were widely traded. Both actual dividend yield and volatility may vary from the assumptions used above. The estimate of volatility takes into account the historical volatility of the Syngenta AG share price and the implied volatilities of such longer dated warrants that have been traded in the market. The volatility assumption for 2015, as measured at the grant date, was based on the 36-month (2014: 120-month) historical volatility of Syngenta AG shares on the SIX. For the TSR adjustment, the correlation of the share prices of comparator companies was measured using their historical daily returns over three years.

The assumptions used in determining the fair value of the cash settlement liability for the options outstanding at December 31, 2016 are set out in Note 3.

Other information regarding the plans is as follows:

	2016	2015	2014
Weighted average grant date fair value of options granted during year (CHF per option)	-	36.8	46.4
Weighted average grant date fair value of options granted during year (\$ equivalent per option <sup>1</sup> )	-	40.0	51.3
Weighted average share price at exercise date for options exercised during year (CHF per option)	393.0	370.9	329.4
Weighted average share price at exercise date for options exercised during year (\$ equivalent per option <sup>2</sup> )	399.4	392.7	366.3
Grant date fair value of shares granted during year:			
RSUs, and PSUs subject to performance conditions (CHF per unit)	361.5	303.6	298.5
RSUs, and PSUs subject to performance conditions (\$ equivalent per share <sup>1</sup> )	355.3	323.3	332.6
PSUs subject to a TSR condition (CHF per unit)	449.5	-	-
PSUs subject to a TSR condition (\$ equivalent per share)	452.6	-	-
Deferred Share Plan (CHF per unit) – combined value of basic and matching share award	723.1	607.2	597.0
Deferred Share Plan (\$ equivalent per unit <sup>1</sup> ) – combined value of basic and matching share award	728.1	646.5	665.2
Employee Share Purchase Plans (CHF per share)	194.5	165.3	166.6
Employee Share Purchase Plans (\$ equivalent per share <sup>1</sup> )	182.6	169.5	177.3
Employee Share Purchase Plan (\$ per ADS)	25.2	25.7	21.8
Cash to be paid on settlement of the ChemChina Tender Offer, including special dividend (CHF per share <sup>3</sup> )	478.6	-	-
Cash to be paid on settlement of the ChemChina Tender Offer, including special dividend (\$ equivalent per share <sup>3</sup> )	469.9	-	-
Cash received from exercise of options and subscription for shares (\$m)	92	85	53

1 At the grant date exchange rate

2 At the exercise date average exchange rate for the month

3 At the December 31, 2016 exchange rate

Compensation expense

The compensation expense associated with employee share participation plans, which was measured indirectly by reference to the fair value of the equity instruments granted, is as follows for the years ended December 31, 2016, 2015 and 2014:

(\$m) 2016 2015 2014

Long-Term Incentive Plan	109	45	42
Deferred Share Plan	11	6	7
Employee Share Purchase Plans	21	16	14
Total	141	67	63

of which:

(\$m)	2016	2015	2014
Accounted for as equity-settled	21	67	63
Accounted for as cash-settled	120	-	-
Total	141	67	63

#### 24. Transactions and agreements with related parties

Key management personnel are considered to be the members of the Syngenta Executive Committee and the Board of Directors. Their compensation is as follows for the years ended December 31, 2016, 2015 and 2014:

(\$m)	2016	2015	2014
Fees, salaries and other short-term benefits	14	13	12
Post-employment benefits	1	2	2
Payments to end of contractual notice period	2	3	-
Share based compensation	24	15	12
Total	41	33	26

\$1 million in aggregate is payable in 2017 to two former Executive Committee members subject to compliance with non-compete agreements, which Syngenta concluded with them in 2016.

Fees, salaries and other short-term benefits includes \$3 million in aggregate of payments to two new Executive Committee members to compensate them for loss of bonuses and incentive awards from their previous employers, which will be spread over the vesting periods according to their contractual terms (2015 and 2014: \$nil).

Members of the Syngenta Executive Committee and Board of Directors receive their cash compensation in Swiss francs, except one member of the Executive Committee who is based in the US and is paid in US dollars. The compensation amounts presented above have been converted into US dollars using the average currency exchange rate in effect during each year reported. The average Swiss franc per US dollar exchange rate for the year ended December 31, 2016 is 0.99 (2015: 0.96; 2014: 0.91).

Post-employment benefits includes healthcare, disability, death in service and pension costs.

The amount disclosed for share based compensation is the expense for the period calculated in accordance with IFRS 2, "Share Based Payment" and as described in Notes 3, 23 and 29, relating to key management personnel. The cost of a share based compensation award is spread over the vesting period of the award. Therefore the charge for each year comprises parts of that year's awards and those of preceding years that had not already vested at the start of the year.

Members of the Board, excluding the Chairman and the Chief Executive Officer, are eligible for the share plan for non-executive Directors. Eligible Directors define a percentage of their annual fee for compensation in shares and, in addition, choose between blocked shares or freely tradable shares. The Chairman receives a fixed part of his compensation in the form of blocked shares. Under these plans, members of the Board were allocated a total of 3,984 shares (2015: 2,543 shares; 2014: 2,644 shares) in lieu of cash compensation. These shares vest immediately and had a combined fair value at grant of \$2 million (2015: \$1 million; 2014: \$1 million).

Detailed disclosures regarding executive remuneration required by Swiss Company Law are included in the Syngenta Corporate Governance Report on [www.syngenta.com](http://www.syngenta.com) in the section "About Syngenta/Governance."

Transactions and balances between Syngenta and its employee post-retirement benefit plans are disclosed in Note 22.

## 25. Commitments and contingencies

### Commitments

Minimum future lease payments at December 31, 2016 for finance leases are \$62 million (2015: \$60 million), of which \$17 million is due within one year (2015: \$18 million), \$37 million after more than one but less than five years (2015: \$34 million) and \$8 million thereafter (2015: \$8 million).

Fixed-term, non-cancelable operating lease commitments total \$227 million at December 31, 2016 (2015: \$120 million) of which \$67 million is due within one year (2015: \$61 million), \$141 million after more than one and less than five years (2015: \$52 million) and \$19 million thereafter (2015: \$7 million). Operating lease payments relate to leases of buildings, office equipment and vehicles. Operating lease expense in 2016 is \$97 million (2015: \$44 million; 2014: \$33 million).

Commitments for the purchase of property, plant and equipment at December 31, 2016 are \$176 million (2015: \$134 million).

At December 31, 2016 and 2015, Syngenta had entered into long-term commitments to purchase minimum quantities of certain raw materials, long-term research agreements with various institutions to fund various research projects, and other commitments. The estimated timing of minimum future committed payments is as follows:

(\$m)	2016		2015	
	Materials purchases	Other	Materials purchases	Other
Within one year	784	62	483	55
From one to two years	190	21	214	21
From two to three years	106	17	165	20
From three to four years	71	12	36	12
From four to five years	55	4	9	10
After more than five years	-	7	40	17
Total	1,206	123	947	135

Syngenta has no material contingent liabilities related to associates and joint ventures.

Syngenta's sales are made subject to normal warranties, which cover product technical specifications and, in some cases, products' performance effect on grower crop yields. Certain license agreements indemnify the other party against liabilities arising from claims related to the intellectual property licensed to or by Syngenta. Leases may require indemnification for liabilities Syngenta's actions may create for the lessor or lessee. Syngenta has also issued warranties to purchasers of businesses or product lines relating to events that arose before the sales. It is not possible to predict the maximum future payments possible under these or similar provisions because it is not possible to predict whether any of these contingencies will occur.

Syngenta has obtained licenses from others for the rights to sell certain products, or products containing certain technology, under agreements which require Syngenta to pay royalties based on its future sales of those products or that technology.

#### Contingencies

##### Litigation matters

Litigation is subject to many uncertainties, and the outcome of individual matters cannot be predicted with certainty. Consequently, it is reasonably possible that the final resolution of some of these matters could require Syngenta to make expenditures in excess of the established provisions that are reported in Note 19. Further, the range of amounts involved, as well as the period of time over which many of these expenditures may be made, cannot be reasonably estimated.



Syngenta maintains general liability insurance, including product liability insurance, covering claims on a worldwide basis with coverage limits and retention amounts which management believes to be adequate and appropriate in relation to Syngenta's businesses and the risks to which it is subject.

Significant recent or on-going legal proceedings are described below.

#### VIPTERA™

Since September 12, 2014, a total of approximately 4,363 lawsuits (as of January 9, 2017) have been filed against Syngenta in state and federal courts in the United States by plaintiffs seeking damages from Syngenta for commercializing its AGRISURE VIPTERA® (MIR162) and DURACADE™ corn seed in the United States without having obtained import approval from China for those products. Virtually all of the lawsuits were filed by individual plaintiffs (including growers, grain elevators and exporters such as Cargill, Archer Daniels Midland and Louis Dreyfus), and approximately 107 by putative classes of growers and others allegedly affected, including ethanol plants, on the theory that China's 2013 rejection of U.S. corn based on the alleged presence of MIR162 caused increased costs and U.S. commodity prices to drop. The cases are pending in multiple jurisdictions, including (1) cases that were initially filed in federal court that have been consolidated for pre-trial proceedings in a federal multi-district litigation ("MDL") action in the District of Kansas; (2) a consolidated state court proceeding in Hennepin County, Minnesota; (3) federal court in the Southern District of Illinois; and (4) various state courts in Illinois, Indiana, Louisiana and Ohio. Certain of these cases also name additional defendants including ADM, Bunge, Cargill, Louis Dreyfus and Gavelon. In September 2016, the federal MDL court certified a nationwide class of corn growers alleging violations of the Lanham Act and eight statewide classes of corn growers, and in November 2016, the court presiding over the Minnesota state court consolidated proceedings certified a class of Minnesota corn growers. The allegations include claims that Syngenta issued misleading statements concerning the status of or timetable for approval of import of VIPTERA™ corn into China and that the public had a right to expect that corn sold to the general public was free from "contamination" with VIPTERA™ corn. Plaintiffs in the federal MDL court have filed expert reports claiming nationwide economic damages in excess of \$5 billion in addition to punitive damages. Plaintiffs in the Minnesota consolidated proceeding have filed expert reports claiming statewide economic damages in excess of \$440 million and are also seeking punitive damages. The Cargill lawsuit refers to damages of in excess of \$90 million and one of the exporter lawsuits specifies damages of \$41 million. The first Minnesota trial will begin on April 24, 2017 on behalf of an individual producer who grew VIPTERA™ corn, followed by a June 5, 2017 federal MDL trial on behalf of the nationwide class and a class of Kansas corn growers who did not grow VIPTERA™ corn, followed by an August 14, 2017 Minnesota trial on behalf of a class of Minnesota corn producers who did not grow VIPTERA™ corn. The federal court in the Southern District of Illinois has set a presumptive trial date of December 2017, and the court presiding over the Iowa state court case has set a presumptive trial date of October 2018. No trial dates have been set for any other cases. Syngenta strongly believes that the claims in these cases are without merit and will vigorously defend the lawsuits.

On December 1, 2015, a claim was filed in Ontario, Canada by a proposed representative plaintiff on behalf of a putative class comprising all farmers in Canada against Syngenta Canada Inc. and Syngenta AG seeking damages from Syngenta for commercializing its AGRISURE VIPTERA® (MIR162) and DURACADE™ corn seed in the North American corn market without having obtained import approval from China for those products. Syngenta Canada Inc. was served with the claim on December 8, 2015. Syngenta AG was served with the claim under the Hague Convention on May 18, 2016. The causes of action referred to in the lawsuit include negligence and negligent

misrepresentations. The allegations include claims that Syngenta actively misled farmers about the importance of the Chinese market, the timing and substance of the application for approval in China, its ability to channel VIPTERA™ corn into non-Chinese markets and its ability to contain the infiltration of VIPTERA™ corn to the North American corn supply. The proposed representative plaintiff is seeking on behalf of the putative class general and special damages of 300 million Canadian dollars (\$222 million at the December 31, 2016 exchange rate), punitive and aggravated damages of 100 million Canadian dollars (\$74 million at the December 31, 2016 exchange rate), the costs of distributing all monies awarded to class members, pre-judgment interest, and costs on a substantial indemnity basis. No steps have been taken in the action except for the service of the claim on Syngenta Canada Inc. and Syngenta AG. Subject to any preliminary motions that Syngenta determines should be brought, the next step in these proceedings will be a certification motion brought by the proposed representative plaintiff. Syngenta strongly believes that the claims in this action are without merit and will vigorously defend the action.

#### Canada Beekeeper Lawsuits

In September 2014, a claim was filed in Ontario, Canada by two proposed representative members on behalf of a putative class comprising all beekeepers who have owned or continue to own and operate honey producing, pollinating, and/or queen bee rearing businesses in Canada since January 1, 2006, against a number of Syngenta legal entities together with certain entities of a second manufacturer of neonicotinoid insecticides. Plaintiffs allege negligence through the sale by that manufacturer and by Syngenta of products containing such insecticides in the knowledge that they would be injurious to bees and by virtue of misrepresentations and concealment relating thereto. Plaintiffs claim 400 million Canadian dollars (\$296 million at the December 31, 2016 exchange rate) general and 50 million Canadian dollars (\$37 million at the December 31, 2016 exchange rate) punitive damages. The pleadings in the Ontario proceedings have subsequently been amended by plaintiffs' counsel to add waiver of tort and unlawful conspiracy to the single cause of action, negligence, which was previously pleaded. Both of the additional causes of action are ancillary to and largely dependent on the negligence claim. The Syngenta defendant legal entities (Syngenta Canada Inc. and Syngenta International AG) have filed appearances in the proceedings. Subject to any preliminary motions, the next step in these proceedings will be a certification motion brought by the proposed representative plaintiffs. No dates have been scheduled for any motions at this time. In October 2014, a Motion for Authorization was filed by the same firm of plaintiffs' counsel in Montréal, Quebec seeking permission to bring a similar class proceeding in that province. The proposed representative plaintiff operates a family business specialized in the breeding of queen bees. The Quebec litigation closely resembles the original Ontario lawsuit claiming negligence except that, rather than a nationwide class, it alleges a class limited to Quebec. At this preliminary motion stage damages are unspecified. Notices of appearance have been entered on behalf of the Syngenta defendant legal entities in Quebec. A case management judge has been appointed in the Quebec proceedings. A preliminary motion by Syngenta and the second manufacturer in August 2016 to address evidentiary issues related to the representative plaintiff's proposed Motion for Authorization resulted in an order allowing that manufacturer and Syngenta to examine the proposed representative plaintiff under oath. That examination took place in November 2016. No date has been scheduled for the Motion for Authorization. Syngenta believes the claims in these cases are without merit and will vigorously defend the lawsuits.

