

EASTMAN CHEMICAL CO  
Form 10-K  
February 27, 2017

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, DC 20549  
FORM 10-K

(Mark  
One)

☒ 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

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission file number 1-12626

EASTMAN CHEMICAL COMPANY

(Exact name of registrant as specified in its charter)

Delaware

62-1539359

(State or other jurisdiction of  
incorporation or organization)

(I.R.S. employer  
identification no.)

200 South Wilcox Drive

Kingsport, Tennessee

37662

(Address of principal executive offices) (Zip Code)

Registrant's telephone number, including area code: (423) 229-2000

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

| Title of each class                      | Name of each exchange on which registered |
|--|---|
| Common Stock, par value \$0.01 per share | New York Stock Exchange                   |
| 1.50% Notes Due 2023                     | New York Stock Exchange                   |
| 1.875% Notes Due 2026                    | New York Stock Exchange                   |

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



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

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Act. YesNo  
[X]

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. YesNo  
[X]

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). YesNo  
[X]

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of the registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. [X]

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

Large accelerated filer ☒ Accelerated filer ☐  
Non-accelerated filer ☐ Smaller reporting company ☐  
(Do not check if a smaller reporting company)

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). YesNo  
[X]

The aggregate market value (based upon the \$67.90 closing price on the New York Stock Exchange on June 30, 2016) of the 145,850,452 shares of common equity held by non-affiliates as of December 31, 2016 was \$9,903,245,691 using beneficial ownership rules adopted pursuant to Section 13 of the Securities Exchange Act of 1934 to exclude common stock that may be deemed beneficially owned as of December 31, 2016 by Eastman Chemical Company's ("Eastman" or the "Company") directors and executive officers and charitable foundation, some of whom might not be held to be affiliates upon judicial determination. A total of 146,488,924 shares of common stock of the registrant were outstanding at December 31, 2016.

#### DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive Proxy Statement for the 2017 Annual Meeting of Stockholders, to be filed with the Securities and Exchange Commission, are incorporated by reference in Part III, Items 10 to 14 of this Annual Report on Form 10-K (this "Annual Report") as indicated herein.



## FORWARD-LOOKING STATEMENTS

Certain statements made or incorporated by reference in this Annual Report are "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act, Section 27A of the Securities Act of 1933, as amended and Section 21E of the Securities and Exchange Act of 1934, as amended. Forward-looking statements are all statements, other than statements of historical fact, that may be made by Eastman Chemical Company ("Eastman" or the "Company") from time to time. In some cases, you can identify forward-looking statements by terminology such as "anticipates," "believes," "estimates," "expects," "intends," "may," "plans," "projects," "will," "would," and similar expressions or expressions of the negative of these terms. Forward-looking statements may relate to, among other things, such matters as planned and expected capacity increases and utilization; anticipated capital spending; expected depreciation and amortization; environmental matters; exposure to, and effects of hedging of, raw material and energy costs; foreign currencies and interest rates; disruption of raw material or energy supply; global and regional economic, political, and business conditions; competition; growth opportunities; supply and demand, volume, price, cost, margin and sales; pending and future legal proceedings; earnings, cash flow, dividends and other expected financial results, events, and conditions; expectations, strategies, and plans for individual assets and products, businesses, and operating segments, as well as for the whole of Eastman; cash requirements and uses of available cash; financing plans and activities; pension expenses and funding; credit ratings; anticipated and other future restructuring, acquisition, divestiture, and consolidation activities; cost reduction and control efforts and targets; the timing and costs of, and benefits from, the integration of, and expected business and financial performance of, acquired businesses; strategic initiatives and development, production, commercialization and acceptance of new products, services and technologies and related costs; asset, business, and product portfolio changes; and expected tax rates and net interest costs.

Forward-looking statements are based upon certain underlying assumptions as of the date such statements were made. Such assumptions are based upon internal estimates and other analyses of current market conditions and trends, management expectations, plans, and strategies, economic conditions, and other factors. Forward-looking statements and the assumptions underlying them are necessarily subject to risks and uncertainties inherent in projecting future conditions and results. Actual results could differ materially from expectations expressed in the forward-looking statements if one or more of the underlying assumptions and expectations proves to be inaccurate or is unrealized. The most significant known factors, risks, and uncertainties that could cause actual results to differ materially from those in the forward-looking statements are identified and discussed under "Management's Discussion and Analysis of Financial Condition and Results of Operations - Risk Factors" in Part II, Item 7 of this Annual Report. Other factors, risks or uncertainties of which we are not aware, or presently deem immaterial, could also cause actual results to differ materially from those in the forward-looking statements.

The Company cautions you not to place undue reliance on forward-looking statements, which speak only as of the date such statements are made. Except as may be required by law, the Company undertakes no obligation to update or alter these forward-looking statements, whether as a result of new information, future events, or otherwise.

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## CORPORATE OVERVIEW

Eastman Chemical Company ("Eastman" or the "Company") is a global advanced materials and specialty additives company that produces a broad range of advanced materials, specialty additives, chemicals, and fibers found in items people use every day. Eastman began business in 1920 for the purpose of producing chemicals for Eastman Kodak Company's photographic business and became a public company, incorporated in Delaware, on December 31, 1993. Eastman has 49 manufacturing sites and equity interests in six manufacturing joint ventures in 14 countries that supply products to customers throughout the world. The Company's headquarters and largest manufacturing site are located in Kingsport, Tennessee. Eastman's businesses are managed and reported in four operating segments: Additives & Functional Products ("AFP"), Advanced Materials ("AM"), Chemical Intermediates ("CI"), and Fibers. See "Business Segments".

Eastman is focused on consistent earnings growth through a market-driven approach that takes advantage of the Company's existing technology platforms, global market and manufacturing presence, and leading positions in key end markets such as transportation, building and construction, and consumables. Eastman management believes that the Company's end-market diversity is a source of strength, and that many of the markets into which the Company's products are sold are benefiting from longer-term global trends such as energy efficiency, a rising middle class in emerging economies, and an increased focus on health and wellness. Management believes that these trends, combined with the diversity of the Company's end markets, facilitate more consistent demand for the Company's products over time.

On July 2, 2012, the Company acquired Solutia Inc., a global leader in performance materials and specialty chemicals. The Company completed four acquisitions in 2014. On June 2, 2014, the Company acquired BP plc's global aviation turbine engine oil business. On August 6, 2014, the Company acquired Knowlton Technologies, LLC, a leader in the design, accelerated prototyping, and manufacture of wet-laid nonwovens in filtration, friction, and custom designed composite webs. On December 5, 2014, Eastman acquired Taminco Corporation, a global specialty chemical company. On December 11, 2014, Eastman acquired Commonwealth Laminating & Coating, Inc. ("Commonwealth"), a specialty films business. Results of the acquired businesses are included in Eastman results as of the date of acquisitions.

In 2016, the Company reported sales revenue of \$9.0 billion, operating earnings of \$1.4 billion, and net earnings attributable to Eastman of \$854 million. Earnings per diluted share attributable to Eastman were \$5.75. Cash provided by operating activities were \$1.4 billion. For Company sales revenue by end-market, see Exhibit 99.01 "2016 Company and Segment Sales Revenue by End-Use Market" of this Annual Report.

### Business Strategy

Eastman's objective is to be an outperforming specialty chemical company with consistent earnings growth and strong cash flow. The Company sells differentiated products into diverse markets and geographic regions. Eastman works with customers to meet their needs in existing and new markets through the development of innovative products and technologies. Management believes that the Company can deliver consistent financial results by leveraging the Company's world class technology platforms, improving product mix through innovation and increasing emphasis on specialty businesses and products, sustaining and expanding advantaged market positions, and leveraging advantaged cost positions. A consistent increase in earnings is expected to result from both organic (internal) growth initiatives and strategic inorganic (external growth through acquisitions complementary or additive to existing products and joint ventures) initiatives.



Innovation and market development initiatives are expected to add one to two percent on a compounded basis to revenue from 2016 through 2018. In 2016, the Company:

In the AFP segment:

Completed retrofit of part of an existing manufacturing facility in Nienburg, Germany and continued construction of an expansion of the Crystex<sup>®</sup> insoluble sulfur rubber additives manufacturing facility in Kuantan, Malaysia, expected to be operational in second half 2017. These actions are expected to allow the Company to capitalize on recent enhancements of technology for the manufacture of Crystex<sup>®</sup> insoluble sulfur by improving the Company's cost position and allowing for the introduction of new products for the tire markets.

Commercialized Eastman Tetrashield<sup>™</sup> performance polyester resins based on proprietary monomer technology. These polyester resins provide a combination of improved performance and sustainability, particularly for the automotive coatings, industrial, and food packaging markets.

In the AM segment:

Continued an additional 60,000 metric ton expansion of Eastman Tritan® copolyester capacity at the Kingsport, Tennessee manufacturing facility expected to be operational in first half 2018 to meet expected future demand in the durable goods and health and wellness markets.

Continued construction of a manufacturing facility for polyvinyl butyral ("PVB") resin at the Kuantan, Malaysia site expected to be operational in second half 2017. This manufacturing capacity will support global growth in the transportation and building and construction markets and allow the Company to better serve customers in the Asia Pacific region.

- Completed integration of the acquired Commonwealth business to strengthen the window film product portfolio, add industry leading protective film technology, and increase scale cost efficiencies.

In 2016, the Company announced that as part of its strategy to increase emphasis on specialty businesses and products:

it is pursuing strategic options to divest or otherwise monetize its excess ethylene capacity position and certain commodity olefin intermediates product lines, while retaining its cost-advantaged integrated position to propylene which supports specialty derivatives throughout the Company, and it changed its organizational and management structure following completion of the integration of recently acquired businesses to better align similar strategies and business models.

Management continues to pursue additional opportunities to leverage the Company's innovation and world class technology platforms for continued near-term and long-term growth both sustaining our leadership in existing markets and expanding into new markets. Examples of these technologies include Eastman Tetrashield™ performance polyester resins, cellulose esters for tires, next generation Crystex® insoluble sulfur technology, and Eastman microfibers technology.

The Company benefits from proprietary technologies and advantaged feedstocks, and focuses on sustainability as a source of competitive strength for growth. Eastman has developed new products and technologies that enable customers' development and sales of sustainable products. Examples of Eastman's leading position in providing sustainable solutions are Eastman Tritan® copolyester, Saflex® acoustic interlayers and acoustic interlayers head up displays ("HUD"), Eastman Impera® high performance resins for tires, and Eastman's Visualize® Material for optical compensation films in liquid crystal displays.