#### Atrazine related litigation

In August 2013, a personal injury Complaint relating to atrazine was filed under seal in the Circuit Court for the Twentieth Judicial Circuit, St. Clair County, Illinois, on behalf of an unnamed minor (the case being brought under the alias James Doe) and his parents, against Syngenta Crop Protection LLC, Syngenta AG, a distributor, Growmark Inc., and three local dealers, M&M Service Company, Hamel Seed & Farm Supply, Inc. and St. Clair Service Company. The Complaint alleges public nuisance, strict liability and negligence, and seeks unspecified damages together with

the costs of suit. Answers and Affirmative Defenses were filed on January 21, 2014 for Syngenta Crop Protection LLC as well as the non-Syngenta defendants, and on February 25, 2014 the Answer and Affirmative Defenses of Syngenta AG were also filed. Fact discovery in the litigation opened in March 2014 and is continuing. The claims in the lawsuit have no grounding in fact or science and Syngenta will vigorously defend the lawsuit.

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#### Tax matters

Significant management judgment is required to estimate the tax provisions related to the eventual outcome of reviews and audits by tax authorities of tax returns filed by Syngenta's subsidiaries. Tax returns filed by many of Syngenta's subsidiaries during the past several years are either currently under examination by tax authorities or are open for future examination until expiry under statutes of limitation. Syngenta is also subject to certain tax claims pending before the judiciary. See Note 2 "Uncertain tax positions" for detail regarding two on-going transfer pricing disputes in Brazil. In Syngenta's opinion, the likelihood is remote that a material amount in excess of current provisions will result from the resolution of any such examination or case. However, it is reasonably possible that actual outcomes and settlements may differ significantly from the estimated liabilities shown in the consolidated balance sheet for income taxes and in Note 17 for other taxes.

#### Environmental matters

It is reasonably possible that Syngenta may be required to make expenditures in excess of the established provisions that are reported in Note 19 to remediate environmental liabilities at some currently or formerly owned, leased and third party sites throughout the world. Further, in cases where it is not possible to estimate reliably the remediation costs that may be incurred in the future for environmental damage that has occurred at sites currently in operation and having no present obligation for environmental damage remediation, no provisions have been made. This is because it is neither possible to determine a time limit beyond which the sites will no longer be operated, nor what remediation costs may be required upon their eventual closure.

In the USA, Syngenta and/or its indemnitors or indemnitees, have been named under federal legislation (the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended) as a potentially responsible party ("PRP") in respect of several sites. Syngenta expects to be indemnified against a proportion of the liabilities associated with a number of these sites by the sellers of the businesses associated with such sites and, where appropriate, actively participates in or monitors the clean-up activities at the sites in respect of which it is a PRP.

#### Contingencies summary

Given the inherent difficulties in estimating liabilities relating to litigation, tax, environmental and certain other matters due to uncertainty concerning both the amount and timing of future expenditures, it is reasonably possible that additional costs may be incurred materially in excess of provisions recorded for such liabilities. Such expenditures, in excess of established provisions, could have a material effect on Syngenta's consolidated operating results and cash flows for a particular reporting period, but management does not believe they will have a materially adverse effect on Syngenta's consolidated financial position or liquidity, although there can be no assurances in this regard.

#### 26. Principal currency translation rates

Year end rates used for the consolidated balance sheets at December 31, to translate the following currencies into \$, are:

	2016 per \$	2015 per \$
Swiss franc	1.02	0.99
British pound sterling	0.81	0.68
Euro	0.95	0.92
Brazilian real	3.26	3.90
Russian ruble	61.55	73.89
Ukrainian hryvnia	27.19	23.79

Average rates during the years ended December 31, used for the consolidated income and cash flow statements, to translate the following currencies into \$, are:

	2016 per \$	2015 per \$	2014 per \$
Swiss franc	0.99	0.96	0.91
British pound sterling	0.73	0.65	0.61
Euro	0.90	0.90	0.75
Brazilian real	3.49	3.33	2.35
Russian ruble	67.57	61.05	37.29
Ukrainian hryvnia	25.43	21.45	11.57

## 27. Risk management of financial risks

### Risk management framework

The nature of Syngenta's business and its global presence exposes it to a range of financial risks. These risks include (i) market risks, which include potential unfavorable changes in foreign exchange rates, interest rates, commodity prices and other market prices (equities, credit spreads etc.), (ii) counterparty risk and (iii) liquidity and refinancing risk.

A financial risk management framework is in place in the form of a Treasury policy approved by the Board of Directors. This policy provides guidance over all Treasury and finance related matters, is underpinned by delegated authority guidelines and is additionally supported by detailed



procedures in place across Syngenta. In accordance with its Treasury policy, Syngenta actively monitors and manages financial risk with the objectives of reducing fluctuations in reported earnings and cash flows from these risks and providing economic protection against cost increases. These objectives are achieved through (a) a monthly assessment of the impact of market risks against defined risk limits (see following section), which take into account the risk appetite of Syngenta and (b) the use of a variety of derivative and non-derivative financial instruments.

Financial instruments available for use to mitigate these risks are selected by Syngenta according to the nature of the underlying risk. These instruments are designed to economically hedge underlying risks arising from operational activities and from funding and investment positions. Syngenta does not enter into any speculative financial transactions.

The fair values and the volumes of the derivatives (including the time periods being hedged and the average strike/price achieved) used to manage financial market risks are below, classified by accounting treatment: CF and FV indicate derivatives where cash flow hedge and fair value hedge accounting is applied, respectively; and M2M indicates derivatives that are marked to market through profit or loss and hedge accounting is not specifically required. The transactions are managed to minimize the potential adverse movement for the entire portfolio of the net transactional flows, rather than on an individual currency basis. As such, there is no single average strike or price of the derivatives.

2016		Fair value of outstanding derivatives <sup>1</sup>			Maturity profile in \$m			
Risk	Accounting treatment	\$m quantity	Assets	Liabilities	0-90 days	90-days -1 year	1-5 years	>5 years
Foreign exchange risk (\$m)								
Trading transaction – committed	M2M	5,713	48	(117)	(49)	(20)	-	-
Trading transaction – uncommitted	CF	1,542	16	(40)	(6)	(18)	-	-
Trading transaction – uncommitted	M2M	97	-	-	-	-	-	-
Issued financial debt and interest	CF	2,234	-	(272)	-	(82)	(144)	(46)
Interest rate risk	FV	500	21	-	-	-	-	21
Commodity price risk								
Gas <sup>2</sup>	CF	7	2	-	1	1	-	-
Soft commodities <sup>3</sup>	M2M	113	29	-	28	1	-	-
Soft commodities <sup>4</sup>	CF	83	6	-	5	1	-	-
Total		10,289	122	(429)	(21)	(117)	(144)	(25)

2015		Fair value of outstanding derivatives <sup>1</sup>			Maturity profile in \$m			
Risk	Accounting treatment	\$m quantity	Assets	Liabilities	0-90 days	90-days -1 year	1-5 years	>5 years
Foreign exchange risk (\$m)								
Trading transaction – committed	M2M	7,133	81	(81)	(21)	18	3	-
Trading transaction – uncommitted	CF	1,456	33	(21)	8	4	-	-
Trading transaction – uncommitted	M2M	127	16	-	-	16	-	-
Issued financial debt and interest	CF	2,234	-	(267)	-	-	(107)	(160)

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Interest rate risk	FV	500	25	-	-	-	-	25
Commodity price risk								
Gas <sup>2</sup>	CF	6	-	(2)	(1)	(1)	-	-
Soft commodities <sup>3</sup>	M2M	87	2	(10)	(6)	(2)	-	-
Soft commodities <sup>4</sup>	CF	82	6	-	-	6	-	-
Total		11,625	163	(381)	(20)	41	(104)	(135)

1 The fair values of derivatives are reported in the consolidated Balance Sheet as shown in Note 28

2 2,277,000 million (2015: 1,888,464 million) British thermal units

3 Mainly 830,985 lbs (2015: 1,637,089 lbs) of coffee

44,020,000 bushels (2015: 5,500,000 bushels) of soybean and 11,720,000 bushels (2015: 7,580,000 bushels) of corn

Of the derivatives listed in the table above, hedge accounting is applied wherever possible. Exceptions to this are derivatives where the fair value movements of the hedges and the retranslation of the underlying exposures are largely offset in profit or loss (hedging foreign exchange risk of committed monetary items); or derivatives placed, which do not fulfil the specific requirements of the accounting standard to achieve hedge accounting (hedging foreign exchange risk of uncommitted forecast transactions; commodity price risk: soft commodities, principally Brazil coffee purchases as part of barter programs).

For those transactions which are not designated for hedge accounting purposes where the transactions do not fulfil the specific requirements of the accounting standard to achieve hedge accounting, the gains and losses on those hedging instruments for the year 2016 were as follows:

Foreign currency forward contracts that are effective economic hedges of forecast cash flows arising from anticipated sales and purchases between Syngenta affiliates and third parties. The amount recorded in profit or loss in 2016 is a loss of \$10 million (2015: \$nil; 2014: loss of \$23 million).

- Commodity derivative contracts that are effective economic hedges of the anticipated purchases of raw materials or purchases, principally purchases related to corn and soybean in North America and Latin America, and the resale of various crops in barter arrangements. The amount recorded in profit or loss in respect of these derivatives in 2016 is a gain of \$45 million (2015: loss of \$1 million; 2014: loss of \$4 million). The profit or loss impact from the corresponding forecasted transactions occurs when the related finished product inventories are sold, which is generally in the year following recognition of the gain or loss on the hedge.



## Assessment of the impact of market risks

The impact of market risks is assessed using a variety of Value-at-Risk (VaR) and Earnings-at-Risk (EaR) methods. These methods are adjusted to reflect the nature of the exposures and the impact of the exposures on profit or loss of the financial year. The specific methods used to assess the impact of financial risks are described below:

Risk	Method	Exposure (financial statement item)	Time horizon (months)
Foreign exchange risk			
Trading transaction – committed	VaR	Monetary asset and liability carrying amounts	1
Trading transaction – uncommitted	EaR	Operating income	12
Issued financial debt and interest	VaR	Monetary liability carrying amounts	1
Translation	VaR	Cumulative translation adjustment in OCI	1
Interest rate risk	EaR	Interest expense	12
Commodity price risk	EaR	Operating income	12

VaR and EaR calculations are risk management tools designed to statistically estimate with a pre-set probability the maximum amount of potential losses in value (VaR) or earnings (EaR) over a specific (holding) time period given current and forecast positions and possible movements in market prices. The VaR and EaR methods used by Syngenta estimate the gross impact on the consolidated financial statements if the underlying items were not hedged and the net impact of the combined underlying hedged items and the related hedging instruments. VaR and EaR calculations attempt to recognize that holding different assets and liabilities or incurring different future cash flow exposures may reduce portfolio risk through diversification. Such diversification effects are captured within the calculations, which aim to present the risk based on Syngenta's currency exposure as a whole, rather than the sum of the exposures to the individual currency pairs within the portfolio of exposures. Using historical data, the VaR and EaR calculations are designed to predict possible changes in the markets in the future at a 99 percent confidence level, with a 1 percent probability that actual results will be worse than calculated. The time horizon used to calculate the VaR figures for each risk is determined by the time period over which management forecasts and monitors changes in the risk and in Syngenta's exposure to it and takes mitigating actions in response to those changes.

The assessment of the impact of market risks is performed monthly and the results are compared against annually defined risk limits. In cases where the net impact is higher than a risk limit, Syngenta enters into derivative financial instrument transactions in order to stay within the risk limits approved in the risk management policy. Breaches of risk limits, should they occur, are immediately reported to senior management.

Syngenta cannot predict future movements in risk variables precisely, therefore calculations of the impact of market risks neither represent actual losses nor consider the effects of potential favorable movements in underlying risk variables. Accordingly, these calculations may only be an indication of future movements to the extent the historic market patterns repeat in the future.

## Foreign exchange risk

Operating worldwide exposes Syngenta to foreign exchange transaction and translation risk at both the Group and subsidiary level. Syngenta's policy is to hedge the effect of foreign exchange translation risk on shareholders' equity only in specific circumstances, for example to protect the value of temporary excess foreign currency denominated cash positions.

### Foreign exchange transaction risk – committed

Syngenta's individual subsidiaries predominantly transact their operational activities in their respective functional currencies. However, the globally integrated nature of Syngenta's business results in its subsidiaries bearing some amount of transactional balance sheet risk, because some monetary items (including financial liabilities) are denominated in foreign currencies.