#### Financial Strategy

In addition to managing its businesses and growth initiatives, the Company remains committed to maintaining a strong financial position with appropriate financial flexibility and liquidity. Eastman management believes maintaining a financial profile that supports an investment grade credit rating is important to its long-term strategic and financial flexibility. The Company employs a disciplined and balanced approach to capital allocation and deployment of cash. The priorities for uses of available cash include payment of the quarterly dividend, repayment of debt, funding targeted growth initiatives, and repurchasing shares. Management expects that the combination of strong cash flow generation and liquidity and a solid balance sheet will continue to provide flexibility to pursue organic and inorganic growth initiatives.

#### BUSINESS SEGMENTS

As a result of changes in the Company's organizational structure and management, beginning first quarter 2016 the Company's products and operations are managed and reported in four operating segments: Additives & Functional Products ("AFP"), Advanced Materials ("AM"), Chemical Intermediates ("CI"), and Fibers. This organizational structure is based on the management of the strategies, operating models, and sales channels that the various businesses employ and supports the Company's strategy to transform towards a specialty portfolio by better aligning similar businesses in a more streamlined structure. All financial information in this Annual Report on Form 10-K (this "Annual Report") is presented on the new operating segment basis. For additional financial and product information for each operating segment, see the Current Report on Form 8-K filed with the Securities and Exchange Commission ("SEC") on April 18, 2016.

Sales revenue and costs related to growth initiatives, research and development ("R&D") costs, certain components of pension and other postretirement benefits, and other expenses and income not identifiable to an operating segment are not included in segment operating results for any of the periods presented and are included in "Other". For identification of manufacturing sites, see Item 2, "Properties". For additional information concerning the Company's operating segments, see Note 20, "Segment Information", to the Company's consolidated financial statements in Part II, Item 8 of this Annual Report.

## ADDITIVES &amp; FUNCTIONAL PRODUCTS SEGMENT

## Overview

In the AFP segment, the Company manufactures chemicals for products in the coatings, tires, consumables, building and construction, industrial applications including solar energy markets, animal nutrition, care chemicals, crop protection, and energy markets. In 2016, the AFP segment had sales revenue of \$3.0 billion, 33 percent of Eastman's total sales. Key technology platforms in this segment are cellulose esters, polyester polymers, insoluble sulfur, hydrocarbon resins, alkylamine derivatives, and propylene derivatives.

AFP sales growth is typically similar to or slightly above global gross domestic product growth due to the segment's sales to diversified end markets. The segment is focused on producing high-value additives that provide critical functionality but which comprise a small percentage of total customer product cost. The segment principally competes on the unique performance characteristics of its products and through leveraging its strong customer base and long-standing customer relationships to promote substantial recurring business and product development.

## Principal Products

| Product                     | Description   | Principal Competitors               | Key Raw Materials      | End-Use Applications  |
|-----------------------------|---|-------------------------------------|------------------------|---|
| Coatings and Inks Additives |   |                                     |                        |   |
| Polymers                    |   |                                     |                        |   |
| cellulosics                 |   |                                     |                        | building and construction (architectural coatings)                                  |
| Eastman Tetrashield™        |   | BASF SE                             |                        | transportation (OEM) and refinish coatings  |
| polyesters                  |   | The Dow Chemical Company            |                        |   |
| polyolefins                 | specialty coalescents, specialty solvents, and commodity solvents | Oxea                                | wood pulp              | durable goods (wood, industrial coatings and applications)                          |
| Additives and Solvents      | paint additives and specialty polymers                            | Celanese Corporation                | propane                | consumables (graphic arts, inks, and packaging)                                     |
| Texanol®                    |   | Alternative technologies            | propylene              |   |
| Optifilm™                   |   |                                     |                        |   |
| ketones                     |   |                                     |                        |   |
| esters                      |   |                                     |                        |   |
| glycol ethers               |   |                                     |                        |   |
| oxo alcohols                |   |                                     |                        |   |
| Adhesives Resins            |   |                                     |                        |   |
|                             | hydrocarbon resins  |                                     |                        | consumables (resins used in hygiene and packaging adhesives)                        |
| Piccotac®                   | and rosin resins  |                                     | C9 resin oil           |   |
| Regalite®                   | mainly for  | Exxon Mobil Corporation             | piperylene             | building and construction (resins for construction adhesives and interior flooring) |
| Eastotac®                   | hot-melt and  | Kolon Industries, Inc.              | gum rosin              |   |
| Eastoflex®                  | pressure sensitive adhesives                                      |                                     |                        |   |
| Tire Additives              |   |                                     |                        |   |
| Crystex®                    | insoluble sulfur rubber additive                                  | Oriental Carbon & Chemicals Limited | sulfur                 | transportation (tire manufacturing)   |
|                             |   |                                     | naphthenic process oil |   |

|            |                               |   |                        |   |
|------------|-------------------------------|---|------------------------|---|
| Santoflex® | antidegradant rubber additive | Shikoku Chemicals Corporation               |                        | other rubber products (such as hoses, belts, seals, and footwear) |
|            |                               | Jiangsu Sinorgchem Technology Co, Ltd.      | nitrobenzene aniline   | transportation (tire manufacturing)                               |
| Impera™    | performance resins            | Korea Kumho Petrochemical Co. Ltd.          | methyl isobutyl ketone | other rubber products (such as hoses, belts, seals, and footwear) |
|            |                               | Lanxess AG                                  |                        |   |
|            |                               | Cray Valley Hydrocarbon Specialty Chemicals | alpha methylstyrene    | transportation (tire manufacturing)                               |
|            |                               | Exxon Mobil Corporation                     | piperylene             |   |
|            |                               | Kolon Industries Incorporated               | styrene                |   |

| Product   | Description  | Principal Competitors   | Key Raw Materials                                    | End-Use Applications   |
|---|--|---|--|--|
| Care Chemicals Additives  |  |   |  |  |
| Alkylamine Derivatives  | amine-derivative-based building blocks for production of flocculants intermediates for surfactants | BASF SE<br>The Dow Chemical Company<br>Huntsman Corporation           | alkylamines<br>ammonia<br>alcohols<br>ethylene oxide | water treatment<br>personal and home care  |
| Specialty Fluids<br>Therminol®<br>Eastman Turbo Oils<br>Skydrol®<br>Eastman SkyKleen® | heat transfer and aviation fluids  | The Dow Chemical Company<br>Exxon Mobil Corporation                   | benzene<br>phosphorous<br>neo-polyol esters          | industrial chemicals and processing (heat transfer fluids for chemical processes)<br>renewable energy<br>commercial aviation |
| Animal Nutrition  |  |   |  |  |
| Formic acid solutions   | formic-acid based solutions  | BASF SE<br>Perstorp<br>Luxi Chemical Group<br>Feicheng Acid Chemicals | sulfuric acid<br>formic acid                         | animal nutrition<br>de-icing   |
| Crop Protection   |  |   |  |  |
| Alkylamine derivatives  | metam based soil fumigants<br>thiram and ziram based fungicides<br>plant growth regulator          | The Dow Chemical Company<br>Argo-Kanesho Co Ltd<br>Bayer<br>BASF SE   | alkylamines<br>CS2<br>caustic soda                   | agriculture<br>crop protection   |

|                             | Percentage of Total Segment Sales |      |      |
|-----------------------------|-----------------------------------|------|------|
| Product Lines               | 2016                              | 2015 | 2014 |
| Coatings and Inks Additives | 24%                               | 24%  | 31%  |
| Adhesives Resins            | 21%                               | 21%  | 27%  |
| Tire Additives              | 17%                               | 17%  | 22%  |
| Other                       | 38%                               | 38%  | 20%  |
| Total                       | 100%                              | 100% | 100% |

Percentage of  
Total Segment

| Sales                           |      |      |      |  |
|---------------------------------|------|------|------|--|
| Sales by Customer Location      | 2016 | 2015 | 2014 |  |
| United States and Canada        | 37%  | 38%  | 41%  |  |
| Asia Pacific                    | 21%  | 21%  | 24%  |  |
| Europe, Middle East, and Africa | 35%  | 35%  | 29%  |  |
| Latin America                   | 7%   | 6%   | 6%   |  |
| Total                           | 100% | 100% | 100% |  |

See Exhibit 99.01 for AFP segment revenue by end-use market.

## Strategy

A key element of the AFP segment's strategy is to leverage proprietary technologies for the continued development of innovative product offerings and to focus growth efforts on further expanding end markets such as coatings, tires, consumables, building and construction, industrial applications, animal nutrition, care chemicals, crop protection, and energy. Eastman management believes that the ability to leverage the AFP segment's research, application development, and production capabilities across multiple markets makes the segment uniquely positioned to meet evolving needs to improve the quality and performance of its customers' products. For example, tire performance labeling regulations in various parts of the world and competitive pressure favoring performance over cost are causing tire manufacturers to simultaneously improve conflicting tire attributes. Eastman's tire additives technology helps tire manufacturers overcome common compromises often observed between wet grip and rolling resistance. In order to address identified market needs, the Company is also developing new technologies such as polyester resins for coatings, sustainable solvents, and cellulose esters and hydrocarbon resins for tires.

In 2016, the Company continued expansion of the Crystex<sup>®</sup> insoluble sulfur rubber additives manufacturing facility in Kuantan, Malaysia, expected to be operational in second half 2017, and retrofitted part of an existing manufacturing facility in Nienburg, Germany. These actions are expected to allow the Company to capitalize on recent enhancements of technology for the manufacture of Crystex<sup>®</sup> insoluble sulfur by improving the Company's cost position and introducing new products for the tire markets.

An example of the Company's continuing innovation and market development efforts is the recently commercialized Eastman Tetrashield<sup>™</sup> performance polyester resins. These polyester resins provide a combination of improved performance and sustainability, particularly for the automotive coatings, industrial, and food packaging markets. Additional examples where the Company is pursuing innovation through other technologies include next generation Crystex<sup>®</sup> and resins and cellulose esters for tires.

The Company's global manufacturing presence is a key element of the AFP segment's growth strategy. For example, the segment expects to capitalize on industrial growth in Asia from its manufacturing capacity expansion in Kuantan, Malaysia and cellulose ester products sourced from our low cost cellulose and acetyl manufacturing stream in North America.

## ADVANCED MATERIALS SEGMENT

### Overview

In the AM segment, the Company produces and markets its polymers, films, and plastics with differentiated performance properties for value-added end uses in transportation, consumables, building and construction, durable goods, and health and wellness markets. In 2016, the AM segment had sales revenue of \$2.5 billion, 28 percent of Eastman's total sales. Key technology platforms for this segment include cellulose esters, copolyesters, and PVB and polyester films.

Eastman has strong technical and market development capabilities that enable the segment to modify its polymers, films, and plastics to control and customize their final properties for development of new applications with enhanced functionality. For example, Eastman Tritan<sup>®</sup> copolyesters are a leading solution for food contact applications due to their performance and processing attributes and Bisphenol A ("BPA") free properties. The Saflex<sup>®</sup> Q Series product line is a leading solution for sound reduction in the cabin of an automobile. The Company maintains what management believes is a leading solar control technology position in the window film market through the use of high



performance sputter coatings which enhance solar heat rejection while maintaining superior optical properties. The segment principally competes on differentiated technology and application development capabilities. Management believes the AM segment's competitive advantages also include long-term customer relationships, vertical integration and scale in manufacturing, and leading market positions.

# Principal Products

| Product  | Description                      | Principal Competitors   | Key Raw Materials   | End-Use Applications  |
|--|----------------------------------|---|---|---|
| Specialty Plastics<br>Eastman Tritan®<br>copolyester<br>Eastar® copolyesters<br>Eastman Spectar®<br>copolyester<br>Eastman Embrace®<br>copolyester<br>Eastman Visualize®<br>Material<br>Eastman<br>Aspira™ family of<br>resins<br>Flexvue® | copolyesters<br>cellulose esters | Covestro<br>Trinseo<br>Evonik Industries AG<br>Saudi Basic Industries<br>Corporation<br>Mitsubishi Chemical<br>Corporation<br>S.K. Chemical<br>Industries<br>Sichuan Push Acetati<br>Company Limited<br>Daicel Chemical<br>Industries Ltd | paraxylene<br>ethylene glycol<br>cellulose<br>purified terephthalic<br>acid ("PTA") | consumables (consumer<br>packaging,<br>consumables and<br>cosmetics<br>packaging, in-store<br>fixtures<br>and displays)<br>durable goods (consumer<br>housewares<br>and appliances)<br>health and wellness<br>(medical)<br>electronics (displays) |

# Advanced Interlayers

|                             |   |   |   |  |
|-----------------------------|---|---|---|--|
| Saflex®<br>Saflex® Q Series | PVB sheet<br>specialty PVB<br>intermediates | Sekisui Chemical Co.,<br>Ltd.<br>Kuraray Co., Ltd | polyvinyl alcohol<br>vinyl acetate monomer<br>butyraldehyde<br>2-ethyl hexanol<br>ethanol<br>triethylene glycol | transportation<br>(automotive safety glass,<br>automotive acoustic<br>HUD)<br>building and construction<br>(PVB for<br>architectural<br>interlayers) |
|-----------------------------|---|---|---|--|

# Performance Films

|  |  |   |                                    |  |
|--|--|---|------------------------------------|--|
| LLumar®<br>SunTek®<br>V-KOOL®<br>Gila® | window film and<br>protective film<br>products for<br>aftermarket<br>applied films | 3M Company<br>Saint-Gobain S.A.<br>Garware Chemicals<br>Limited | polyethylene<br>terephthalate film | transportation<br>(automotive after-market<br>window film and paint<br>protection<br>film)<br>building and construction<br>(residential<br>and commercial<br>window films) |
|--|--|---|------------------------------------|--|

Percentage of  
Total Segment  
Sales

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| Product Lines        | 2016 | 2015 | 2014 |
|----------------------|------|------|------|
| Specialty Plastics   | 50%  | 51%  | 54%  |
| Advanced Interlayers | 34%  | 33%  | 34%  |
| Performance Films    | 16%  | 16%  | 12%  |
| Total                | 100% | 100% | 100% |

Percentage of  
Total Segment  
Sales

| Sales by Customer Location      | 2016 | 2015 | 2014 |
|---------------------------------|------|------|------|
| United States and Canada        | 37%  | 38%  | 36%  |
| Asia Pacific                    | 32%  | 31%  | 30%  |
| Europe, Middle East, and Africa | 26%  | 26%  | 28%  |
| Latin America                   | 5%   | 5%   | 6%   |
| Total                           | 100% | 100% | 100% |

See Exhibit 99.01 for AM segment revenue by end-use market.

## Strategy

Management believes that the AM segment has significant opportunities to leverage innovation and technology platforms into new products and applications, accelerate its growth, and further leverage its manufacturing capacity. The segment continues to expand its portfolio of higher margin products in attractive end markets. Through Eastman's advantaged asset position and expertise in applications development, management believes that the AM segment is well positioned for future growth. The advanced interlayers product lines, including acoustic PVB sheet and HUD, leverage Eastman's global presence to supply industry leading innovations to automotive and architectural end markets by collaborating with global and large regional customers. In the automotive end market, the performance films product line has industry leading technologies, recognized brands, and what management believes is one of the largest distribution and dealer networks which, when combined, position Eastman for further growth, particularly in leading automotive markets such as North America and Asia. The segment's product portfolio is aligned with underlying energy efficiency trends in both automotive and architectural markets. Additionally, increased demand for BPA-free products has created new opportunities for various copolyester applications.

The AM segment expects to continue to improve product mix from increased sales of premium products, including Eastman Tritan® copolyester, Eastman Visualize® Material, advanced interlayers with acoustic properties, LLumar®, V-KOOL®, and SunTek® window and protective films.

The acquisition of Commonwealth in December 2014 further expanded the AM segment's product portfolio and channel network in the diverse window film markets, enabled further manufacturing and distribution efficiencies, and added industry leading paint protection film technology to expand AM segment offerings in after-market automotive and protective film markets.

The Company is continuing an additional 60,000 metric ton expansion of Eastman Tritan® copolyester capacity at the Kingsport, Tennessee manufacturing facility expected to be operational in first half 2018 to meet expected future demand in the durable goods and health and wellness markets. Through recent debottlenecks and working capital management, management expects to have adequate Eastman Tritan® copolyester manufacturing capacity to meet demand growth in advance of the capacity expansion in 2018.

Construction of a manufacturing facility for PVB resin at the Kuantan, Malaysia site is expected to be operational in second half 2017. This manufacturing capacity will support expected global growth in the transportation and building and construction markets and allow the Company to better serve customers in the Asia Pacific region.

## CHEMICAL INTERMEDIATES SEGMENT

### Overview

The CI segment leverages large scale and vertical integration from the cellulose and acetyl, olefins, and alkylamines streams to support our specialty operating segments with advantaged cost positions. The CI segment sells excess intermediates beyond our specialty needs for use in markets such as industrial chemicals and processing, building and construction, health and wellness, and agrochemicals. Certain products are also used internally by other operating segments of the Company. In 2016, the CI segment had sales revenue of \$2.5 billion, 28 percent of Eastman's total sales. Key technology platforms include acetyls, oxos, plasticizers, polyesters, and alkylamines.

The CI segment product lines benefit from competitive cost positions primarily resulting from the use of and access to lower cost raw materials, the Company's scale, technology, and operational excellence. Examples include coal used in

the production of cellulose and acetyl stream product lines, feedstocks used in the production of olefin derivative product lines such as oxo alcohols and plasticizers, and ammonia and methanol used to manufacture methylamines. In addition to a competitive cost position, the plasticizers business should continue to benefit from the growth in relative use of non-phthalate rather than phthalate plasticizers in the United States, Canada, and Europe.

Several CI segment product lines are affected by cyclicalities, most notably in the olefin and acetyl-based businesses. See "Eastman Chemical Company General Information - Manufacturing Streams". This cyclicalities is caused by periods of supply and demand imbalance, when either incremental capacity additions are not offset by corresponding increases in demand, or when demand exceeds existing supply. While management continues to take steps to reduce the impact of the trough of these cycles, future results are expected to occasionally fluctuate due both to general economic conditions and industry supply and demand.

# Principal Products

| Product   | Description  | Principal Competitors   | Key Raw Materials   | End-Use Applications   |
|---|--|---|---|--|
| <b>Intermediates</b>  |  |   |   |  |
| oxo alcohols and derivatives<br>acetic acid and derivatives<br>acetic anhydride<br>ethylene glycol ethers<br>esters | Olefin derivatives, acetyls, ethylene, commodity solvents  | Lyondell Bassell, BASF SE<br>The Dow Chemical Company<br>Oxea<br>BP plc<br>Celanese Corporation<br>Lonza<br>Flint Hills Resources | propane<br>ethane<br>propylene<br>coal<br>natural gas<br>paraxylene<br>metaxylene | industrial chemicals and processing<br>building and construction (paint/coating applications, construction chemicals, building materials)<br>pharmaceuticals and agriculture<br>health and wellness<br>packaging |
| <b>Plasticizers</b>   |  |   |   |  |
| Eastman 168®<br>Eastman®<br>DOP<br>Benzoflex®<br>Eastman<br>TXIB®<br>Eastman<br>Effusion™                           | primary non-phthalate and phthalate plasticizers and a range of niche non-phthalate plasticizers | BASF SE<br>Exxon Mobil Corporation<br>LG Chem, Ltd.<br>Emerald Performance Materials  | propane<br>propylene<br>paraxylene  | building and construction (non-phthalate plasticizers used in interior surfaces)<br>consumables (food packaging, packaging adhesives, and glove applications)<br>health and wellness (medical devices)           |
| <b>Functional Amines</b>  |  |   |   |  |
| alkylamines   | methylamines and salts<br>higher amines and solvents   | BASF SE<br>Chemours<br>U.S. Amines<br>Oxea  | methanol<br>ammonia<br>acetone<br>ethanol<br>butanol                              | agrochemicals<br>energy<br>consumables<br>water treatment<br>animal nutrition<br>industrial intermediates  |

|                   | Percentage of Total Segment Sales |      |      |
|-------------------|-----------------------------------|------|------|
| Product Lines     | 2016                              | 2015 | 2014 |
| Intermediates     | 65%                               | 65%  | 78%  |
| Plasticizers      | 20%                               | 20%  | 21%  |
| Functional Amines | 15%                               | 15%  | 1%   |
| Total             | 100%                              | 100% | 100% |

|   | Percentage of<br>Total Segment<br>Sales |      |      |
|---|---|------|------|
| Sales by Customer Location                                  | 2016                                    | 2015 | 2014 |
| United States and Canada                                    | 69%                                     | 69%  | 72%  |
| Asia Pacific  | 12%                                     | 12%  | 13%  |
| Europe, Middle East, and Africa                             | 13%                                     | 13%  | 10%  |
| Latin America   | 6%                                      | 6%   | 5%   |
| Total   | 100%                                    | 100% | 100% |
| See Exhibit 99.01 for CI segment revenue by end-use market. |   |      |      |

## Strategy

To maintain and enhance its status as a low cost producer and optimize earnings, the CI segment continuously focuses on cost control, operational efficiency, and capacity utilization. This includes focusing on products used internally by other downstream operating segments, thereby supporting growth in specialty product lines throughout the Company. Through the CI segment, the Company has leveraged the advantage of its highly integrated manufacturing facilities. For example, the Kingsport, Tennessee manufacturing facility allows for the production of acetic anhydride and other acetyl derivatives from coal rather than natural gas or other petroleum feedstocks. At the Longview, Texas manufacturing facility, Eastman uses its proprietary oxo-technology in one of the world's largest single-site, oxo butyraldehyde manufacturing facilities to produce a wide range of alcohols and other derivative products utilizing local propane and ethane supplies, as well as purchased propylene. The Pace, Florida manufacturing facility using ammonia and methanol feedstocks is the largest methylamine production site in the world. These integrated facilities, combined with large scale production processes and a continuous focus on additional process improvements, allow the CI segment product lines to remain cost competitive and, for some products, cost-advantaged over competitors.