Such committed foreign currency exposures are largely generated by the routing of products from Syngenta's central manufacturing sites to its foreign locations. The risk management strategy is to ensure that these committed exposures are fully hedged, unless otherwise approved by Group Treasury, for example where not deemed cost-effective or where there is no forward market for a specific currency.

The derivative instruments that Syngenta's risk management policy allows to be used to manage the risk are foreign exchange forward contracts and cross currency swaps with the same risk (foreign exchange currency index), where the fair value movements of the hedges and the retranslation of the underlying committed exposures are largely offset in profit or loss.

The derivative instruments are placed with the same maturity as the expected cash flows of the hedged transactions so that the timing of the cash flows of the items within the hedged exposure effectively matches the timing of the cash flows of the derivative instrument.

Net committed transactional currency exposures are identified and reported on a monthly basis by business units. The impact of the hedging program can be illustrated in the VaR calculations for committed exposures, which relate to the revaluation of exposures relative to spot rates over a monthly period. The impact of interest differentials and other factors is not included in these calculations.

(\$m, except risk reduction %)	December 31, 2016			December 31, 2015		
	Value-at-Risk			Value-at-Risk		
Underlying currency (1-month holding period)	Gross impact	Net impact	Risk reduction	Gross impact	Net impact	Risk reduction
Swiss franc	88	8	90%	40	20	50%
Brazilian real	119	2	99%	96	–	100%
British pound sterling	23	-	99%	24	8	68%
Russian ruble	39	-	99%	23	–	99%
Rest of world	92	22	77%	83	24	71%
Total undiversified	361	32	91%	266	52	80%
Diversification	(207)	(24)	89%	(155)	(32)	79%
Net VaR	154	8	95%	111	20	82%

At December 31, 2016, the Value-at-Risk for a one month holding period, after hedges, at a 99 percent confidence level was \$8 million (December 31, 2015: \$20 million).

The largest exposures arise in Brazilian real, Swiss franc, British pound sterling and Russian ruble. Switzerland and Great Britain house large research and manufacturing sites. In recent years, due to the growth of Syngenta sales, exposures in emerging markets (particularly Brazil) have become significant.

#### Foreign exchange transaction risk – uncommitted

Uncommitted transactions are expected, highly probable future transactions for which Syngenta does not yet have a contractual right or obligation (mainly sales and costs).

The US dollar represents the biggest single currency for both sales and costs. However, currency mismatches arise from Syngenta having a centralized cost base, denominated mainly in Swiss francs, British pounds and US dollars, against a local selling base, denominated mainly in US dollars, Euros and various other currencies, including those in emerging markets. In addition, due to the seasonality of Syngenta's business, the majority of sales occur during the first half of the year whereas costs tend to occur more linearly throughout the year.

The risk management objective is to minimize the impact of changes in foreign exchange rates on the operating income forecasted to result from these transactions. Syngenta considers hedging this exposure unless it can reliably expect that operating income could, without significant adverse economic impact, be protected by adjusting the

pricing of forecast transactions for changes in foreign exchange rates before those transactions occur. Hedging transactions are managed to minimize the potential adverse movement for the entire portfolio of the net transactional flows, rather than on an individual currency basis. Transactions in a specific calendar year are managed cumulatively in separate portfolios.

The cumulative diversified risk of the whole portfolio can be reduced by entering into derivative transactions for a portion or the full amount of the individual transactions so that the remaining risk of the whole portfolio is at acceptable levels within clearly defined risk limits. The risk management objective is applicable for transactions in the following 24 months. Currently transactions for the next 12 month period are being hedged.

The derivative instruments that Syngenta's risk management policy allows to be used to manage the risk are:

foreign exchange forward contracts and net purchased currency options with the same risk (foreign exchange currency index) which are eliminating or reducing the uncertainty in the cash flows.

placed mainly with the same or (to a lesser extent) with shorter maturity than the timing of the cash flows being hedged so that the timing of the cash flows of the hedged transactions effectively matches the timing of the cash flows of the derivative instrument.

The impact of the hedging program on operating income can be illustrated in the Earnings-at-Risk calculation performed for anticipated net transactional currency flows for the following year taking into account related currency hedges.

(\$m, except risk reduction %)	December 31, 2016			December 31, 2015		
	Earnings-at-Risk			Earnings-at-Risk		
Underlying currency (12-month holding period)	Gross impact	Net impact	Risk reduction	Gross impact	Net impact	Risk reduction
Swiss franc	161	67	58%	199	90	55%
Argentine peso	27	27	-	500	500	-
Brazilian real	112	112	-	94	94	-
Russian ruble	29	13	56%	10	8	-
Euro	44	44	-	40	39	3%
British pound sterling	51	32	37%	40	25	38%
Rest of world	206	188	9%	191	159	17%
Total undiversified	630	483	23%	1,074	915	15%
Diversification	(445)	(355)	20%	(498)	(387)	22%
Net EaR	185	128	31%	576	528	8%

At December 31, 2016, the total potential adverse movement for 2017 net transactional flows after hedges relative to year-end, at a 99 percent confidence level, was \$128 million (December 31, 2015: \$528 million).

The net resulting Earnings-at-Risk figures at December 31, 2016 decreased by \$400 million compared with December 31, 2015 mainly due to the large reduction in the risk of the Argentine peso (December 31, 2015: \$500 million vs. December 31, 2016: \$27 million). This reduction is a product of the Argentine peso stabilizing through the year after the sharp devaluation in December 2015 which occurred due to the election of the new government in Argentina.

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The risk is similar to the levels seen at the end of 2014 with the greatest exposures being the Swiss franc, where Syngenta has a significant cost base in Switzerland with no material offsetting sales, and the Brazilian real, where a significant cost base is only partially offset by sales because sales in Brazil are largely dollarized.

Foreign exchange transaction risk – issued financial debt and interest

Syngenta has a funding strategy which involves securing a diversification of funding sources in different markets and maintaining an optimal currency mix of debt.

This additional foreign currency exposure arises from the debt issuances in Euro and in Swiss franc under the Euro Medium Term Note (EMTN) program. The risk management objective is to minimize the impact of changes in foreign exchange rates on these foreign currency denominated debt interest and principal repayments.

The foreign exchange risk on the foreign currency denominated debt is managed mostly by derivative instruments, and to a lesser extent within a portfolio of other committed transactions, so that no material foreign currency risk remains as a result of the foreign currency denominated debt.

The derivative instruments which Syngenta's risk management policy allows to be used to manage the risk are:

cross currency swaps designated as hedges of foreign exchange risk of future interest and principal payments on foreign currency financial debt which are eliminating or reducing the uncertainty in the cash flows.

placed mainly with the same terms as the items being hedged so that the timing of the interest and principal repayments of the hedged transactions effectively matches the timing of the cash flows of the derivative instrument.

Foreign exchange translation risk

Translation exposure arises from the consolidation of foreign currency denominated financial statements of Syngenta's subsidiaries. This is reported as currency translation effects in OCI.

Translation risk can be significant; however, Syngenta regards its equity base to be of sufficient magnitude generally to absorb the short- to medium-term impact of exchange rate movements.

Syngenta can use both foreign currency denominated debt and net investment hedging to manage this exposure. The latter incorporates specific actions to protect the value of temporary excess foreign currency denominated cash positions. No hedging was undertaken for exposures of this type during the years ended December 31, 2016 or 2015. The exposure is deemed to be mitigated by the large net asset base of Syngenta and consequently no additional management of the exposure was undertaken in 2016 or 2015.

The table below presents the 1-month translation Value-at-Risk:

(\$m)	December 31, 2016	December 31, 2015
	Value-at-Risk	Value-at-Risk
Currency of net investment in subsidiary (1-month holding period)	Gross impact	Gross impact
Brazilian real	156	164
Swiss franc	145	287
Euro	44	56
British pound sterling	59	61
Rest of world	135	128
Total undiversified	539	696
Diversification	(204)	(277)
Net VaR	335	419

At December 31, 2016, the Value-at-Risk for a one month holding period at a 99 percent confidence level was \$335 million (December 31, 2015: \$419 million). The Value-at-Risk at December 31, 2016 is lower than as of December 31, 2015 mainly driven by an increased Swiss franc volatility in 2015 due to the removal by the Swiss Central Bank of the cap of the Swiss franc against the Euro.

The two largest single currency exposures arise in the Brazilian real and Swiss franc, driven by the large operations and investments in facilities in Switzerland and Brazil.

#### Interest rate risk

Syngenta is exposed to fluctuations in interest rates on its borrowings (including forecasted borrowings) and excess cash. While the majority of Syngenta's borrowings have fixed interest rates, portions of Syngenta's net borrowings, including its short-term commercial paper program and local borrowings, are subject to changes in short-term interest rates.

Syngenta monitors its interest rate exposures and analyzes the potential impact of interest rate movements on net interest expense. The risk management strategy involves ensuring an efficient fixed/floating mix of total debt within approved interest rate limits.

The derivative instruments allowed to manage the risk are interest rate swaps relating to future interest payments of financial debt liabilities. The derivative instruments are placed with the same maturity as the expected cash flows of the hedged transactions so that the timing of the cash flows of the hedged transactions effectively matches the timing of the cash flows of the derivative instrument.

At December 31, 2016, the net amount of Earnings-at-Risk on floating rate debt due to potential changes in interest rates (a parallel shift of 100 bps was applied) was \$10 million (2015: \$10 million). The net amount of Earnings-at-Risk on net debt, as defined under “Capital structure” below, due to potential changes in interest rates was immaterial at December 31, 2016 and 2015.

#### Commodity price risks

Operating in the agribusiness sector, changes in certain commodity prices affect Syngenta’s reported operating results and cash flows. On a limited basis, Syngenta enters into derivative transactions to hedge the exposure of its cost base to commodity prices. This activity comprises oil and natural gas hedging in the UK and USA, as well as soft commodity hedging for corn and soybean purchases by the Seeds business in the USA, Canada, Brazil and Argentina, where Syngenta contracts to purchase various seed crops from growers and hedges the cost of the purchases. In barter arrangements where Syngenta sells products in exchange for receiving a certain amount of a commodity crop, Syngenta hedges the value of the crop. At December 31, 2016 and 2015, there were no open hedging transactions for Brazil and Argentina corn and soybean price risk.



Syngenta has indirect exposure to oil price fluctuations mainly through the impact of oil prices on the cost of both raw materials, especially chemical intermediates in the Crop Protection business, and distribution activities. At December 31, 2016, there was no hedge protection in place for oil for 2017 (December 31, 2015: no hedge protection in place for oil for 2016). As the exposure to oil is indirect, Syngenta does not calculate the Earnings-at-Risk due to potential changes in oil prices.

Natural gas exposure occurs in Syngenta's primary manufacturing sites and Syngenta is managing the exposure by hedging the main risk component, which is the natural gas market price, contractually linked to the NYMEX natural gas benchmark price. The other risk components within the exposure are immaterial.

The main objective of managing commodity price risk is to reduce the impact of commodity price changes on operating income and to provide economic protection against future cost increases. Syngenta uses fixed price contracts and derivatives (both Over-the-Counter (OTC) and exchange traded instruments, including commodity option and futures contracts) to achieve this objective. The derivative instruments are placed with the same maturity as the expected cash flows of the hedged transactions so that the timing of the cash flows of the hedged transactions effectively matches the timing of the cash flows of the derivative instrument.

At December 31, 2016, the net amount of Earnings-at-Risk due to potential changes in natural gas prices was not material. Earnings-at-Risk due to potential changes in prices of soft commodities, principally corn and soybean, assuming a 12-month holding period are presented below.

(\$m, except risk reduction %)	December 31, 2016			December 31, 2015		
	Earnings-at-Risk			Earnings-at-Risk		
Soft commodities	Gross impact	Net impact	Risk reduction	Gross impact	Net impact	Risk reduction
Total undiversified <sup>1</sup>	36	28	23%	40	16	60%

1 As the main soft commodities are largely correlated to each other, the impact of diversification is immaterial

The Earnings-at-Risk of soft commodities is driven by their high price volatility compared to other asset classes. The hedging program reduces overall 12-month Earnings-at-Risk at December 31, 2016 to \$28 million (December 31, 2015: \$16 million). The increase in net risk in 2016 is mainly due to lower hedge ratios.

Derivatives and hedge accounting

Syngenta seeks to apply, wherever possible, hedge accounting to present its financial statements in accordance with the economic purpose of the hedging activity. Hedges for which hedge accounting is not adopted either (a) do not meet the requirements for hedge accounting treatment under IFRS or (b) when combined with the accounting for the underlying hedged items, impact the financial statements in a manner aligned with the economic purpose of the hedging transaction without the need to adopt hedge accounting treatment, for example hedges of monetary items denominated in foreign currency.

Syngenta determines the economic relationship between the hedged items and the hedging instruments by reviewing the critical terms of the hedged items and the hedging instruments. As a result Syngenta concludes that the risk being hedged for the hedged items and risk inherent in the hedging instruments are sufficiently aligned, there is no inherent mismatch in the hedging relationship and a 100 percent hedge ratio applies both for the actual quantities hedged and for the hedge accounting, except as described below.

For the hedging of foreign currency risk of uncommitted forecasted trading transactions, because the exposures are largely generated by the routing of products from Syngenta’s central manufacturing sites to its foreign locations, the profit or loss impact from the corresponding transactions occurs when the related finished product inventories are sold to third parties. When entering into derivative hedging contracts, Syngenta selects maturity dates based on the forecast period that Syngenta holds inventories of its products for each commercial market by hedged currency exposure. Limited variability in the holding period occurs mainly due to timing of the third party sales transactions (“inventory holding period mismatch”).