In 2016, the Company announced that as part of its strategy to increase emphasis on specialty businesses and products it is pursuing strategic options to divest or otherwise monetize its excess ethylene capacity position and certain commodity olefin intermediates product lines. Eastman will retain its cost-advantaged integrated position to propylene which supports specialty derivatives throughout the Company. This process is expected to continue through first half 2017.

In 2012, the Company entered into an agreement with Enterprise Products Partners L.P. to purchase propylene from a planned propane dehydrogenation plant to further improve the Company's long-term competitive cost position. This plant is expected to be operational in 2017. Prior to completion of the plant, the Company continues to benefit from a propylene market contract with an advantaged cost position for purchased propylene.

## FIBERS SEGMENT

### Overview

In the Fibers segment, Eastman manufactures and sells Estron® acetate tow and Estrobond® triacetin plasticizers for use primarily in the manufacture of cigarette filters; Estron® natural (undyed) and Chromspun® solution-dyed acetate yarns for use in apparel, home furnishings, and industrial fabrics; and cellulose acetate flake and acetyl raw materials for other acetate fiber producers. Eastman is one of the world's two largest suppliers of acetate tow and has been a market leader in the manufacture and sale of acetate tow since it began production in the early 1950s. The Company is the world's largest producer of acetate yarn and has been in this business for over 75 years. In 2016, the Fibers segment had sales revenue of \$1.0 billion, 11 percent of Eastman's total sales.

The largest 12 Fibers segment customers account for approximately 80 percent of the segment's 2016 sales revenue and include multinational as well as regional cigarette producers, fabric manufacturers, and other acetate fiber producers.

The Company's long history and experience in the fibers markets are reflected in the Fibers segment's operating expertise, both within the Company and in support of its customers' processes. The Fibers segment's knowledge of the industry and of customers' processes allows it to assist its customers in maximizing their processing efficiencies, promoting repeat sales, and mutually beneficial, long-term customer relationships.



The Company's fully integrated fiber manufacturing process employs unique technology that allows it to use a broad range of high-purity wood pulps for which the Company has dependable sources of supply.

Contributing to profitability in the Fibers segment is the limited number of competitors and significant barriers to entry. These barriers include, but are not limited to, high capital costs for integrated manufacturing facilities.

The Fibers segment's competitive strengths include a reputation for high-quality products, technical expertise, large scale vertically-integrated processes, reliability of supply, balanced acetate flake supply for Fibers products, a reputation for customer service excellence, and a customer base characterized by strategic long-term customer relationships. The Company continues to capitalize and build on these strengths to further improve the strategic position of its Fibers segment. The principal methods of competition include maintaining the Company's large-scale vertically integrated manufacturing process from acetyl raw materials, reliability of supply, product quality, and sustaining long-term customer relationships. Despite continued challenging acetate tow market conditions, including additional industry capacity and lower capacity utilization rates, management expects continued strong Fibers segment cash flow.

#### Principal Products

| Product                  | Description                   | Principal Competitors  | Key Raw Materials                            | End-Use Applications   |
|--------------------------|-------------------------------|--|--|--|
| Acetate Tow              |                               |  |  |  |
| Estron®                  | cellulose acetate tow         | Celanese Corporation<br>Solvay S.A.<br>Daicel Corporation<br>Mitsubishi Rayon Co. Ltd. | wood pulp<br>methanol<br>high sulfur<br>coal | tobacco (manufacture of cigarette filters)   |
| Acetate Yarn             |                               |  |  |  |
| Estron®                  | natural (undyed)              | UAB Dirbtinis Pluostas   | wood pulp                                    | consumables (apparel, home furnishings,<br>and industrial fabrics)<br>health and wellness (medical tape) |
| Chromspun®               | acetate yarn                  | Industrias del Acetato de  | methanol                                     |  |
| Cosilva™                 | solution dyed acetate<br>yarn | Celulosa S.A.<br>Mitsubishi Rayon Co. Ltd.   | high sulfur<br>coal                          |  |
| Acetyl Chemical Products |                               |  |  |  |
| Estrobond®               | triacetin                     | Jiangsu Ruijia Chemistry   | wood pulp<br>methanol<br>high sulfur<br>coal | tobacco (manufacture of cigarette filters)   |
|                          | cellulose diacetate           | Co., Ltd.  |  |  |
|                          | flake                         | Polynt SPA   |  |  |
|                          | acetic acid                   | Daicel Corporation   |  |  |
|                          | acetic anhydride              | Celanese Corporation<br>Solvay S.A.  |  |  |

| Product Lines                             | Percentage of Total Segment Sales |      |      |
|---|-----------------------------------|------|------|
|   | 2016                              | 2015 | 2014 |
| Acetate Tow                               | 80%                               | 78%  | 79%  |
| Acetate Yarn and Acetyl Chemical Products | 20%                               | 22%  | 21%  |
| Total                                     | 100%                              | 100% | 100% |

| Sales by Customer Location      | Percentage of Total Segment Sales |      |      |
|---------------------------------|-----------------------------------|------|------|
|                                 | 2016                              | 2015 | 2014 |
| United States and Canada        | 21%                               | 21%  | 19%  |
| Asia Pacific                    | 44%                               | 49%  | 53%  |
| Europe, Middle East, and Africa | 29%                               | 26%  | 24%  |

|               |      |      |      |
|---------------|------|------|------|
| Latin America | 6%   | 4%   | 4%   |
| Total         | 100% | 100% | 100% |

## Strategy

In the Fibers segment, Eastman continues to leverage its strong customer relationships and industry knowledge to maintain a leading industry position in the global market. Eastman's Fibers segment benefits from a state-of-the-art, world class, acetate flake production facility at the Kingsport, Tennessee site which is supplied from Eastman's vertically integrated coal gasification facility. Eastman's total global acetate tow capacity is approximately 180,000 metric tons, not including the Company's participation in an acetate tow joint venture manufacturing facility in China. The Company also benefits from the Kingsport, Tennessee tow production facility being the largest and most integrated acetate tow site in the world. The Company supplies 100 percent of the acetate flake raw material to the China manufacturing joint venture from the Company's manufacturing facility in Kingsport, Tennessee which the Company recognizes in sales revenue. The Company recognizes earnings in the joint venture through its equity investment, reported in "Other (income) charges, net" in the Consolidated Statements of Earnings, Comprehensive Income and Retained Earnings in Part II, Item 8 of this Annual Report.

The Company intends to continue to make use of its capabilities in fibers technology to maintain a strong focus on incremental product and process improvements, with the goals of meeting customers' evolving needs and further improving the segment's manufacturing process efficiencies.

The Fibers segment R&D efforts focus on serving existing customers, developing new applications and markets, and reducing cost. These R&D efforts assist acetate tow customers in the effective use of the segment's products and customers' product development efforts. Additionally, these efforts are focused on developing new products and exploring new market applications, leveraging experience innovating cellulose products to offset declining demand in the tobacco industry, optimizing asset productivity, and working with suppliers to reduce costs.

As a result of challenging market conditions for acetate tow, the Company closed its Workington, UK acetate tow manufacturing facility in 2015. Following an increase in flake capacity at the Kingsport, Tennessee site in 2015, the Fibers segment could supply all its acetate tow and yarn spinning capacity from this low cost flake asset. In order to fully utilize the increased capacity and reduce fixed costs, the Company sold its 50 percent interest in Primester, which manufactures cellulose acetate at the Company's Kingsport, Tennessee site in June 2016.

## EASTMAN CHEMICAL COMPANY GENERAL INFORMATION

### Financial Information About Geographic Areas

Eastman operates as a global business with approximately 55 percent of its sales revenue generated from outside the United States and Canada region in 2016. The United States and Canada region contains the highest concentration of the Company's long-lived assets with approximately 75 percent located in the United States. The Company has expanded its international manufacturing presence and is also able to transport products globally to meet demand. While all regions continue to be affected by ongoing uncertainty and volatility in the global economy, the degree of the impact on the various regions is dependent on the mix of the Company's operating segments and products in each region. See "Management's Discussion and Analysis of Financial Condition and Results of Operations - Risk Factors" in Part II, Item 7 of this Annual Report. For sales by customer location by business segments, see "Business Segments". For sales revenue by geographic areas, see Note 20, "Segment Information", to the Company's consolidated financial statements in Part II, Item 8 of this Annual Report and "Management's Discussion and Analysis of Financial Condition and Results of Operations - Sales by Customer Location" in Part II, Item 7 of this Annual Report. For long-lived assets by geographic areas, see Note 20, "Segment Information", to the Company's consolidated financial statements in Part II, Item 8 of this Annual Report.

### Seasonality and Cyclicalities

The Company's earnings are typically higher in second and third quarters, and cash flows from operations are typically highest in the second half of the year due to seasonal demand based on general economic activity in the Company's key markets as described in "Business Segments". Results in the AM segment are typically weaker in fourth quarter due to seasonal downturns in key markets.

The intermediates product lines of the CI segment and the coatings and inks product lines of the AFP segment are impacted by the cyclicalities of key end products and markets, while other operating segments are more sensitive to global economic conditions. Supply and demand dynamics determine profitability at different stages of business cycles and global economic conditions affect the length of each cycle.

Despite sensitivity to global economic conditions, many of the products of each operating segment are expected to continue to provide an overall stable foundation for earnings growth.

#### Sales, Marketing, and Distribution

The Company markets and sells products primarily through a global marketing and sales organization which has a presence in the United States and approximately 30 other countries selling into more than 100 countries around the world. Eastman's strategy is to target industries and applications where the Company can develop products and service offerings to provide differentiated value that address current and future customer needs. Management considers both customer-facing capabilities and technical expertise to be critical for success. Our strategic marketing approach and capabilities leverage the Company's insights about trends, markets, and customers to drive development of specialty product and service offerings. Through a highly skilled and specialized sales force that is capable of providing differentiated product solutions, Eastman strives to be the preferred supplier in the Company's targeted markets.

The Company's products are also marketed through indirect channels, which include distributors and contract representatives. Sales outside the United States tend to be made more frequently through distributors and contract representatives than sales in the United States. The combination of direct and indirect sales channels, including sales online through its Customer Center website, allows Eastman to reliably serve customers throughout the world.

The Company's products are shipped to customers directly from Eastman's manufacturing plants and from distribution centers worldwide.

#### Sources and Availability of Raw Material and Energy

Eastman purchases approximately 75 percent of its key raw materials and energy through different contract mechanisms, generally of two to five years in initial duration with renewal or cancellation options for each party. Most of these agreements do not require the Company to purchase materials or energy if its operations are reduced or idle. The cost of raw materials and energy is generally based on market price at the time of purchase, and Eastman uses derivative financial instruments for certain of its key raw materials to mitigate the impact of market price fluctuations. Key raw materials include cellulose, propane, paraxylene, propylene, methanol, polyvinyl alcohol, and a wide variety of precursors for specialty organic chemicals. Key purchased energy sources include natural gas, coal, and electricity. The Company has multiple suppliers for most key raw materials and energy and uses quality management principles, such as the establishment of long-term relationships with suppliers and on-going performance assessment and benchmarking, as part of its supplier selection process. When appropriate, the Company purchases raw materials from a single source supplier to maximize quality and cost improvements, and has developed contingency plans designed to minimize the potential impact of any supply disruptions from single source suppliers.

While temporary shortages of raw materials and energy may occasionally occur, these items are generally sufficiently available to cover current and projected requirements. However, their continuous availability and cost are subject to unscheduled plant interruptions occurring during periods of high demand, domestic and world market conditions, changes in government regulation, natural disasters, war or other outbreak of hostilities or terrorism or other political factors, or breakdown or degradation of transportation infrastructure. Eastman's operations or products have in the past, and may in the future, be adversely affected by these factors. See "Management's Discussion and Analysis of Financial Condition and Results of Operations - Risk Factors" in Part II Item 7 of this Annual Report. The Company's raw material and energy costs as a percent of total cost of operations were approximately 40 percent in 2016. For additional information about raw materials, see Exhibit 99.02 "Product and Raw Material Information" of this Annual Report.

## Manufacturing Streams

Integral to Eastman's strategy for growth is leveraging its heritage of expertise and innovation in cellulose and acetyl, olefins, polyester, and alkylamine chemistries in key markets, including transportation, building and construction, consumables, tobacco, and agriculture. For each of these chemistries, Eastman has developed and acquired a combination of assets and technologies that are operated within four manufacturing "streams".

In the cellulose and acetyl stream, the Company begins with coal which is gasified in the presence of oxygen in its coal gasification facility. The resulting synthesis gas is converted into a number of chemicals including methanol, methyl acetate, acetic acid, and acetic anhydride. In the long-term, the Company's ability to use coal is considered to be a raw material cost advantage. Cellulose derivative manufacturing at the Company begins with natural polymers, sourced from managed forests, which, when combined with acetyl and olefin chemicals, provide differentiated product lines. Cellulose and acetyl stream products include but are not limited to, cellulose fibers, plastics, and esters. The major end markets for products from the cellulose and acetyl stream include coatings, displays, and tobacco.

In the olefins stream, the Company begins primarily with propane and ethane, which are cracked into the "olefin" chemicals ethylene and propylene in three cracking units at its facility in Longview, Texas. The Company purchases additional propylene for use at its Longview facility and other facilities outside the United States. Propylene derivative products are used in a variety of items such as paints and coatings, automotive safety glass, and non-phthalate plasticizers. Ethylene derivative products are converted for end uses in the food industry, health and beauty products, detergents, and automotive products. Historically, periodic additions of large blocks of capacity have caused profit margins of light olefins to expand and contract, resulting in "ethylene" or "olefins" cycles. The Company believes it is positioned to be less impacted by these cycles than more commodity based producers due to its diverse derivatives products and focus on more specialty markets.

In the polyester stream, the Company begins with purchased paraxylene and produces purified terephthalic acid ("PTA") and dimethyl terephthalate ("DMT") for polyesters and copolyesters. PTA or DMT is then reacted with various glycols, which the Company either makes or purchases, along with other raw materials (some of which the Company makes and are proprietary) to produce copolyesters. The Company believes that this backward integration of polyester manufacturing is a competitive advantage, giving Eastman a low cost position, as well as a more reliable intermediate supply. In addition, Eastman can add specialty monomers to copolyesters to provide clear, tough, chemically resistant product characteristics. As a result, the Company's copolyesters effectively compete with materials such as polycarbonate and acrylic.

In the alkylamines stream, the Company begins with ammonia and alcohols (C1 - C6) to produce methylamines and higher alkylamines, which can then be further reacted with other chemicals to produce alkylamine derivatives. The Company's alkylamines products are primarily used in agriculture, water treatment, consumables, animal nutrition and oil and gas end markets. The Company is recognized as one of the leading global producers of alkylamines. Methylamines are manufactured by reacting methanol with ammonia in a catalytic reactor. Three different methylamines are produced: mono methylamine ("MMA"), di methylamine ("DMA") and tri methylamine ("TMA"). The reaction circumstances (pressure, temperature, catalysts, etc.) and reactant ratios determine the ratio of the three products which are purified by distillation and used as building blocks to produce downstream derivatives or sold externally to merchant customers. The term higher alkylamines refers to amines produced with C2-C6 alcohols (ethyl, n butyl, n propyl, isopropyl and cyclohexyl amines). The manufacturing process for higher alkylamines is similar to that for methylamines, as ammonia is combined with various alcohols in catalytic reactors and subsequently distilled. The use of different alcohols results in the creation of different higher alkylamines which are used both internally to produce derivatives or sold externally to the merchant market.

The Company leverages its expertise and innovation in cellulose and acetyl, olefins, polyester and alkylamine chemistries, and technologies, to meet demand and create new uses and opportunities for the Company's products in key markets. Through integration and optimization across these streams, the Company is able to create unique and differentiated products that have a performance advantage over competitive materials.



## Capital Expenditures

Capital expenditures were \$626 million, \$652 million, and \$593 million in 2016, 2015, and 2014, respectively. Capital expenditures in 2016 were primarily for AFP and AM segment expansions in Kuantan, Malaysia, an AM segment expansion of Eastman Tritan® copolyester capacity in Kingsport, Tennessee, and Longview, Texas site modernization projects. The Company expects that 2017 capital spending will be approximately \$575 million.

## Employees

Eastman employs approximately 14,000 men and women worldwide. Approximately 10 percent of the total worldwide labor force is represented by collective labor agreements, mostly outside the United States.

## Customers

Eastman has an extensive customer base and, while it is not dependent on any one customer, loss of certain top customers could adversely affect the Company until such business is replaced. The top 100 customers accounted for approximately 55 percent of the Company's 2016 sales revenue. No single customer accounted for 10 percent or more of the Company's consolidated sales revenue during 2016.

## Intellectual Property and Trademarks

While the Company's intellectual property portfolio is an important Company asset which it expands and vigorously protects globally through a combination of patents that expire at various times, trademarks, copyrights, and trade secrets, neither its business as a whole nor any particular operating segment is materially dependent upon any one particular patent, trademark, copyright, or trade secret. As a producer of a broad range of advanced materials, specialty additives, chemicals, and fibers, Eastman owns over 700 active United States patents and more than 1,800 active foreign patents, expiring at various times over several years, and also owns over 5,000 active worldwide trademark applications and registrations. Eastman continues to actively protect its intellectual property. As the laws of many countries do not protect intellectual property to the same extent as the laws of the United States, Eastman cannot ensure that it will be able to adequately protect its intellectual property assets outside the United States. See "Management's Discussion and Analysis of Financial Condition and Results of Operations - Risk Factors" in Part II Item 7 of this Annual Report.

The Company pursues opportunities to license proprietary technology to third parties in areas where it has determined competitive impact to its businesses will be minimal. These arrangements typically are structured to require payments at significant project milestones such as signing, completion of design, and start-up.

## Research and Development

For 2016, 2015, and 2014, Eastman's R&D expenses totaled \$219 million, \$242 million, and \$227 million, respectively. The Company manages certain growth initiatives and costs at the corporate level, including certain R&D costs not allocated to any one operating segment. The Company uses a stage-gating process, which is a disciplined decision making framework for evaluating targeted opportunities, with a number of projects at various stages of development. As projects meet milestones, additional amounts are spent on those projects. The Company continues to explore and invest in R&D initiatives that are aligned with macro trends in sustainability, consumerism, and energy efficiency such as high performance materials and advanced cellulose. An example of such an initiative is the Eastman microfiber technology platform which leverages the Company's core competency in polyesters, spinning capability, and in-house application expertise, for use in a wide range of applications including liquid and air filtration, high strength packaging in nonwovens, and performance apparel in textiles. In 2016, the Company shifted some R&D resources from process technology efforts into application development efforts which focused on new product introductions and increased growth related spend. Plans have been developed to increase future spending on select R&D programs.

## Environmental

The Company's cash expenditures related to environmental protection and improvement were \$267 million, \$290 million, and \$319 million, in 2016, 2015, and 2014, respectively, and include operating costs associated with environmental protection equipment and facilities, engineering costs, and construction costs. These cash expenditures include environmental capital expenditures of approximately \$45 million, \$52 million, and \$69 million in 2016, 2015,

and 2014, respectively.

Eastman is subject to significant and complex laws, regulations, and legal requirements relating to the use, storage, handling, generation, transportation, emission, discharge, disposal, and remediation of, and exposure to, hazardous and non-hazardous substances and wastes in all of the countries in which it does business. These health, safety, and environmental considerations are a priority in the Company's planning for all existing and new products and processes. The Health, Safety, Environmental and Security Committee of Eastman's Board of Directors oversees the Company's policies and practices concerning health, safety, and the environment and its processes for complying with related laws and regulations, and monitors related matters.

The Company's policy is to operate its plants and facilities in compliance with all applicable laws and regulations such that it protects the environment and the health and safety of its employees and the public. The Company intends to continue to make expenditures for environmental protection and improvements in a timely manner consistent with its policies and with the technology available. In some cases, applicable environmental regulations such as those adopted under the Clean Air Act, Resource Conservation and Recovery Act, Comprehensive Environmental Response, Compensation, and Liability Act, and related actions of regulatory agencies, determine the timing and amount of environmental costs incurred by the Company. Likewise, any new legislation or regulations related to greenhouse gas emissions and energy could impact the timing and amount of environmental costs incurred by the Company.

The Company accrues environmental costs when it is probable that the Company has incurred a liability at a contaminated site and the amount can be reasonably estimated. In some instances, the amount cannot be reasonably estimated due to insufficient information, particularly as to the nature and timing of future expenditures. In these cases, the liability is monitored until such time that sufficient information exists. With respect to a contaminated site, the amount accrued reflects liabilities expected to be paid out within approximately 30 years and the Company's assumptions about remediation requirements at the contaminated site, the nature of the remedy, the outcome of discussions with regulatory agencies and other potentially responsible parties at multi-party sites, and the number and financial viability of other potentially responsible parties. Changes in the estimates on which the accruals are based, unanticipated government enforcement action, or changes in health, safety, environmental, and chemical control regulations, and testing requirements could result in higher or lower costs.