For the hedging of commodity price risk of soy and corn, there is variability between the index being hedged (CBOT) and the drivers of the actual exposures (local soy elevator prices based on CBOT and Syngenta seeds production and selling prices based on CBOT). The variability is, however, limited to individual transactions within the group of transactions in this hedging program – and a hedge ratio of 100 percent is observed for the whole group of transactions.

The following table summarizes the accounting treatment, sources of ineffectiveness and the effectiveness assessment method for the identified financial market risks:

Risk	Accounting treatment	Potential sources of ineffectiveness	Effectiveness assessment	
			Method	Frequency
Foreign exchange risk:				
Trading transaction – uncommitted	CF	Lower volume of hedged items; inventory holding period mismatch	Critical terms match	Quarterly
Issued financial debt and interest	CF	Lower volume of hedged items	Critical terms match	Quarterly
Interest rate risk	FV	Lower volume of hedged items	Critical terms match	Quarterly
Commodity price risk:				
Gas	CF	Lower volume of hedged items		Semi-annually

Soft commodities	CF	Lower volume of hedged items; index mismatch	Critical terms match Regression analysis	Quarterly
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Ineffectiveness is recognized in the consolidated income statement in Other general and administrative for hedges of uncommitted foreign currency forecast transactions, in Financial expense, net for hedges of committed foreign currency monetary items, in Financial expense, net for hedges of interest rate risk and in Cost of goods sold for hedges of commodity price risk. For the years ended December 31, 2016 and 2015 none of the above potential sources of ineffectiveness, individually or collectively, resulted in material amounts of actual ineffectiveness being reported for any hedge accounting relationships.

#### Fair Value Hedge Accounting

The amounts being reported in the statement of financial position for the fair value hedging relationships at December 31, 2016 and 2015 are as follows:

Risk (\$m)	Carrying amount		Accumulated amount	
	2016	2015	2016	2015
Interest rate risk – for continuing hedging relationships	515	519	(17)	(21)
Interest rate risk – for hedged items that have ceased to be adjusted	83	85	(8)	(10)
Total	598	604	(25)	(31)

The carrying amounts of the hedged items, including the fair value adjustments to the hedged items, are reported under Current financial debt and other financial liabilities and Financial debt and other non-current liabilities.

The change in the value of the hedged items during the period for hedge effectiveness purposes was \$7 million (2015: \$4 million).

#### Cash flow hedges

The gains/(losses) on derivative instruments recognized in and classified out of the cash flow hedge reserve during the years ended December 31, 2016 and 2015 were as follows. The amounts shown exclude related income tax effects, which are disclosed in Note 7. This is a change in presentation from the corresponding tables in prior years' financial statements, which included the related income tax effects.

Continuing hedging relationships	Hedge accounting no longer applied
Foreign exchange risk	Commodity price risk

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2016 (\$m)	Trading transaction – uncommitted	Issued financial debt and interest	Gas		Soft commodities	Subtotal	Foreign exchange risk translation	Issued financial debt and interest	Subtotal	Total
Opening balance	4	12	-	-		16	(69)	(2)	(71)	(55)
(Losses)/gains recognized in OCI:										
on hedges as designated	36	(43)	-	3		(4)	1	-	1	(3)
Transferred directly to assets or liabilities	-	-	-	(7)		(7)	-	-	-	(7)
Reclassifications to profit or loss:										
(Losses)/gains on hedges as designated:										
Cost of goods sold	-	-	-	7		7	-	-	-	7
General and administrative	(63)	-	-	-		(63)	-	-	-	(63)
Financial expense, net	-	100	-	-		100	-	2	2	102
Closing balance	(23)	69	-	3		49	(68)	-	(68)	(19)
Continuing hedging relationships							Hedge accounting no longer applied			
			Foreign exchange risk		Commodity price risk					
2015 (\$m)	Trading transaction – uncommitted	Issued financial debt and interest	Gas		Soft commodities	Subtotal	Foreign exchange risk translation	Issued financial debt and interest	Subtotal	Total
Opening balance	46	(86)	(3)	21		(22)	(69)	(2)	(71)	(93)
(Losses)/gains recognized in OCI:										
on hedges as designated	(12)	1	(2)	(21)		(34)	-	(5)	(5)	(39)
undesignated hedging costs	(9)	-	-	-		(9)	-	-	-	(9)
recognized in OCI										
Transferred directly to assets or liabilities	-	-	-	(4)		(4)	-	-	-	(4)
Reclassifications to profit or loss:										
(Losses)/gains on hedges as designated:										
Cost of goods sold	-	-	5	4		9	-	-	-	9
General and administrative	(21)	-	-	-		(21)	-	-	-	(21)
	-	97	-	-		97	-	5	5	102

Financial expense,  
net  
Closing balance

4	12	-	-	16	(69)	(2)	(71)	(55)
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2014 (\$m)	Continuing hedging relationships				Hedge accounting no longer applied				
	Foreign exchange risk		Commodity price risk		Subtotal	Foreign exchange translation	Issued financial debt and interest	Subtotal	Total
	Trading transaction – uncommitted	Issued financial debt and interest	Gas	Soft commodities					
Opening balance	105	(120)	1	25	11	(73)	6	(67)	(56)
(Losses)/gains recognized in OCI	(21)	(243)	(3)	(6)	(273)	4	(16)	(12)	(285)
Reclassifications to profit or loss:									
Cost of goods sold	–	–	(1)	2	1	–	–	–	1
General and administrative	(38)	–	–	–	(38)	–	–	–	(38)
Financial expense, net	–	277	–	–	277	–	8	8	285
Closing balance	46	(86)	(3)	21	(22)	(69)	(2)	(71)	(93)

Amounts reclassified from the cash flow hedge reserve into profit or loss are recognized in the consolidated income statement in Other general and administrative for hedges of uncommitted foreign currency forecast transactions, in Financial expense, net for hedges of committed foreign currency monetary items and for hedges of interest rate risk and in Cost of goods sold for hedges of commodity price risk.

#### Credit risk

Credit risk arises from the possibility that counterparties involved in transactions with Syngenta may default on their obligation, resulting in financial losses to Syngenta. Credit risk relates both to financial assets (including derivatives, marketable securities and money market contracts) as well as to operational assets managed by Syngenta's businesses (such as trade receivables).

Syngenta's maximum exposure to credit risk is the carrying values of its financial assets and receivables, including derivatives with positive market values. These amounts are disclosed in Note 28.

Syngenta has policies and operating guidelines in place to ensure that financial instrument transactions are only entered into with high credit quality banks and financial institutions. These include limits in respect of counterparties to ensure that there are no significant concentrations of credit risk. Syngenta continuously monitors the creditworthiness of its counterparties based on credit ratings and credit default swap data.

At December 31, 2016, Syngenta had no treasury or derivative transactions representing a significant concentration of credit risk. No credit losses have been incurred from investments in derivative financial instruments during the years

ended December 31, 2016 and 2015.

To minimize its exposure to derivative positions, Syngenta enters into netting agreements under an International Swaps and Derivatives Association (ISDA) master agreement with its respective counterparties. In addition, for almost all derivative positions, Syngenta has entered into Credit Support Annex contracts (CSAs) under which cash is exchanged as collateral. The CSA contracts cumulatively limit either Syngenta's or the counterparty's aggregate credit risk exposure to no more than \$1 million per counterparty on a weekly settlement basis for the positions for which CSA contracts have been agreed. There are no constraints on the cash exchanged and held between counterparties and the collateral can be used as part of operations. At December 31, 2016, an asset amounting to \$349 million (2015: \$267 million), and a liability amounting to \$9 million (2015: \$43 million) were recorded representing cash paid and received by Syngenta as collateral under these CSAs.

The impact of credit risk on the fair value of derivatives is considered through market observable credit default swap spreads for Syngenta and its counterparties. The impact on the fair value of Syngenta's derivative positions at December 31, 2016 and 2015 of the risk of default by financial counterparties was not material.

The credit risk to operational assets is managed through the use of credit limits and is partially mitigated through commercial activities, which include barter operations, cash sales incentives and obtaining other security from customers where appropriate.

The following tables show the effect of set off rights that apply to financial assets and liabilities under the above ISDA and CSA agreements at December 31, 2016 and 2015. Syngenta's rights under these arrangements would become enforceable in the event of a future default of the respective counterparty.

(\$m)	2016		2015	
	Assets	Liabilities	Assets	Liabilities
Gross recognized derivative financial instrument fair values (Note 28)	122	(429)	163	(381)
Amounts offset in consolidated balance sheet	-	-	-	-
Net amounts per consolidated balance sheet	122	(429)	163	(381)
Amounts subject to conditional set-off rights but not offset in consolidated balance sheet:				
ISDA Master netting agreements for derivative financial instruments	(60)	60	(65)	65
Collateral (received) / paid by Syngenta under CSA agreements	(9)	349	(43)	267
Net amounts in the event that all conditional set-off rights are applied	53	(20)	55	(49)

#### Liquidity risk and refinancing risk

Within Syngenta's risk management framework, liquidity risk is defined as the risk of being unable to raise funds to meet payment obligations when they fall due.



Refinancing or funding risk is defined as the risk of being unable, on an ongoing basis, to borrow in the market to fund actual or proposed commitments. Syngenta mitigates its liquidity and refinancing risk by maintaining: a committed unsecured funding facility; ongoing discussions with its core banks to best monitor its funding capacity; simulations; and diversification of its debt portfolio.

Syngenta's liquidity risk policy is to maintain at all times sufficient liquidity reserves both at Group and subsidiary level in order to meet payment obligations as they become due and also to maintain an adequate liquidity margin. The planning and supervision of liquidity is the responsibility of the subsidiaries and Group Treasury. Liquidity requirements are forecasted on a weekly basis. Syngenta operates regional or country cash pools to allow efficient use of its liquidity reserves.

### Short-term liquidity

Two of Syngenta's largest markets are Europe, Africa and the Middle East and North America. Both sales and operating profit in these two regions are seasonal and are weighted towards the first half of the calendar year, reflecting the northern hemisphere planting and growing cycle. Latin America is another large market for Syngenta and sales and operating profit there are weighted towards the second half of the calendar year, reflecting the southern hemisphere planting and growing cycle. This seasonal operating activity results in seasonal working capital requirements.

Syngenta's principal source of liquidity consists of cash generated from operations. Working capital fluctuations due to the seasonality of the business are supported by short-term funding available from a \$2.5 billion Global Commercial Paper program supported by a committed, revolving, multi-currency syndicated credit facility. In January 2016, the amount of this credit facility was increased from \$1.5 billion to \$2.5 billion. Its contractual expiry date is in 2019 but it has a change of control clause which allows each lender to cancel its commitment unless renegotiated terms are agreed within 30 days of a change of control occurring. In order to address the risk of early termination, ChemChina has provided cover for the backstop facility and also for other financing needs arising from the change of control via a committed Target Facilities Agreement that Syngenta expects to be able to access on successful completion of the ChemChina Tender Offer. The amount drawn under the Global Commercial Paper program at December 31, 2016 was \$100 million (2015: \$nil). The average outstanding balance under the Global Commercial Paper program for the year 2016 was \$1,217 million (2015: \$500 million).

The maturity analyses for Syngenta's current financial liabilities other than short-term derivative liabilities are presented in Notes 15 to 17.

The maturities of short term derivative liabilities are as follows:

(\$m) Total	0-90 days	90-180 days	180 days-1 year
2016	239	98	36
2015	115	90	16

### Long-term financing

Long-term capital employed is currently financed through eight unsecured bonds, one unsecured floating rate note, and unsecured notes issued under the Note Purchase Agreement in the US Private Placement market. During 2015, the 4.125 percent Eurobond 2015 with the principal of EUR 500 million matured.

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During 2015, Syngenta issued an unsecured non-current 12 year EUR 500 million security with a fixed interest rate of 1.25 percent.

The following table shows Syngenta's contractually agreed (undiscounted) interest and principal repayments on long-term financing-related non-derivative financial liabilities and the related derivatives held at December 31, 2016 and 2015. Non-derivative financial liabilities are recorded at amortized cost (less related issuance costs) unless subject to fair value hedge accounting, in which case the liability is adjusted for the change in fair value of the hedged risk to the extent the hedge relationship is effective. Derivative financial liabilities are recorded at fair value. The table therefore shows the total carrying amount of Syngenta's financial debt adjusted for the effect, if any, of applying fair value hedge accounting.

2016 (\$m)	Non-derivative financial liabilities (Unsecured bonds and notes)				Derivative financial liabilities (Interest rate and cross-currency swaps)			
	Fixed rate interest	Variable rate interest	Principal repayment	Total	Fixed rate interest	Variable rate interest	Repayment <sup>1</sup>	Total
Less than 1 year	66	-	-	66	23	11	0	34
1-3 years	132	-	344	476	46	18	52	116
3-5 years	122	-	602	724	30	31	113	174
5-10 years	162	-	820	982	92	4	37	133
More than 10 years	230	-	1025	1,255	25	-	54	79
Total payments	712	-	2791	3503	216	64	256	536
Net carrying amount				2,805				190

2015 (\$m)	Non-derivative financial liabilities (Unsecured bonds and notes)				Derivative financial liabilities (Interest rate and cross-currency swaps)			
	Fixed rate interest	Variable rate interest	Principal repayment	Total	Fixed rate interest	Variable rate interest	Repayment <sup>1</sup>	Total
Less than 1 year	67	1	-	68	38	4	-	42
1-3 years	134	1	273	408	76	6	72	154
3-5 years	131	-	427	558	68	-	43	111
5-10 years	196	-	1,372	1,568	113	-	131	244
More than 10 years	257	-	1,047	1,304	40	-	32	72
Total payments	785	2	3,119	3,906	335	10	278	623
Net carrying amount				3,137				267

<sup>1</sup> The repayments above (and the net carrying amount of the derivative financial liabilities) do not include the amounts paid as collateral

Forecast data for liabilities that may be incurred in the future is not included in the table above. Amounts in foreign currency were translated to US dollars at the closing rate at the reporting date. Variable payments at each year end arising from financial instruments were calculated based on the forward interest rate yield curve and the spread that

Syngenta pays on its outstanding debt and open derivatives at December 31, 2016 and 2015, respectively. Non-derivative financial liabilities, repayment of which can be demanded by the counterparty at any time, have been assigned to the earliest repayment period.