The Company does not currently expect near term environmental capital expenditures arising from requirements of environmental laws and regulations to materially impact the Company's planned level of annual capital expenditures for environmental control facilities. Other matters concerning health, safety, and the environment are discussed in "Management's Discussion and Analysis of Financial Condition and Results of Operations" in Part II Item 7 and in Note 1, "Significant Accounting Policies"; Note 13, "Environmental Matters and Asset Retirement Obligations"; and Note 22, "Reserve Rollforwards" to the Company's consolidated financial statements in Part II, Item 8 of this Annual Report.

#### Backlog

On December 31, 2016 and 2015, Eastman's backlog of firm sales orders represented less than 10 percent of the Company's total consolidated revenue for the year. These orders are primarily short-term and all orders are expected to be filled in the following year. The Company manages its inventory levels to control the backlog of products depending on customers' needs. In areas where the Company is the single source of supply, or competitive forces or customers' needs dictate, the Company may carry additional inventory to meet customer requirements.

#### Available Information - SEC Filings

The Company makes available free of charge, through the "Investors - SEC Information" section of its Internet website ([www.eastman.com](http://www.eastman.com)), its annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as soon as reasonably practicable after electronically filing such material with, or furnishing it to, the SEC.

The Company is required to file annual, quarterly and current reports, proxy statements and other information with the SEC. The public may read and copy any materials that the Company files with the SEC at the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. Information on the operation of the Public Reference Room

may be obtained by calling the SEC at 1-800-SEC-0330. In addition, the SEC maintains an Internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC at <http://www.sec.gov>.

ITEM 1A. RISK FACTORS

For identification and discussion of the most significant risks applicable to the Company and its business, see Part II - Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations - Risk Factors" of this Annual Report.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

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## EXECUTIVE OFFICERS OF THE COMPANY

Certain information about the Company's executive officers is provided below:

Mark J. Costa, age 50, is Chief Executive Officer and Chair of the Eastman Chemical Company Board of Directors. Mr. Costa joined the Company in June 2006 as Senior Vice President, Corporate Strategy and Marketing; was appointed Executive Vice President, Polymers Business Group Head and Chief Marketing Officer in August 2008; was appointed Executive Vice President, Specialty Polymers, Coatings and Adhesives, and Chief Marketing Officer in May 2009; and became President and a member of the Board of Directors of the Company in May 2013. Prior to joining Eastman, Mr. Costa was a senior partner with Monitor Group ("Monitor"). He joined Monitor, a global management consulting firm, in 1988, and his experience included corporate and business unit strategies, asset portfolio strategies, innovation and marketing, and channel strategies across a wide range of industries. Mr. Costa was appointed Chief Executive Officer in January 2014 and was named Board Chair effective July 2014.

Curtis E. Espeland, age 52, is Executive Vice President and Chief Financial Officer. Mr. Espeland joined Eastman in 1996, and has served in various financial management positions of increasing responsibility, including Director of Internal Auditing; Director of Finance, Asia Pacific; Director of Corporate Planning and Forecasting; Vice President and Controller; Vice President, Finance, Eastman Division; Vice President, Finance, Polymers; and Senior Vice President and Chief Financial Officer from 2008 until December 2013. He served as the Company's Chief Accounting Officer from December 2002 to 2008. Prior to joining Eastman, Mr. Espeland was an audit and business advisory manager with Arthur Andersen LLP in the United States, Eastern Europe, and Australia. Mr. Espeland was appointed to his current position effective January 2014.

Brad A. Lich, age 49, is Executive Vice President and Chief Commercial Officer, with responsibility for the Advanced Materials ("AM") and Fibers segments, outside U.S. regional business leadership, and the marketing, sales, pricing, and procurement organizations. Mr. Lich joined Eastman in 2001 as Director of Global Product Management and Marketing for the Coatings business. Other positions of increasing responsibility followed, including General Manager of Emerging Markets of the former Coatings, Adhesives, Specialty Polymers, and Inks ("CASPI") segment. In 2006, Mr. Lich became Vice President of Global Marketing with direct responsibility for company-wide global marketing functions. In 2008, Mr. Lich was appointed Vice President and General Manager of the CASPI segment, and in 2012 was appointed Vice President and General Manager of the Additives & Functional Products ("AFP") segment. In January 2014, Mr. Lich was appointed Executive Vice President, with responsibility for the AFP and AM segments and the marketing, sales, and pricing organizations. In March 2016, Mr. Lich assumed executive responsibility for outside U.S. regional business leadership. Mr. Lich was appointed to his current position effective July 2016.

Lucian Boldea, age 45, is Senior Vice President with responsibility for the AFP segment. Mr. Boldea joined Eastman in 1997 as a chemist. During his career at Eastman, he has held various positions in R&D, licensing, business management, and corporate growth platforms leadership. These positions included Technology Director for the former Performance Chemicals and Intermediates ("PCI") segment and Director of Corporate Growth Platforms. In 2015, he was Group Vice President and General Manager of the AFP segment. Mr. Boldea was appointed to his current position effective July 2016.

Michael H.K. Chung, age 63, is Senior Vice President and Chief International Ventures Officer. Mr. Chung joined Eastman in 1976, and since that time has held various management positions, primarily in the Company's chemicals and fibers businesses. He was appointed Vice President, Fibers International Business in 2006, and in 2009 he was appointed Vice President and Managing Director, Asia Pacific Region. Mr. Chung was appointed to his current

position effective January 2011.

Mark K. Cox, age 51, is Senior Vice President and Chief Manufacturing, Supply Chain, and Engineering Officer. Mr. Cox joined Eastman in 1986 and has served in a variety of management positions, including leadership roles within the Business Management, Manufacturing, and Technology areas. Additionally, he has held responsibility for Eastman's Corporate Six Sigma program. In August 2008, Mr. Cox was appointed Vice President, Chemicals and Fibers Technology. Beginning in May 2009, Mr. Cox served as Vice President, Chemicals, Fibers, and Performance Polymers Technology. He was appointed Vice President, Worldwide Engineering and Construction in August 2010, appointed Senior Vice President and Chief Manufacturing and Engineering Officer effective January 2014, and to his current position effective March 2016.

Stephen G. Crawford, age 52, is Senior Vice President and Chief Technology Officer, with executive responsibility for corporate innovation. Mr. Crawford joined Eastman in 1987. Since then, he has held several leadership positions of increasing responsibility in both the manufacturing and technology organizations. Since 2007, he has served as Vice President of Global R&D in the AM and AFP segments. Mr. Crawford was appointed to his current position effective January 2014.



David A. Golden, age 51, is Senior Vice President, Chief Legal and Sustainability Officer and Corporate Secretary. Mr. Golden has responsibility for Eastman's Legal, Corporate Health, Safety, Environment, Security, Global Public Affairs and Policy, and Sustainability organizations, and has overall responsibility for Eastman's Ethics and Corporate Compliance program. Prior to this position, he was Vice President, Associate General Counsel, and Corporate Secretary with overall responsibility for Eastman's Legal Department. Mr. Golden joined Eastman in 1995 as an attorney and has held positions of increasing responsibility, including serving as the Company's Director of Internal Audit from October 2005 to October 2007 and Vice President and Assistant General Counsel responsible for the Company's Commercial and International Law groups from 2007 to 2010. Mr. Golden was appointed Senior Vice President, Chief Legal Officer, and Corporate Secretary in January 2013 and to his current position including executive leadership of the Company's sustainability efforts in March 2016. Prior to joining Eastman, he worked as an attorney in the Atlanta office of the law firm of Hunton & Williams.

Perry Stuckey III, age 57, is Senior Vice President, Chief Human Resources Officer. Mr. Stuckey joined Eastman in 2011, as Vice President, Global Human Resources, and was responsible for Eastman's human resources strategy and services worldwide. Mr. Stuckey's work experience includes a variety of global human resource management positions in manufacturing, industrial automation, and bio-technology organizations, including Hill-Rom Company, Rockwell Automation, and Monsanto Company. Mr. Stuckey was appointed to his current position in January 2013.

Damon C. Warmack, age 59, is Senior Vice President, Corporate Development with executive responsibility for the Chemical Intermediates segment. Mr. Warmack joined Eastman in 1980, working in a series of sales and product management positions. He was located in Taiwan, Hong Kong, Shanghai, and Singapore with a range of assignments including the establishment of Eastman's commercial presence in China, joint venture development and management, and serving as Vice President and Managing Director, Asia Pacific. In addition, he served as Vice President and General Manager of Resins, Inks, and Monomers, leading the restructure and divestiture of this business. Mr. Warmack then served as Vice President and General Manager of the former CASPI segment and then of the former PCI segment. More recently, he had responsibility for corporate development and strategic planning, playing a lead role in the Company's business portfolio transformation through acquisitions and divestitures. Mr. Warmack was appointed to his current position effective July 2016.

Scott V. King, age 48, is Vice President, Corporate Controller and Chief Accounting Officer. Since joining Eastman in 1999 as Manager, Corporate Consolidations and External Reporting, Mr. King has held various positions of increasing responsibility in the financial organization. He was first appointed Corporate Controller in August 2007 and has served as Chief Accounting Officer since September 2008. Prior to joining Eastman, Mr. King was an audit and business advisory manager with PricewaterhouseCoopers LLP.

## ITEM 2. PROPERTIES

At December 31, 2016, Eastman owned or operated 49 manufacturing sites and had equity interests in six manufacturing joint ventures in a total of 14 countries. Utilization of these sites may vary with product mix and economic, seasonal, and other business conditions; however, none of the principal plants is substantially idle. The Company's plants, including approved expansions, generally have sufficient capacity for existing needs and expected near-term growth. These plants are generally well maintained, in good operating condition, and suitable and adequate for their use. Unless otherwise indicated, all of the properties are owned.