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## Capital structure

Absent major acquisitions, Syngenta targets maintaining a solid investment grade credit rating, as recognized by major third-party rating agencies, which it currently believes provides an optimal balance between financial flexibility and the cost of capital. Syngenta manages capital by monitoring levels of net debt, as calculated below, and equity against targets. Syngenta defines net debt as excluding financing-related derivatives and related collateral paid and received under CSA agreements as these balances offset each other. Capital is returned to shareholders primarily through dividend payments, with the aim of continuous dividend growth, complemented by tactical share repurchases.

The net debt to equity ratio was 29 percent at December 31, 2016 (31 percent at December 31, 2015).

The components of net debt at December 31, 2016 and 2015 are as follows:

(\$m)	2016	2015
Current financial debt	767	547
Non-current financial debt	2,854	3,183
Cash and cash equivalents	(1,284)	(1,141)
Marketable securities <sup>1</sup>	(56)	(3)
Net debt at December 31	2,281	2,586

1 Included within 'Derivative and other financial assets' and 'Financial and other non-current assets'

## 28. Financial assets and liabilities

The following tables show the carrying amounts and fair values of financial assets and liabilities by category of financial instrument and reconciliation to where they are presented in the balance sheet at December 31, 2016 and 2015. The fair value hierarchy level is shown for those financial assets and liabilities that are carried at fair value in the balance sheet.

2016 (\$m)	Carrying amount (based on measurement basis)			Total <sup>1</sup>	Comparison fair value
	Amortized cost	Fair value level 1	Fair value level 2 <sup>1</sup>		
Cash and cash equivalents	1,284	-	-	1,284	1,284 <sup>2</sup>
Trade receivables, net:					
At amortized cost	4,440	-	-	4,440	4,440 <sup>2</sup>
Mandatorily measured at fair value through profit or loss	-	-	103	103	103
Total				4,543	4,543
Other accounts receivable:					
Financial assets	255	-	-	255	255 <sup>2</sup>
Non-financial assets	-	-	-	315	- <sup>3</sup>
Total				570	
Derivative and other financial assets:					
Derivative financial assets <sup>4</sup>	-	6	92	98	98
Other current financial assets	349	53	-	402	402 <sup>2</sup>
Total				500	500
Financial and other non-current assets:					
Loans, receivables and pooled investments	47	47	7	101	101 <sup>5</sup>
Equity investments at fair value through OCI	-	1	75	76	76
Other, not carried at fair value	-	-	-	239	- <sup>3</sup>
Derivative financial assets <sup>4</sup>	-	-	24	24	24
Total				440	
Trade accounts payable	3,338	-	-	3,338	3,338 <sup>2</sup>
Current financial debt and other financial liabilities:					
Non-derivative financial liabilities	808	-	-	808	808 <sup>2</sup>
Derivative financial liabilities <sup>4</sup>	-	-	239	239	239
Total				1,047	1,047
Other current liabilities:					
Financial liabilities	230	-	-	230	230 <sup>2</sup>
Non-financial liabilities	-	-	-	944	- <sup>3</sup>
Total				1,174	
Financial debt and other non-current liabilities:					
Non-derivative financial liabilities	2,854	-	-	2,854	2,908 <sup>6</sup>
Derivative financial liabilities <sup>4</sup>	-	-	190	190	190
Non-financial liabilities	-	-	-	33	- <sup>3</sup>
Total				3,077	

The totals for equity investments at fair value through OCI include \$75 million of level 3 investments, mainly within Syngenta's venture business unit, presented in the level 2 column in the table above. The main valuation input for these investments is the price from their most recent shareholder financing transactions.

<sup>2</sup> Carrying amount approximates the estimated fair value due to the short-term nature of the financial instruments

<sup>3</sup> Fair value is not required to be disclosed for non-financial assets and non-financial liabilities, including defined benefit pension assets

<sup>4</sup> Derivative financial assets and liabilities are measured at fair value through profit or loss except that gains and losses on cash flow hedges of forecast transactions are not recognized in profit or loss until the hedged transaction is recognized in profit or loss

<sup>5</sup> Fair values of these receivables are measured by discounting their cash flows at interest rates derived using observable yields on government bonds with maturities and currencies that match those of the respective receivable and the estimated credit risk of each receivable. The total fair value disclosed is due from counterparties that have not issued traded bonds and represents a level 3 fair value measurement

<sup>6</sup> Financial liabilities represent both exchange traded bonds and non-exchange traded private placement notes issued by Syngenta. The fair value disclosed consists of level 2 fair value measurements derived from observable price quotations for these bonds, except for one private placement note with a fair value of \$144 million, which is a level 3 measurement because market interest rates and credit rates are not observable for the full period through to its maturity date in 2035

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2015 (\$m)	Carrying amount (based on measurement basis)			Total <sup>1</sup>	Comparison fair value
	Amortized cost	Fair value level 1	Fair value level 2 <sup>1</sup>		
Cash and cash equivalents	1,141	-	-	1,141	1,141 <sup>2</sup>
Trade receivables, net:					
At amortized cost	4,023	-	-	4,023	4,023 <sup>2</sup>
Mandatorily measured at fair value through profit or loss	-	-	105	105	105
Total				4,128	4,128
Other accounts receivable:					
Financial assets	384	-	-	384	384 <sup>2</sup>
Non-financial assets	-	-	-	337	- <sup>3</sup>
Total				721	
Derivative and other financial assets:					
Derivative financial assets <sup>4</sup>	-	6	128	134	134
Other current financial assets	267	-	-	267	267 <sup>2</sup>
Total				401	401
Financial and other non-current assets:					
Loans, receivables and pooled investments	45	51	7	103	103 <sup>5</sup>
Equity investments at fair value through OCI	-	2	71	73	73
Other, not carried at fair value	-	-	-	191	- <sup>3</sup>
Derivative financial assets <sup>4</sup>	-	-	29	29	29
Total				396	
Trade accounts payable	3,311	-	-	3,311	3,311 <sup>2</sup>
Current financial debt and other financial liabilities:					
Non-derivative financial liabilities	615	-	-	615	615 <sup>2</sup>
Derivative financial liabilities <sup>4</sup>	-	-	115	115	115
Total				730	730
Other current liabilities:					
Financial liabilities	209	-	-	209	209 <sup>2</sup>
Non-financial liabilities	-	-	-	774	- <sup>3</sup>
Total				983	
Financial debt and other non-current liabilities:					
Non-derivative financial liabilities	3,197	-	-	3,197	3,218 <sup>6</sup>
Derivative financial liabilities <sup>4</sup>	-	-	267	267	267
Non-financial liabilities	-	-	-	37	- <sup>3</sup>
Total				3,501	

The totals for equity investments at fair value through OCI include \$71 million of level 3 investments, mainly within 1 Syngenta's venture business unit, presented in the level 2 column in the table above. The main valuation input for these investments is the price from their most recent shareholder financing transactions.

2 Carrying amount approximates the estimated fair value due to the short-term nature of the financial instruments

3 Fair value is not required to be disclosed for non-financial assets and non-financial liabilities, including defined benefit pension assets

4 Derivative financial assets and liabilities are measured at fair value through profit or loss except that gains and losses on cash flow hedges of forecast transactions are not recognized in profit or loss until the hedged transaction is recognized in profit or loss



5 Fair values of these receivables are measured by discounting their cash flows at interest rates derived using observable yields on government bonds with maturities and currencies that match those of the respective receivable and the estimated credit risk of each receivable. The total fair value disclosed is due from counterparties that have not issued traded bonds and represents a level 3 fair value measurement

6 Financial liabilities represent both exchange traded bonds and non-exchange traded private placement notes issued by Syngenta. The fair value disclosed consists of level 2 fair value measurements derived from observable price quotations for these bonds, except for one private placement note with a fair value of \$147 million, which is a level 3 measurement because market interest rates and credit rates are not observable for the full period through to its maturity date in 2035

The levels of fair value hierarchy used above are defined as follows:

Level 1 fair value measurements are those derived from quoted prices (unadjusted) in active markets for identical assets or liabilities;

Level 2 fair value measurements are those derived from inputs other than quoted prices included within level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices); and

Level 3 fair value measurements are those derived from valuation techniques that include inputs for the asset or liability that are not based on observable market data.

The fair values of equity shareholdings subject to a lock-up period where the underlying shares are actively traded on a stock exchange is derived by applying a discount to the market price and are classified as level 2. They are reclassified as level 1 on expiry of the lock-up period. In 2016 and 2015, there were no transfers between level 1 and level 2 of the fair value hierarchy or between the fair value and amortized cost categories. In 2015, one equity shareholding was sold for \$13 million in response to an offer from a third party to acquire all the equity of the company concerned. There were no transfers during the years ended December 31, 2016, 2015 and 2014 into or out of level 3 of the fair value hierarchy.

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Movements in level 3 financial assets for the years ended December 31, 2016 and 2015 were as follows:

(\$m)	2016	2015
January 1	71	66
Gains/(losses) recognized on equity instruments at fair value through OCI	-	(2)
Additions due to issues	4	21
Disposals due to sales	(1)	(14)
Currency translation effects and other	1	-
December 31	75	71

Income, expense, gains and losses relating to financial instruments recognized in profit or loss during the years ended December 31, 2016, 2015 and 2014 are as follows:

2016 (\$m)	Amortized cost loans and receivables <sup>1</sup>	Derivative liabilities	Liabilities carried at amortized cost	Total
Recognized within Financial expense, net <sup>2</sup> :				
Interest income	181	-	-	181
Interest expense	(7)	(35)	(158)	(200)
Currency gains/(losses), net	-	(253)	-	(253)
Recognized within Operating income:				
Impairment charges	(67)	-	-	(67)
Total	107	(288)	(158)	(339)
2015 (\$m)	Amortized cost loans and receivables <sup>1</sup>	Derivative liabilities	Liabilities carried at amortized cost	Total
Recognized within Financial expense, net <sup>2</sup> :				
Interest income	150	-	-	150
Interest expense	(6)	(31)	(132)	(169)
Currency gains/(losses), net	-	(215)	-	(215)
Recognized within Operating income:				
Impairment charges	(76)	-	-	(76)
Total	68	(246)	(132)	(310)
2014 (\$m)	Amortized cost loans and receivables <sup>1</sup>	Derivative liabilities	Liabilities carried at amortized cost	Total
Recognized within Financial expense, net <sup>2</sup> :				
Interest income	152	-	-	152
Interest expense	(6)	(18)	(171)	(195)
Currency gains/(losses), net	-	(139)	-	(139)
Recognized within Operating income:				
Impairment charges	(67)	-	-	(67)
Total	79	(157)	(171)	(249)

- 1 Includes immaterial amounts relating to financial assets classified as at fair value through profit or loss
- 2 Financial expense, net also includes \$19 million of bank charges (2015: \$22 million; 2014: \$35 million)

Reported gains and (losses) recognized in OCI on revaluation of equity investments that were designated at fair value through OCI were \$nil, \$(3) million and \$(33) million for the years ended December 31, 2016, 2015 and 2014, respectively.

## 29. New IFRSs and accounting policies

### New IFRSs

Syngenta has adopted the following revised IFRSs from January 1, 2016. These IFRSs have not been early adopted and their adoption had no material impact on these consolidated financial statements:

“Accounting for Acquisitions of Interests in Joint Operations”, Amendments to IFRS 11. The amendments clarify that the acquisition accounting and disclosure requirements of IFRS 3 “Business Combinations” must be applied to the acquisitions of an interest in a joint operation. Syngenta was required to apply the amendments prospectively from January 1, 2016. There were no such acquisitions during 2016.

“Clarification of Acceptable Methods of Depreciation and Amortization”, Amendments to IAS 16 and IAS 38. The amendments state that a unit of revenue depreciation method for property, plant and equipment is inappropriate, and that a unit of revenue amortization method for intangible assets is presumed to be inappropriate unless the economic benefits derived from the asset are highly correlated with revenues or the asset’s use is conditional on a measure of revenue such as a threshold amount. Syngenta was required to apply the amendments retrospectively.

“Agriculture: Bearer Plants” Amendments to IAS 16 and IAS 41, requires bearer plants to be accounted for and reported as property, plant and equipment instead of as biological assets.

The “Annual Improvements to IFRSs” amendments for the 2012-14 annual improvement cycles.

“Disclosure Initiative”, amendments to IAS 1, amended guidance for presenting gains and losses recognized in OCI by associates and joint ventures, presenting the notes to the financial statements and including additional line items and subtotals in financial statements.