The locations and general character of the Company's manufacturing sites are:

| Location                                   | Segment using manufacturing location |                    |                        |        |
|--|--------------------------------------|--------------------|------------------------|--------|
|  | Additives & Functional Products      | Advanced Materials | Chemical Intermediates | Fibers |
| USA  |                                      |                    |                        |        |
| Alvin, Texas <sup>(1)</sup>                | x                                    |                    |                        |        |
| Anniston, Alabama                          | x                                    |                    |                        |        |
| Axton, Virginia                            |                                      | x                  |                        |        |
| Canoga Park, California <sup>(2)</sup>     |                                      | x                  |                        |        |
| Cartersville, Georgia <sup>(1)</sup>       | x                                    |                    |                        |        |
| Chestertown, Maryland                      |                                      |                    | x                      |        |
| Columbia, South Carolina <sup>(1)(3)</sup> |                                      | x                  |                        |        |
| Franklin, Virginia <sup>(1)</sup>          | x                                    |                    |                        |        |
| Indianapolis, Indiana <sup>(2)</sup>       | x                                    |                    |                        |        |
| Jefferson, Pennsylvania                    | x                                    |                    |                        |        |
| Kingsport, Tennessee                       | x                                    | x                  | x                      | x      |
| Lemoyne, Alabama <sup>(1)</sup>            | x                                    |                    |                        |        |
| Linden, New Jersey                         | x                                    |                    |                        |        |
| Longview, Texas                            | x                                    | x                  | x                      |        |
| Martinsville, Virginia <sup>(4)</sup>      |                                      | x                  |                        |        |
| Monongahela, Pennsylvania                  | x                                    |                    |                        |        |
| Pace, Florida                              | x                                    |                    | x                      |        |
| Sauget, Illinois                           | x                                    |                    |                        |        |
| Springfield, Massachusetts                 |                                      | x                  |                        |        |
| St. Gabriel, Louisiana                     | x                                    |                    | x                      |        |
| Sun Prairie, Wisconsin                     |                                      | x                  |                        |        |
| Texas City, Texas                          |                                      |                    | x                      |        |
| Trenton, Michigan                          |                                      | x                  |                        |        |
| Watertown, New York <sup>(5)</sup>         |                                      |                    |                        |        |
| Europe                                     |                                      |                    |                        |        |
| Antwerp, Belgium <sup>(1)</sup>            | x                                    | x                  |                        |        |
| Ghent, Belgium <sup>(4)</sup>              | x                                    | x                  | x                      |        |
| Kohtla-Järve, Estonia                      | x                                    |                    | x                      |        |
| Oulu, Finland <sup>(2)</sup>               | x                                    |                    |                        |        |
| Dresden, Germany                           |                                      | x                  |                        |        |
| Leuna, Germany                             | x                                    |                    | x                      |        |
| Nienburg, Germany                          | x                                    |                    |                        |        |
| Middelburg, the Netherlands                | x                                    |                    |                        |        |
| Newport, Wales                             | x                                    | x                  |                        |        |

(1) Eastman is a guest under an operating agreement with a third party, which operates its manufacturing facilities at the site.

(2) Eastman leases from a third party and operates the site.

(3) Although nearly the entire manufacturing site was included in the first quarter 2011 divestiture of the Company's polyethylene terephthalate ("PET") business and related assets, a portion was retained subsequent to the sale.

(4) Eastman has more than one manufacturing site at this location.

(5) This location supports developing businesses of the Eastman microfiber technology platform, the financial results of which are not identifiable to an operating segment and are included in "Other".



| Location                                | Segment using manufacturing location |                    |                        |        |   |
|---|--------------------------------------|--------------------|------------------------|--------|---|
|   | Additives & Functional Products      | Advanced Materials | Chemical Intermediates | Fibers |   |
| Asia Pacific                            |                                      |                    |                        |        |   |
| Fengxian, China                         | x                                    |                    |                        |        |   |
| Suzhou, China <sup>(1)(2)(3)</sup>      | x                                    | x                  |                        |        |   |
| Wuhan, China <sup>(4)</sup>             |                                      |                    | x                      |        |   |
| Yixing, China                           | x                                    |                    |                        |        |   |
| Zibo, China <sup>(5)</sup>              | x                                    |                    | x                      |        |   |
| Kashima, Japan                          | x                                    |                    |                        |        |   |
| Ulsan, Korea                            |                                      |                    |                        |        | x |
| Kuantan, Malaysia <sup>(1)</sup>        | x                                    | x                  |                        |        |   |
| Jurong Island, Singapore <sup>(1)</sup> | x                                    |                    | x                      |        |   |
| Latin America                           |                                      |                    |                        |        |   |
| Itupeva, Brazil <sup>(6)</sup>          | x                                    |                    |                        |        |   |
| Mauá, Brazil                            |                                      |                    | x                      |        |   |
| Santo Toribio, Mexico                   |                                      | x                  |                        |        |   |
| Uruapan, Mexico                         | x                                    |                    |                        |        |   |

<sup>(1)</sup> Eastman leases from a third party and operates the site.

<sup>(2)</sup> Eastman has more than one manufacturing site at this location.

<sup>(3)</sup> Eastman holds a 60 percent share in the joint venture Solutia Therminol Co., Ltd., Suzhou in the AFP segment.

<sup>(4)</sup> Eastman holds a 51 percent share in the joint venture Eastman Specialties Wuhan Youji Chemical Co., Ltd.

<sup>(5)</sup> Eastman holds a 51 percent share in the joint venture Qilu Eastman Specialty Chemical Ltd.

<sup>(6)</sup> Eastman is a guest under an operating agreement with a third party, which operates its manufacturing facilities at the site.

Eastman has 50 percent or less ownership in joint ventures at the following manufacturing sites:

| Location                      | Segment using manufacturing location |                    |                        |        |   |
|-------------------------------|--------------------------------------|--------------------|------------------------|--------|---|
|                               | Additives & Functional Products      | Advanced Materials | Chemical Intermediates | Fibers |   |
| USA                           |                                      |                    |                        |        |   |
| St. Gabriel, Louisiana        | x                                    |                    |                        |        |   |
| Asia Pacific                  |                                      |                    |                        |        |   |
| Hefei, China                  |                                      |                    |                        |        | x |
| Nanjing, China <sup>(1)</sup> | x                                    |                    | x                      |        |   |
| Shenzhen, China               |                                      | x                  |                        |        |   |
| Jurong Island, Singapore      |                                      |                    | x                      |        |   |

<sup>(1)</sup> Eastman has more than one manufacturing site at this location.

Eastman has distribution facilities at all of its plant sites. In addition, the Company owns or leases approximately 200 stand-alone distribution facilities in approximately 30 countries. Corporate headquarters are in Kingsport, Tennessee. The Company's regional headquarters are in Shanghai, China; Miami, Florida; Capelle aan den IJssel, the Netherlands; Zug, Switzerland; Singapore; and Kingsport, Tennessee. Technical service is provided to the Company's customers from technical service centers in Kingsport, Tennessee; Palo Alto, California; Canoga Park, California; Springfield, Massachusetts; Akron, Ohio; Martinsville, Virginia; Ghent, Belgium; Guangzhou, China; Middelburg, the Netherlands; Mumbai, India; and Shanghai, China.

A summary of properties, classified by type, is included in Note 4, "Properties and Accumulated Depreciation", to the Company's consolidated financial statements in Part II, Item 8 of this Annual Report.

### ITEM 3. LEGAL PROCEEDINGS

#### General

From time to time, Eastman and its operations are parties to, or targets of, lawsuits, claims, investigations and proceedings, including product liability, personal injury, asbestos, patent and intellectual property, commercial, contract, environmental, antitrust, health and safety, and employment matters, which are being handled and defended in the ordinary course of business. While the Company is unable to predict the outcome of these matters, it does not believe, based upon currently available facts, that the ultimate resolution of any such pending matters will have a material adverse effect on its overall financial condition, results of operations, or cash flows.

#### Solutia Legacy Torts Claims Litigation

Pursuant to an Amended and Restated Settlement Agreement effective February 28, 2008 between Solutia Inc. ("Solutia") and Monsanto Company ("Monsanto") in connection with Solutia's emergence from Chapter 11 bankruptcy proceedings (the "Monsanto Settlement Agreement"), Monsanto is responsible for the defense and indemnification of Solutia against any Legacy Tort Claims (as defined in the Monsanto Settlement Agreement) and Solutia has agreed to retain responsibility for certain tort claims, if any, that may arise from Solutia's conduct after its spinoff from Pharmacia Corporation (f/k/a Monsanto), which occurred on September 1, 1997. Solutia, which became a wholly-owned subsidiary of Eastman on July 2, 2012, has been named as a defendant in several such proceedings, and has submitted the matters to Monsanto as Legacy Tort Claims. To the extent these matters are not within the meaning of Legacy Tort Claims, Solutia could potentially be liable thereunder. In connection with the completion of its acquisition of Solutia, Eastman guaranteed the obligations of Solutia and Eastman was added as an indemnified party under the Monsanto Settlement Agreement.

### ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

## PART II

ITEM MARKET FOR REGISTRANT'S COMMON STOCK, RELATED STOCKHOLDER MATTERS AND  
5. ISSUER PURCHASES OF EQUITY SECURITIES

(a)Eastman Chemical Company's ("Eastman" or the "Company") common stock is traded on the New York Stock Exchange (the "NYSE") under the symbol "EMN". The following table presents the high and low sales prices of the common stock on the NYSE and the cash dividends per share declared by the Company's Board of Directors for each quarterly period of 2016 and 2015:

|                   | High    | Low     | Cash<br>Dividends<br>Declared |
|-------------------|---------|---------|-------------------------------|
| 2016First Quarter | \$74.98 | \$56.03 | \$ 0.46                       |
| Second Quarter    | 78.79   | 65.19   | 0.46                          |
| Third Quarter     | 72.50   | 63.10   | 0.46                          |
| Fourth Quarter    | 77.98   | 62.70   | 0.51                          |
| 2015First Quarter | \$76.67 | \$67.13 | \$ 0.40                       |
| Second Quarter    | 83.90   | 67.74   | 0.40                          |
| Third Quarter     | 82.79   | 62.84   | 0.40                          |
| Fourth Quarter    | 73.82   | 63.84   | 0.46                          |

As of December 31, 2016, there were 146,488,924 shares of the Company's common stock issued and outstanding, which shares were held by 17,198 stockholders of record. These shares include 50,798 shares held by the Company's charitable foundation. The Company's Board of Directors has declared a cash dividend of \$0.51 per share during the first quarter of 2017, payable on April 3, 2017 to stockholders of record on March 15, 2017. Quarterly dividends on common stock, if declared by the Board of Directors, are usually paid on or about the first business day of the month following the end of each quarter. The payment of dividends is a business decision made by the Board of Directors from time to time based on the Company's earnings, financial position and prospects, and such other considerations as the Board considers relevant. Accordingly, while management currently expects that the Company will continue to pay a quarterly cash dividend, its dividend practice may change at any time.

See Part III, Item 12, "Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters -Securities Authorized for Issuance Under Equity Compensation Plans" of this Annual Report on Form 10-K (this "Annual Report") for the information required by Item 201(d) of Regulation S-K.

(b)Not applicable.