The relevant new or revised IFRSs that Syngenta has not yet adopted are the following:

IFRS 9 “Financial Instruments” was published in July 2014. IFRS 9 was published in stages and Syngenta early adopted an earlier version, IFRS 9 (December 2013) in 2014. The July 2014 version of IFRS 9 is the complete and final version and contains certain revisions to the financial asset classification and measurement requirements in the December 2013 version, the most important being the addition of a third business model for asset classification with objectives of both collecting contractual cash flows from the assets and selling the assets. On the basis of the financial assets it holds at December 31, 2016, Syngenta does not believe these revisions will have a material impact on its consolidated financial statements. The July 2014 version of IFRS 9 also contains requirements for financial asset impairment that will replace the currently applicable equivalent IAS 39 guidance. Under the new impairment requirements, Syngenta will record allowances for expected credit losses on its financial assets. Syngenta’s largest category of financial assets is its trade receivables, which with few exceptions have credit terms of less than 12 months. Under the new requirements, an allowance will be recognized equal to the credit losses Syngenta expects to incur over the lifetime of the trade receivables. This may result in earlier recognition of loss allowances, because under the current guidance credit losses are not recognized until they are incurred. IFRS 9 (July 2014) is effective January 1, 2018 and the new impairment requirements must be applied retrospectively, but restatement of prior periods upon adoption is not required. Early adoption is permitted. Syngenta intends to adopt IFRS 9 (July 2014) on January 1, 2018 and does not currently believe that adoption will have a material impact on its financial statements, but will finalize its assessment of the impact during 2017. The impact on retained earnings upon adoption will depend on the receivable balances outstanding and information available at December 31, 2017 and it is not possible at this time to estimate the impact of aligning impairment allowances with the requirements of the expected credit loss model at that date.

IFRS 15 “Revenue from Contracts with Customers” was published in May 2014, and contains a single comprehensive set of requirements for the recognition of revenue. Under IFRS 15, reported revenue will represent the transfer of promised goods or services to customers in an amount that reflects the consideration to which Syngenta expects to be entitled in exchange for those goods or services. The recognition requirements relating to contracts where revenue is variable, which for Syngenta include both product sales and licensing agreements, have been expanded significantly in IFRS 15. Each licensing contract Syngenta enters into has unique terms and certain licensing contracts may involve significant upfront or milestone payments in addition to sales-based royalties.

IFRS 15 allows transition either by retrospective application to and restatement of prior periods, or by a one-time catch-up adjustment to retained earnings ('modified retrospective method'). The mandatory adoption date for IFRS 15 is January 1, 2018 but early adoption is permitted and Syngenta currently intends to adopt IFRS 15 early with effect from January 1, 2017, using the modified retrospective transition method. Under that method, comparative income statements for prior periods are not restated and Syngenta expects any adjustment to retained earnings at January 1, 2017 to be immaterial. IFRS 15 will require the value of third party products and services Syngenta offers as customer incentives in certain of its loyalty programs to be included in Sales and Cost of goods sold. Because Syngenta defines in contracts with the third party suppliers how customers receive these incentives, it will be deemed to be supplying the third party products and services as a principal. Currently Syngenta accounts for these incentives on a net basis and reported Sales and Cost of goods sold include only the value of Syngenta products supplied. Under IFRS 15, the additional amount that will be reported in Sales and Cost of goods sold in 2017 and future years as a result of this change in presentation will depend on customer achievement of targets in the related programs, but is estimated to be \$60 million annually. This will have no impact on net income.

IFRS 16 "Leases", was published in January 2016, and requires a lessee to account for all leases by recognizing an asset for the right to use the leased asset and a corresponding liability for lease payments during the lease term, which is defined as the non-cancellable period of the lease and any additional periods for which the lessee has an option to use the asset that it is reasonably certain to exercise. Leases with a term of less than one year and leases of certain small value assets are exempt from these requirements and will continue to be accounted for in the same way as operating leases under the current IAS 17. The liability for lease payments will be the present value of payments required over the lease term, excluding contingent payments and payments for services associated with the lease. Lease expense will be attributed to accounting periods in the same way as for finance leases under the current IAS 17. Syngenta must adopt IFRS 16 by January 1, 2019 at the latest. Early adoption is permitted on condition that IFRS 15 is also adopted on or before the date IFRS 16 is adopted. IFRS 16 allows transition either by retrospective application to and restatement of prior periods, or by a modified retrospective application method under which IFRS 16 is applied to all leases with a remaining term of more than one year upon adoption by making a one-time catch-up adjustment to retained earnings, and prior periods are not restated. Syngenta is currently assessing the impact on its financial statements of IFRS 16, including the requirement to recognize an asset and a liability for leases that it currently classifies as operating leases and for which it therefore does not recognize a lease asset or liability at present. Syngenta's minimum commitments under its existing operating leases are disclosed in Note 25.

"Sale or Contribution of Assets between an Investor and its Associate or Joint Venture", Amendments to IFRS 10 and IAS 28, was issued in September 2014 and requires Syngenta to recognize gains and losses on such sales or contributions only to the extent they relate to the interest in the Associate or Joint Venture that is held by investors other than Syngenta. In December 2015, the IASB postponed mandatory application of the amendments indefinitely. Based on the associates and joint ventures in which it has investments at December 31, 2016, Syngenta does not believe that the amendments will have a material impact on its consolidated financial statements.

“Recognition of Deferred Tax Assets for Unrealised Losses”, Amendments to IAS 12, was published in January 2016, and clarifies that for deferred income tax accounting purposes an entity may assume that an asset will be realized for more than its carrying amount if that outcome is supported by sufficient evidence. Syngenta must adopt the amendments on January 1, 2017. Syngenta does not believe that adoption of the amendments will have a material impact on its financial statements.

“Disclosure Initiative”, amendments to IAS 7, was issued in January 2016, and introduces a new requirement for Syngenta to disclose changes in liabilities arising from financing activities, including separate disclosure of changes arising from cash flows and non-cash changes. Syngenta is required to apply the amendments from January 1, 2017.

“Classification and Measurement of Share Based Payment Transactions”, Amendments to IFRS 2, was issued in June 2016. The amendments clarify IFRS guidance on the accounting treatment of transactions with net settlement features for withholding tax obligations, and on the treatment of vesting and non-vesting conditions in and modifications to cash-settled transactions. Syngenta’s accounting for its share based payments in these financial statements was consistent with the amendments. The amendments must be applied with effect from January 1, 2018. If the ChemChina Tender Offer completes successfully, Syngenta would no longer have any outstanding share based payment transactions.

“Annual Improvements to IFRS Standards” 2014-2016 Cycle was issued in December 2016. It clarifies two points: financial statement disclosure requirements for investments in subsidiaries, joint ventures and associates that are classified as held-for-sale; and for investments in subsidiaries held by a joint venture or associate which is an investment company as defined by IFRS 10. Syngenta must adopt these amendments from January 1, 2017 and January 1, 2018 respectively. At December 31, 2016, neither point would have any impact on Syngenta’s consolidated financial statements.

IFRIC 22 “Foreign Currency Transactions and Advance Consideration” was issued in December 2016, and requires most foreign currency transactions the consideration for which is received or paid in advance, to be translated into the transacting entity’s functional currency using the exchange rate at the date(s) on which this consideration is paid or received. The interpretation contains options for application either retrospectively or prospectively to transactions after adoption, which for Syngenta must be by January 1, 2018 at the latest. Syngenta believes that its existing accounting policy for foreign currency translation is consistent with IFRIC 22 guidance in all material respects and so adoption will not have a material impact on its financial statements.

“Transfers of Investment Property”, Amendments to IAS 40, was issued in December 2016 and clarifies that property is transferred into or out of Investment property only when there is actual evidence of change in use and not based on management’s intentions. Syngenta must apply these amendments to changes in use that occur after January 1, 2018. Early adoption is permitted, but the amendments may be applied retrospectively to changes in use before their adoption only where this is possible without using hindsight. Syngenta does not believe that adoption of the amendments will have a material impact on its financial statements.

Principles of consolidation

## Subsidiaries

Subsidiaries are those entities which Syngenta controls. Syngenta controls all its subsidiaries through ownership of a majority of their voting rights. Syngenta fully consolidates the income, expenses, assets, liabilities and cash flows of subsidiaries from the date it acquires control up to the date control ceases. Intercompany transactions and balances are eliminated upon consolidation.

## Associates and joint ventures

Syngenta has no interests in entities that it does not consolidate that would meet the definition of joint operations. Syngenta accounts for both associates and joint ventures using the equity method.

## Business combinations

Syngenta accounts for business combinations in accordance with IFRS 3, (revised January 2008), using the acquisition method. At the date it acquires control of another business, Syngenta records the fair value of the agreed consideration payable, including the estimated fair value of any contingent consideration and of any pre-existing ownership interest it holds in the acquired entity. Directly attributable acquisition transaction costs are expensed as incurred. The assets and liabilities of acquired businesses are identified and recorded in the consolidated financial statements at their acquisition date fair values, with certain exceptions as set out in IFRS 3. Acquired intangible assets are generally valued based on the income approach: the relief from royalty method is generally used for brand names and product technology rights, and the residual income method for customer relationships. Acquired land and buildings are valued based on the market approach and specialized plant and equipment based on the cost approach. Non-controlling interests which either consist of actively traded financial instruments or which do not represent a proportionate ownership interest in the acquired entity to which they relate are recorded at their fair value. All other non-controlling interests are recorded at their proportionate share of the fair value of the acquired business's net assets.

## Other accounting policies

### Foreign currencies

Monetary assets and liabilities denominated in foreign currencies are translated into the functional currency at the rate prevailing at the balance sheet date. Non-monetary assets and liabilities denominated in foreign currencies, stated at historical cost or fair value, are translated into the functional currency at the foreign exchange rate prevailing at the date of the transaction or the date the fair value was determined, respectively. Foreign currency transactions are translated into the relevant functional currency at the exchange rate prevailing at the date of the transaction. With exceptions for certain regional supply centers, holding and finance subsidiaries, each Syngenta subsidiary uses the local currency of its country of operations as its functional currency. Unrealized gains or losses related to equity loans, designated cash flow and net investment hedging arrangements and gains and losses on remeasuring equity investments designated at fair value through OCI are recognized in OCI. All other resulting foreign exchange transaction gains and losses are recognized in profit or loss. Equity loans are intercompany loans to subsidiaries that are not expected to be repaid in the foreseeable future and therefore considered part of Syngenta's net investment in the subsidiary.

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Income, expense and cash flows of foreign operations are translated into US dollars using average exchange rates prevailing during the period. Assets and liabilities of foreign operations are translated to US dollars using exchange rates prevailing at the balance sheet date. Foreign exchange differences arising on these translations are recognized directly in OCI. The consolidated historical cost of inventories that have been transferred between Syngenta group entities since their initial purchase or manufacture is measured by translating the currencies in which the costs of purchase or manufacture were incurred into US dollars at the exchange rates prevailing at the date when those costs were incurred, and foreign exchange differences arising on retranslating these amounts to US dollars at the rates at the balance sheet date or the date the inventories were sold, as applicable, are recognized in OCI. Upon disposal or loss of control of a foreign subsidiary, the cumulative currency translation difference relating to the subsidiary is reclassified from equity to profit or loss as part of the gain or loss on disposal.

## Revenue

Revenue is measured as the fair value of the consideration received or receivable. If the consideration is receivable more than 12 months after the transaction date and the effect of discounting is material, the revenue amount recognized is discounted to its present value at the transaction date and the unwinding of this discount is recognized as financial income over the period until the date the consideration is due. Revenue from sales of goods is recognized in the income statement when the significant risks and rewards of ownership have been transferred to the buyer, which is usually upon delivery, at a fixed or determinable price, and when collectability is reasonably assured. Delivery is defined based on the terms of the sale contract. Revenue is reported net of sales taxes, returns, discounts and rebates. Rebates to customers are provided for in the same period that the related sales are recorded based on the contract terms.

In certain markets, sales terms allow customers to exchange purchased products at a later date for other Syngenta products of their choice, to the same value. Revenue is recognized upon delivery of the original products, and is reduced by a provision for products expected to be exchanged. This provision is released, and the corresponding revenue is recorded, when the substitute products are delivered or the period available to exchange the products expires, whichever is earlier.

In certain markets, sales terms allow customers the option of a one-time, non-repeatable extension of credit, for a defined additional period, in respect of a defined proportion of purchases made during a defined period, if the customers still have the inventories on hand upon expiration of the initial agreed credit period. Customers have no right to return these inventories, and must pay unconditionally when the additional credit period expires. In accordance with IAS 18, revenue for these sales is recognized upon product delivery.

Where a right of return exists, revenue is recognized when a reasonable estimate of returns can be made, or when the right of return expires, whichever is earlier. Where Syngenta's distributors hold inventories and have the right of return, or Syngenta's commercial practice is to accept returns from distributors, and it is not possible to make a reasonable estimate of returns, Syngenta recognizes revenue when its distributors sell the inventories to their customers.

Where third parties hold Syngenta inventories on a consignment basis, revenue is recognized in the period that inventories are withdrawn from consignment and delivered to customers.

Syngenta periodically enters into prepayment contracts with customers whereby it receives advance payments for products to be delivered in a future period. These advance payments are recorded as liabilities and presented as part of Trade accounts payable. Advance payment liabilities are released and revenues associated with such advance payment transactions are recognized upon delivery of and transfer of title, ownership, and risk of loss of the related products to the customer.

Royalty and license income is recognized when earned. If the license agreement contains performance obligations for Syngenta, the related income is considered earned when Syngenta has performed the obligations. Contractual minimum royalty income and non-refundable lump sum payments are considered earned when there are no substantive performance obligations or contingencies associated with their receipt other than the passage of time. Amounts received in advance of performance or which may be refundable dependent on future performance are deferred in the consolidated balance sheet. If the license agreement provides for royalties based on sales made by the licensee, the related income is considered earned in the period that the related sales occur.

Cash rebates and discounts granted to customers are classified as a reduction of revenue. Awards of free or discounted products or services supplied by Syngenta in connection with customer loyalty programs are recognized as revenue when the customer redeems the credits. Awards supplied by a third party are recognized as revenue when the third party becomes obliged to supply the awards if Syngenta is an agent for the third party, and when Syngenta has performed its obligations to the customer if Syngenta is a principal. Net profit from programs where Syngenta is an agent is shown as part of Sales. Revenue related to programs where Syngenta is a principal is presented as part of Sales, and associated costs are presented within Cost of goods sold or Marketing and distribution expense as appropriate. Syngenta determines whether it is a principal or an agent according to whether it is exposed to the risks and rewards of supplying the third party products or services, in particular inventory holding risk. Liabilities associated with customer loyalty programs are classified within Trade accounts payable.

#### Barter transactions

For certain customers in certain markets, trade receivables are settled either with proceeds from sales by such customers of agricultural commodities or by delivery of commodities to Syngenta by such customers. For these arrangements, Syngenta recognizes revenue when it has a legally enforceable receivable, the amount of which is reliably measurable based on an agreed price for the Syngenta products. Where Syngenta has a contract with the customer for physical delivery of a commodity at a fixed price, an embedded derivative is recognized for the fair value of the contract until physical delivery. When it subsequently sells the commodity, Syngenta classifies additional revenue as sales only to the extent that the original contract for the sale of Syngenta products included revenue that was contingent upon the commodity sales proceeds. Any remaining gains or losses on the commodity sale are recorded in Marketing and distribution expense in the consolidated income statement.

## Research and development

Research expenses are charged to the consolidated income statement when incurred. Internal development costs are capitalized as intangible assets only when there is an identifiable asset that can be completed and is expected to generate future economic benefits and when the cost of such an asset can be measured reliably. Costs incurred internally to develop new chemical or biological crop protection products based on active ingredients that have not yet obtained regulatory approval, or to develop new seed varieties which contain new traits that have not yet obtained regulatory approval, are expensed as incurred because of the uncertainty inherent in the outcome of the regulatory approval process. Costs incurred in the design, construction and testing of new or improved production processes that do not themselves require regulatory approval and that can be applied to products which have already obtained approval are capitalized if the processes are technically feasible, Syngenta intends and has sufficient resources to complete the development, the process will generate future economic benefits, and expenditure attributable to developing the process can be measured reliably. Development expenses Syngenta incurs to develop technology on behalf of a third party under a collaboration agreement are capitalized and amortized over the agreement term if Syngenta expects to recover the costs under the terms in that agreement.

Costs of purchasing distribution rights, patent rights and licenses to use or sell products, or technology or registration data are capitalized as intangible assets. Costs of applying for patents for internally developed products, costs of defending existing patents and costs of challenging patents held by third parties where these are considered invalid, are considered part of development expense and expensed as incurred.

#### Expenses by function

Cost of goods sold includes costs of purchasing and producing inventories that have been sold to third parties, inbound and inter-site distribution expenses, impairment of inventories, environmental remediation costs associated with ongoing Syngenta manufacturing sites, and general overhead expenses of Syngenta's Production and Supply function which are expensed as incurred. Marketing and distribution includes costs of selling products, providing technical support for products sold, marketing and promotional expenses, distribution of finished products to third party customers, and impairment of trade and other receivables. Research and development includes the expenses of Syngenta's research sites and third party research collaboration agreements, expenses incurred during the regulatory process for Syngenta products and the costs of Syngenta's global field trials organization. General and administrative includes expenses of general management, finance, human resources, information systems, legal affairs and taxes, corporate affairs and communications, business planning and corporate development functions. Services provided by these departments to the Production and Supply, Marketing and Distribution and Research and Development functions are allocated to and included within those other functions. Gains and losses arising on routine asset disposals and gains and losses reclassified from OCI when hedged forecast foreign currency trading transactions affect profit or loss are also reported within General and administrative. Restructuring is a separate general and administrative function as it is managed through a project management office which is accountable to the Executive Committee. Impairment of property, plant and equipment that results from restructuring plans, rather than ongoing activities of the functions responsible for the assets, is included in Restructuring. Impairment of goodwill and intangible assets is also included in Restructuring unless a specific function is accountable for the impairment loss. Non-current asset depreciation and amortization are charged to the functions responsible for the related assets.

#### Restructuring

Restructuring represents the effect on reported performance of initiating and enabling business changes that are considered major and that, in the opinion of management, will have a material effect on the nature and focus of Syngenta's operations, and therefore require separate disclosure to provide a more thorough understanding of business performance. Restructuring includes the incremental costs of closing, restructuring or relocating existing operations, and gains or losses from related asset disposals. Restructuring also includes the effects of analyzing and preparing for potential industry consolidation transactions as well as completing and integrating significant business combinations and divestments, including related transaction costs, gains and losses. Recurring costs of normal business operations and routine asset disposal gains and losses are excluded.

#### Income taxes

Income taxes for the year comprise current and deferred taxes, calculated using rates enacted or substantively enacted at the balance sheet date. Current tax is the expected tax payable on taxable income for the year and any adjustments to tax payable in respect of previous years. Deferred tax is recognized using the liability method and thus is calculated on temporary differences between the tax bases of assets and liabilities and their respective carrying amounts in the consolidated balance sheet.

Deferred tax is provided on temporary differences arising on investments in subsidiaries, associates and joint ventures, except where the timing of the reversal of the temporary difference can be controlled and it is probable that the difference will not reverse in the foreseeable future. Deferred tax liabilities are not recognized on the initial recognition of goodwill if the carrying amount of goodwill exceeds its tax base. Deferred tax assets, including those related to unused tax losses, are recognized to the extent that it is probable that future taxable profit will be available against which the assets can be utilized. Income tax expense, current and deferred, is recognized in profit or loss unless it relates to items recognized in OCI or in equity in which case the tax expense is also recognized in OCI or equity, respectively.

Syngenta's policy is to comply fully with applicable tax regulations in all jurisdictions in which Syngenta's operations are subject to income taxes. Syngenta's estimates of current income tax expense and liabilities are calculated assuming that all tax computations filed by Syngenta's subsidiaries will be subject to review or audit by the relevant tax authorities. Syngenta and the relevant tax authorities may have different interpretations of how regulations should be applied to actual transactions. Syngenta records provisions for taxes it estimates will ultimately be payable when the reviews or audits have been completed, including allowances for any interest and penalties which may become payable. Syngenta releases these provisions when the tax audit of the applicable year is completed or an Advance Pricing Agreement (APA) settlement is reached that impacts previous years' tax payments, or otherwise when the statute of limitations for the applicable year expires, unless there is evident reason for earlier release.

#### Financial Instruments

Syngenta early adopted IFRS 9 (2013) with effect from January 1, 2014.

#### **Trade and other accounts receivable**

Trade and other accounts receivable include invoiced amounts less adjustments for doubtful receivables which are estimated by taking into account whether receivables are past due based on contractual terms, payment history and other available evidence of collectability. Receivable balances are written off only when there is no realistic prospect of their being collected.

Factoring arrangements transferring substantially all economic risks and rewards associated with accounts receivable to a third party are accounted for by derecognizing the accounts receivable upon receiving the cash proceeds of the factoring arrangement. Factoring arrangements that transfer to a third party some, but not substantially all economic risks and rewards are accounted for by continuing to recognize Syngenta's continuing rights over the receivable and by recognizing any related obligation to the third party factor.

Trade receivables are classified as and measured at amortized cost, less adjustments for doubtful receivables as described above, in accordance with IFRS 9. Syngenta holds trade receivables to collect their contractual cash flows, which consist solely of payments of principal and, where applicable, interest, except for certain foreign currency sales transactions in which Syngenta offers to its customers a written exchange rate option embedded into the sales contract. Trade receivable/option contracts that result from these foreign currency sales transactions are classified as at fair value through profit or loss. The fair value of these trade receivables is measured by:

- (a) remeasuring the embedded exchange rate option at fair value;
- (b) retranslating the underlying trade receivable into the selling entity's functional currency using closing spot exchange rates at the balance sheet date; and
- (c) adjusting the resulting carrying amount of the combined receivable contract to reflect changes in customer credit risk. Syngenta includes this adjustment in the provision for doubtful receivables.

#### Derivative and other financial instruments

Regular way purchases and sales of marketable securities are recognized at settlement date.

Financial assets and liabilities which have remaining contractual maturities of 12 months or less at the balance sheet date are presented within Total current assets and Total current liabilities, respectively. Financial assets and liabilities which have remaining contractual maturities of more than 12 months are presented within Financial and other non-current assets and Financial debt and other non-current liabilities, respectively.

Equity investments in other entities which are not subsidiaries, associates or joint ventures of Syngenta are included in Financial and other non-current assets. They are classified and measured at fair value through OCI and are revalued to fair value at each reporting date, with all changes in fair value recognized within OCI. In Syngenta's opinion, presenting gains and losses on these investments in OCI is more consistent with Syngenta's strategic investment objectives than presenting those gains and losses within profit and loss. The fair value of equity investments traded in active markets is measured at the quoted price at the balance sheet date, multiplied by the number of shares held by Syngenta. The fair value of other equity investments is based on recent observable market transactions for equity shares in the investee company or, where there are no recent transactions, on valuation multiples for equity shares in similar companies, which are traded.

Other non-current receivables represent royalty and license receivables, loans to employees and other third parties, and amounts recoverable from third parties in reimbursement of environmental remediation and other costs. These receivables are stated at amortized cost, less provision for impairment where appropriate.

Financial debt is recognized initially at its fair value less transaction costs, which represents the net proceeds from issuing the debt. Subsequently, financial debt is stated at amortized cost using the effective interest method, except where subject to a fair value hedge relationship, in which case the carrying amount of the debt is adjusted by the change in the fair value of the hedged exposure during the hedge relationship.

Derivative financial instruments are recorded initially at their fair value when Syngenta becomes a party to the instrument. They are revalued to fair value at each reporting date and presented as financial assets when the fair value is positive and as financial liabilities when the fair value is negative.

Fair values of publicly traded derivatives are based on quoted market prices of the specific instruments held at the balance sheet date.

Fair values of non-publicly traded derivatives are valued using accepted economic methodologies for pricing these financial instruments, such as discounted cash flow analysis or option pricing models. The valuation models seek to make maximum use of market inputs existing at the balance sheet date. The methods used to determine the fair value of specific types of non-publicly traded derivatives are as follows:

Interest rate and cross-currency swaps are calculated as the present value of the estimated future cash flows. The future cash flows are determined using relevant market forward interest rates at the balance sheet date and are discounted using the zero-coupon rates with equivalent maturities for AA rated entities at the balance sheet date, as adjusted for the counterparty's credit risk. These discount rates incorporate the impact of net credit risk present in those derivative instruments. For cross-currency swaps, the discount rates reflect the impact of the currency basis on the future cash flows denominated in different currencies;

-Forward contracts are determined using relevant market exchange rates at the balance sheet date;

Currency options are valued using the Black-Scholes-Merton option pricing model, which incorporates spot exchange rates, zero coupon rates with equivalent maturities for entities with credit ratings which approximate Syngenta's counterparty credit risk, and implied volatility in the market forward exchange rates at the balance sheet date; and

Commodity options are valued using the Black-Scholes-Merton option pricing model, which incorporates future commodity price curves with equivalent maturities and implied volatilities in the commodities markets at the balance sheet date, adjusted for counterparty credit risk.

Realized gains and losses on disposal of amortized cost financial assets, revaluation gains and losses on derivatives not designated as accounting hedges, and gains and losses corresponding to the ineffective portion of derivatives designated as accounting hedges are recorded in profit or loss as they arise.

Syngenta applies hedge accounting as follows:

#### Fair value hedges

The designated hedging instruments are remeasured to fair value and the underlying hedged items are remeasured by the amount of change in the fair value of the hedged risk. The resulting remeasurement gains or losses are recognized in profit or loss as they occur.

#### Cash flow hedges

For the effective portion of the hedge, gains and losses on remeasuring designated hedging instruments to fair value are recognized in OCI as part of the cash flow hedge reserve, and are reclassified into profit or loss in the period (or



periods) during which the underlying hedged cash flows affect profit or loss.

When a hedging instrument expires or is sold, or when a hedge no longer meets the criteria for cash flow hedge accounting, any cumulative unrealized gain or loss on the hedging instrument remains in equity until the underlying hedged item affects profit or loss. However, if a hedged forecasted transaction is no longer expected to occur, the cumulative unrealized gain or loss on the hedging instrument is immediately reclassified into profit or loss.

#### Time value of options

When Syngenta designates a derivative financial instrument that is, or contains, an option as a hedging instrument in a hedge accounting relationship, the time value of the options as measured using the Black-Scholes-Merton option pricing model is excluded from the hedge designation and accounted for as a cost of hedging, as follows. The change in the fair value of the option during its term is recognized in OCI to the extent that the option terms are aligned with the attributes of the hedged exposure. If the hedged item is a transaction, the cumulative change in time value is included in the initial carrying amount of any non-financial asset or liability recognized when the hedged transaction occurs, or otherwise is recognized in profit and loss when the cash flows from the hedged transaction affect profit and loss. If the hedged item is a risk that may affect profit or loss during the option term, the cumulative amount recognized in OCI is amortized into profit and loss on a straight line basis over the option term.

### Net working capital

For the purposes of presenting consolidated cash flows, the balance sheet items included in Net working capital are Inventories, Trade receivables, Other accounts receivable, Trade accounts payable, Other current assets, Other current liabilities, and similar items due after more than one year, such as minimum royalties from multi-year license agreements.

### Inventories

Purchased products are recorded at acquisition cost while own-manufactured products are recorded at manufacturing cost including a share of production overheads based on normal capacity. Cost of inventories is determined on a first-in-first-out basis. Allowances are made for inventories with a net realizable value less than cost, or which are slow moving. Net realizable value is the estimated selling price in the ordinary course of business, less the estimated costs of completion and costs to sell. Costs to sell include direct marketing, selling and distribution costs. Unsaleable inventories are fully written off.

### Biological assets

Biological assets represent growing plants and cuttings in Syngenta's Flowers business and sugar cane seedlings within its Sugar cane business. In Flowers, young plants and cuttings are measured at fair value less costs to sell, with key inputs being current average third party net selling prices, actual average selling costs and, for immature assets, estimated stage of growth relative to mature assets. Sugar cane seedlings are measured at cost less impairment because fair value is not reliably measurable due to the nature of the asset not corresponding to traded assets or products in the market. The carrying amount of current consumable biological assets measured using the cost model is tested for impairment by comparing it with the assets' net realizable value determined in accordance with IAS 2, "Inventories". Syngenta classifies gains and losses from remeasuring biological assets to fair value, and impairment losses for biological assets measured at cost less impairment, within Cost of goods sold.

### Property, plant and equipment

Property, plant and equipment are recorded at acquisition or production cost, less accumulated depreciation and any impairment losses. Eligible borrowing costs are capitalized as part of the asset cost if construction is expected to take more than one year to complete. Capitalization ceases when the asset is ready for its intended use. Depreciation is charged on a straight-line basis to the income statement, starting from the date the asset is ready for use, over the following estimated useful lives:

Buildings	20 to 40 years
Machinery and equipment	10 to 25 years
Furniture and vehicles	5 to 20 years
Computer hardware	3 to 7 years

Land is recorded at acquisition cost and is not subject to depreciation. Bearer biological assets are accounted for as Property, plant and equipment using the cost model and depreciated over their productive lives.

Expenditures made for existing property, plant and equipment that will provide future economic benefit are capitalized and depreciated over the revised remaining useful life of the asset.

#### Leases

Property, plant and equipment financed by leases giving rights to use the leased assets as if they were owned by Syngenta are classified as finance leases and therefore are capitalized at the lower of fair value and the present value of minimum lease payments at the inception of the lease. Such leases are also embedded in contracts for goods or services provided by suppliers to Syngenta when the supplier can fulfil their obligations only by using a specific asset to supply Syngenta and the contract price is neither fixed per unit of output nor represents a market price. Finance lease assets and liabilities are recognized at the commencement of the lease, which is when the leased asset is ready for use and Syngenta has the right to use it. Finance lease assets are depreciated over the shorter of the remaining lease term and the estimated useful life of the leased asset. Leases that are not classified as finance leases are accounted for as operating leases. Operating lease payments are recognized as lease expense on a straight-line basis over the lease term irrespective of the timing of the payments. The lease term is the non-cancelable period according to the lease contract unless Syngenta has a right to extend the lease beyond the end of that period and believes it is reasonably certain to exercise that right.

#### Intangible assets other than goodwill

Intangible assets, other than goodwill, are recorded at cost less accumulated amortization and any impairment losses. Currently, all such intangible assets are assigned a finite estimated useful life. The cost of acquired intangible assets other than goodwill consists of the purchase price including transaction costs. The cost of internally generated intangible assets consists of direct internal and external design, development, and testing costs incurred to make the asset ready for use in the manner intended by management. Borrowing costs associated with internal software development projects are capitalized if the project is expected to take more than one year to complete. Capitalization ceases when the software is ready for its intended use.

Intangible assets are amortized starting from the date the asset is ready for use. In respect of product rights, this is when regulatory approval has been obtained. Asset lives are reviewed annually. The straight-line method of amortization is used except where another systematic basis better reflects the pattern of consumption of the economic benefits represented by the asset. Amortization is charged within the consolidated income statement to the function responsible for the asset, or to General and administrative.

Useful lives assigned to acquired product rights are based on the period over which Syngenta expects economic benefit from the product rights. Estimated lives assigned to most product rights upon acquisition are between 10 and

20 years and do not exceed 20 years for any asset.

Patents and trademarks are amortized over their estimated economic or legal life, whichever is shorter. Lives assigned are between 3 and 20 years for patents and between 5 and 30 years for trademarks.

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Business combinations give Syngenta access to the distribution channels and customer relationships of the acquired business. These relationships normally continue to generate economic benefit to Syngenta following the acquisition. The useful lives of customer relationships are determined from management estimates of customer attrition rates. Estimated lives assigned are between 5 and 30 years.

Acquired in-process research and development (IPR&D), is valued at fair value at acquisition. It is assessed for impairment annually until it has been successfully developed and is available for use at which time it begins being amortized over its estimated useful life. Lives assigned are between 10 and 20 years.

Assets attributable to long-term supply agreements are amortized as part of cost of goods sold over the period of the supply agreements, which are between 5 and 12 years.

Purchased software licenses are amortized over their remaining license terms. Internally developed software is amortized from the date it is ready for use until the sooner of its expected replacement date or the date significant costs are expected to be incurred to upgrade it. Lives assigned are between 3 and 7 years.

#### Goodwill

Goodwill is the excess of the fair value of an acquired business over the fair value of its identifiable net assets at the acquisition date. Goodwill is recognized as an asset and presented within intangible assets. Goodwill is not amortized, but is tested annually for impairment and reduced by any impairment losses.

#### Impairment

Property, plant and equipment, intangible assets and investments in associates and joint ventures are tested for impairment (“tested”) in accordance with IAS 36 unless classified as held-for-sale. Goodwill and intangible assets not yet ready for use are tested annually and are also reviewed at each interim and annual reporting date to determine whether conditions changed since the most recent review or annual test. Individual other non-current assets are reviewed at each reporting date to determine whether events or changes in conditions indicate that the carrying amount of each asset may not be recoverable. If any such indication exists, the asset is tested for impairment. Syngenta estimates an asset’s recoverable amount as the higher of the asset’s fair value less selling costs and value in use, which is the present value of the cash flows expected from the asset’s use and eventual disposal. An impairment loss is recorded in the consolidated income statement to the extent that the carrying amount of the tested asset exceeds its recoverable amount. Impairment losses are not reversed for goodwill, but are reversed for other assets if their recoverable amounts subsequently increase.

#### Non-current assets held-for-sale

Non-current assets and groups of assets are reclassified as held-for-sale when the assets are available for immediate sale in their present condition and a sale within one year is highly probable. Property, plant and equipment and intangible assets held-for-sale are remeasured at the lower of fair value less costs to sell or carrying amount at the date they meet the held-for-sale criteria at which time depreciation and amortization also ceases. Any resulting impairment loss is recognized in profit or loss. Fair value is measured based on bids received from potential buyers of the assets.

#### Provisions

A provision is recognized in the balance sheet when Syngenta has a legal or constructive obligation to a third party or parties as a result of a past event, the amount of which can be reliably estimated and it is probable that an outflow of economic benefits will be required to settle the obligation. The amount recognized as a provision is the best estimate of the expenditure required to settle the obligation at the balance sheet date. Syngenta self-insures or uses a combination of insurance and self-insurance for certain risks. Provisions for these risks are estimated in part by considering historical claims experience and other actuarial assumptions and, where necessary, counterparty risk.

#### Environmental provisions

Provisions for remediation costs are made when there is a present obligation, it is probable that expenditures for remediation work will be required within ten years (or a longer period if specified by a legal obligation) and the cost can be estimated within a reasonable range of possible outcomes. The costs are based on currently available facts: technology expected to be available at the time of the clean up; laws and regulations presently or virtually certain to be enacted; and prior experience in remediation of contaminated sites.

Environmental liabilities are recorded at the estimated amount at which the liability could be settled at the balance sheet date, and are discounted if the impact is material and if cost estimates and timing are considered reasonably certain.

Syngenta's restructuring programs have involved closure of several sites to date. Remediation liabilities recognized when site closures are announced are accounted for as restructuring provisions.

#### Legal and product liability settlements

For claims for which, according to Syngenta's assessment, it is not probable that a liability exists or that there will be a future cash outflow or other sacrifice of economic benefits, Syngenta provides for the costs of defense only. For claims where an outcome unfavorable to Syngenta is assessed as more likely than not, provision is made for the estimated amount of damages and settlement, including directly attributable legal costs. No provision is made where the legal procedures are at too early a stage to estimate the outcome with any reliability.

#### Restructuring provisions and costs

Restructuring costs are accrued (charged to provisions) when Syngenta has approved a detailed and formal restructuring plan and the restructuring has either commenced or been announced publicly and they qualify for recognition in accordance with IAS 37. Provisions for severance payments and related employment termination costs that do not depend on future service, are made in full when employees are given details of the restructuring plan and the termination benefits that will apply to individual employees should their contracts be terminated. Retention and other payments that depend on future service are recognized over the required service period. Restructuring costs relating to ongoing activities, such as relocation, training and information systems, do not qualify for provisioning under IAS 37 and are expensed when incurred.

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## Post-employment benefits

For defined benefit plans, plan assets are measured at fair value. The plans' holdings in publicly quoted investments are valued at closing prices at the balance sheet date. The plans' holdings in pooled investment vehicles (PIVs) that are not publicly quoted are valued at the respective investment managers' current estimate of fair value, on a basis consistent with each PIV's most recent audited financial statements. Derivative contracts entered into directly by the pension plans are included within plan assets. Exchange traded derivatives are valued at quoted balance sheet date bid prices for contracts which are assets, or offer prices for contracts which are liabilities, at the balance sheet date. Fair values of over the counter derivatives are measured using independent third party pricing services. The defined benefit obligations are measured at the present value of future benefit payments attributable to employee service rendered up to the balance sheet date, according to the benefit formula set out in the relevant pension plan rules and employment terms at the balance sheet date. Where a surplus of plan assets over the benefit obligation exists at the balance sheet date or would arise upon payment of the minimum funding commitment applicable to the pension plan, Syngenta evaluates the extent to which the surplus is realizable over time through refund rights and reductions in the present value of its future contributions to the plan. To the extent that the surplus is not realizable, the net defined benefit asset is reduced and, where applicable, an additional liability for minimum funding contributions is recognized. Benefit expense charged to profit or loss comprises current service cost, which is the cost to Syngenta of the increase in benefits earned from employee service in the period, gains and losses arising from amendments to and settlements of benefits that occurred during the period, and interest on the net defined benefit asset or liability, which is the change in the present value of that asset or liability arising from the passage of time during the period, measured using the rate used to discount the defined benefit obligation at the previous period end. The net interest cost is presented within Other general and administrative in the consolidated income statement. The benefit obligation and cost are attributed to periods using the projected unit credit actuarial method and are measured using long-term assumptions about expected future length of employee service, increases in pay and pensions, longevity, and for healthcare plans, medical costs. Assumptions are reviewed annually. Gains and losses arising from variances between assumptions and actual outcomes, and from changes to assumptions, are recognized in OCI in the period in which they arise.

Contributions to defined contribution pension plans are recognized as an expense in profit or loss when they are due.

## Share based payments

The fair value of share and share option awards to employees is recognized as compensation expense over the period in which the shares or options vest, or immediately for awards with no remaining vesting period. To reflect vesting conditions unrelated to Syngenta's share price, compensation expense is measured using Syngenta's best estimate at each reporting date of the shares and options expected to vest and adjusted subsequently in line with actual vesting. Fair value is measured for equity-settled awards at grant date only, but is additionally remeasured at each reporting date for cash-settled awards. An award is granted when it has been approved by the Compensation Committee of Syngenta AG's Board of Directors and its terms have been communicated to share plan members. Fair value of grants of Syngenta AG ordinary shares is measured at market value, less any cash amount payable by the employee and any expected dividends to which the employee is not entitled. Fair value of options over Syngenta AG ordinary shares is measured using the Black-Scholes-Merton formula. As described in Note 23, vesting of certain share and share option awards is conditional on Syngenta's total share return over a three year period relative to a defined peer group of other companies. The Monte Carlo method was used to fair value these awards at grant date. Grants with a cash or equity alternative for plan members are accounted for as liabilities until the members' choice is known. The incremental fair value of members' equity option for these grants is zero. A member's choice to receive equity instruments is accounted



for by transferring the fair value of the liability to shareholders' equity when the choice is made. For certain plans, Syngenta has withholding obligations in respect of plan members' personal income tax liabilities on vesting or exercise of awards. These plans were accounted for as fully equity-settled until February 2, 2016 when the accounting was amended to account for all unexercised awards of options and for awards of shares that will vest after the expected completion date of the ChemChina Tender Offer as fully cash-settled, as described in detail in Note 3.

The fair value of share based payment awards to customers in cash rebate sacrifice arrangements is recognized as a reduction in sales in the same way as the cash rebate.

#### Dividends and capital distributions

Dividends payable to shareholders of Syngenta AG are recorded as liabilities and as a reduction in shareholders' equity when they are approved by the shareholders of Syngenta AG and any conditions for payment are satisfied.

#### Treasury shares

Share capital includes the par value of treasury shares held by Syngenta that have not been canceled. Treasury shares are shown as a separate component of shareholders' equity and stated at the amount paid to acquire them. Differences between this amount and the amount received upon their disposal are recorded as a movement in consolidated shareholders' equity.

#### 30. Subsequent events

No events occurred between the balance sheet date and the date on which these consolidated financial statements were approved by the Board of Directors that would require adjustments to or disclosure in the consolidated financial statements.

#### Approval of the Consolidated Financial Statements

These consolidated financial statements were approved by the Board of Directors on February 7, 2017.