## (c) Purchases of Equity Securities by the Issuer and Affiliated Purchasers:

In February 2014, the Board of Directors authorized the repurchase of up to an additional \$1 billion of the Company's outstanding common stock. As of December 31, 2016, a total of 6,542,190 shares have been repurchased under this authorization for a total amount of \$498 million. During 2016, the Company repurchased 2,131,501 shares of common stock for a total cost of approximately \$145 million. For additional information, see Note 15, "Stockholders' Equity", to the Company's consolidated financial statements in Part II, Item 8 of this Annual Report.

| Period                | Total<br>Number<br>of Shares<br>Purchased | Average<br>Price<br>Paid Per<br>Share <sup>(1)</sup> | Total<br>Number of<br>Shares<br>Purchased<br>as Part of<br>Publicly<br>Announced<br>Plans<br>or Programs | Approximate<br>Dollar<br>Value (in<br>millions)<br>that May Yet<br>Be<br>Purchased<br>Under the<br>Plans or<br>Programs |
|-----------------------|---|--|--|---|
| October 1 - 31, 2016  | 304,943                                   | \$ 65.59   | 304,943  | \$ 507  |
| November 1 - 30, 2016 | —   | \$ —   | —  | \$ 507  |
| December 1 - 31, 2016 | 65,618                                    | \$ 76.20   | 65,618   | \$ 502  |
| Total                 | 370,561                                   | \$ 67.46   | 370,561  |   |

(1) All shares were repurchased under a Company announced repurchase plan.

(2) Average price paid per share reflects the weighted average purchase price paid for shares.



## ITEM 6. SELECTED FINANCIAL DATA

| Statements of Earnings Data<br>(Dollars in millions, except per share amounts) | Year Ended December 31, |         |         |         |         |
|--|-------------------------|---------|---------|---------|---------|
|  | 2016                    | 2015    | 2014    | 2013    | 2012    |
| Sales  | \$9,008                 | \$9,648 | \$9,527 | \$9,350 | \$8,102 |
| Operating earnings   | 1,383                   | 1,384   | 1,162   | 1,862   | 800     |
| Earnings from continuing operations  | 859                     | 854     | 755     | 1,172   | 443     |
| Earnings from discontinued operations  | —                       | —       | 2       | —       | —       |
| Gain from disposal of discontinued operations                                  | —                       | —       | —       | —       | 1       |
| Net earnings   | 859                     | 854     | 757     | 1,172   | 444     |
| Less: Net earnings attributable to noncontrolling interest                     | 5                       | 6       | 6       | 7       | 7       |
| Net earnings attributable to Eastman   | \$854                   | \$848   | \$751   | \$1,165 | \$437   |
| Amounts attributable to Eastman stockholders:                                  |                         |         |         |         |         |
| Earnings from continuing operations, net of tax                                | \$854                   | \$848   | \$749   | \$1,165 | \$436   |
| Earnings from discontinued operations, net of tax                              | —                       | —       | 2       | —       | 1       |
| Net earnings attributable to Eastman stockholders                              | \$854                   | \$848   | \$751   | \$1,165 | \$437   |
| Basic earnings per share attributable to Eastman:                              |                         |         |         |         |         |
| Earnings from continuing operations  | \$5.80                  | \$5.71  | \$5.01  | \$7.57  | \$2.99  |
| Earnings from discontinued operations  | —                       | —       | 0.02    | —       | 0.01    |
| Net earnings   | \$5.80                  | \$5.71  | \$5.03  | \$7.57  | \$3.00  |
| Diluted earnings per share attributable to Eastman:                            |                         |         |         |         |         |
| Earnings from continuing operations  | \$5.75                  | \$5.66  | \$4.95  | \$7.44  | \$2.92  |
| Earnings from discontinued operations  | —                       | —       | 0.02    | —       | 0.01    |
| Net earnings   | \$5.75                  | \$5.66  | \$4.97  | \$7.44  | \$2.93  |
| Statements of Financial Position Data  |                         |         |         |         |         |
| Current assets   | \$2,866                 | \$2,878 | \$3,173 | \$2,840 | \$2,699 |
| Net properties   | 5,276                   | 5,130   | 5,087   | 4,290   | 4,181   |
| Goodwill   | 4,461                   | 4,518   | 4,486   | 2,637   | 2,644   |
| Other intangibles  | 2,469                   | 2,650   | 2,905   | 1,781   | 1,870   |
| Total assets   | 15,457                  | 15,580  | 16,072  | 11,845  | 11,710  |
| Current liabilities  | 1,795                   | 2,056   | 2,022   | 1,470   | 1,364   |
| Long-term borrowings   | 6,311                   | 6,577   | 7,248   | 4,254   | 4,779   |
| Total liabilities  | 10,849                  | 11,559  | 12,482  | 7,970   | 8,682   |
| Total Eastman stockholders' equity   | 4,532                   | 3,941   | 3,510   | 3,796   | 2,943   |
| Dividends declared per share   | 1.89                    | 1.66    | 1.45    | 1.25    | 1.08    |

On December 5, 2014, Eastman completed its acquisition of Taminco Corporation ("Taminco"), a global specialty chemical company. The fair value of total consideration transferred was \$2.8 billion, consisting of cash of \$1.7 billion, net of cash acquired, and repayment of Taminco's debt of \$1.1 billion. The acquisition was accounted for as a business combination. Taminco's former specialty amines and crop protection businesses are managed and reported as part of the Additives & Functional Products ("AFP") segment and its former functional amines business are managed and reported as part of the Chemical Intermediates segment.

On December 11, 2014, the Company acquired Commonwealth Laminating & Coating, Inc. ("Commonwealth") for a total purchase price of \$438 million including the repayment of debt. The acquisition was accounted for as a business combination and the acquired Commonwealth business is managed and reported in the Advanced Materials segment.



On June 2, 2014, the Company acquired BP plc's global aviation turbine engine oil business ("aviation turbine oil business") for a total cash purchase price of \$283 million. The acquisition was accounted for as a business combination and the acquired aviation turbine oil business is managed and reported in the AFP segment.

On August 6, 2014, the Company acquired Knowlton Technologies, LLC ("Knowlton"), for a total cash purchase price of \$42 million. The acquisition was accounted for as a business combination. The acquired Knowlton business is a developing business of the Eastman microfiber technology platform, the financial results of which are not identifiable to an operating segment and are included in "Other".

For additional information about the above acquired businesses, see Note 2, "Acquisitions", to the Company's consolidated financial statements in Part II, Item 8 of this Annual Report. As of the date of acquisition, results of the acquired businesses are included in Eastman results.

On July 2, 2012, the Company completed its acquisition of Solutia Inc. ("Solutia"), a global leader in performance materials and specialty chemicals. The fair value of total consideration transferred was \$4.8 billion, consisting of cash of \$2.6 billion, net of cash acquired; equity in the form of Eastman stock of approximately \$700 million; and Solutia's debt at fair value of \$1.5 billion.

## ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

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This Management's Discussion and Analysis of Financial Condition and Results of Operations ("MD&A") is based upon the consolidated financial statements of Eastman Chemical Company ("Eastman" or the "Company"), which have been prepared in accordance with accounting principles generally accepted ("GAAP") in the United States, and should be read in conjunction with the Company's consolidated financial statements and related notes included elsewhere in this 2016 Annual Report on Form 10-K (this "Annual Report"). All references to earnings per share ("EPS") contained in this report are to diluted earnings per share unless otherwise noted.

## MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

### CRITICAL ACCOUNTING ESTIMATES

In preparing the consolidated financial statements in conformity with GAAP, the Company's management must make decisions which impact the reported amounts and the related disclosures. Such decisions include the selection of the appropriate accounting principles to be applied and assumptions on which to base estimates and judgments that affect the reported amounts of assets, liabilities, sales revenue and expenses, and related disclosure of contingent assets and liabilities. On an ongoing basis, the Company evaluates its estimates, including those related to impairment of long-lived assets, environmental costs, pension and other postretirement benefits, litigation and contingent liabilities, and income taxes. The Company bases its estimates on historical experience and on various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions. The Company's management believes the critical accounting estimates described below are the most important to the fair presentation of the Company's financial condition and results. These estimates require management's most significant judgments in the preparation of the Company's consolidated financial statements.

#### Impairment of Long-Lived Assets

##### Definite-lived Assets

Properties and equipment and definite-lived intangible assets to be held and used by the Company are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. The review of these long-lived assets is performed at the asset group level, which is the lowest level for which identifiable cash flows are largely independent of the cash flows of other assets and liabilities. If the carrying amount is not considered to be recoverable, an analysis of fair value is triggered. An impairment is recognized for the excess of the carrying amount of the asset over the fair value. Fair value is either salvage value determined through market analysis or alternative future use. The Company's assumptions related to long-lived assets are subject to change and impairments may be required in the future. If estimates of fair value less costs to sell are revised, the carrying amount of the related asset is adjusted, resulting in a charge to earnings.

##### Goodwill

The Company conducts testing of goodwill annually in the fourth quarter or more frequently when events and circumstances indicate an impairment may have occurred. The testing of goodwill is performed at the reporting unit level which the Company has determined to be its components. Components are defined as an operating segment or one level below an operating segment, and in order to be a reporting unit, the component must 1) be a business as defined by applicable accounting standards (an integrated set of activities and assets that is capable of being conducted and managed for the purpose of providing a return in the form of dividends, lower costs, or other economic benefits directly to the investors or other owners, members, or participants); 2) have discrete financial information available; and 3) be reviewed regularly by Company operating segment management. The Company aggregates certain components into reporting units based on economic similarities.

The Company uses an income approach and applies a fair value methodology based on discounted cash flows in testing the carrying value of goodwill for each reporting unit. Key assumptions and estimates used in the Company's 2016 goodwill impairment testing included projections of revenues, expenses, and cash flows determined using the Company's annual multi-year strategic plan and a market participant tax rate. The most critical assumptions are the estimated discount rate and a projected long-term growth rate. The Company believes these assumptions are consistent with those of a hypothetical market participant would use given circumstances that were present at the time

the estimates were made. However, actual results and amounts may be significantly different from the Company's estimates. In addition, the use of different estimates or assumptions could result in materially different determinations. In order to determine the discount rate, the Company uses a market perspective weighted average cost of capital ("WACC") approach. The WACC is calculated incorporating weighted average returns on debt and equity from market participants. Therefore, changes in the market, which are beyond the control of the Company, may have an impact on future calculations of estimated fair value.

If the estimated fair value of a reporting unit is determined to be less than the carrying value of the net assets of the reporting unit including goodwill, additional steps, including a valuation of the estimated fair value to the assets and liabilities of the reporting unit, would be necessary to determine the amount, if any, of goodwill impairment.

## MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

As a result of the tests performed during fourth quarter 2016, there were no impairments of the Company's goodwill. Fair values substantially exceeded the carrying values for each reporting unit tested, except for the specialty fluids reporting unit and the crop protection reporting unit (both a part of the Additives & Functional Products operating segment as described in Part I, Item 1, "Business", of this Annual Report).

As of December 31, 2016, goodwill of \$541 million is allocated to the specialty fluids reporting unit. As of fourth quarter testing, specialty fluids had an estimated fair value that exceeded the carrying value including goodwill by 32 percent. Cash flows from the specialty fluids reporting unit are susceptible to changes in demand due to cyclicity and timing of customer project completions primarily in the industrial and solar markets. Two of the most critical assumptions used in the calculation of the fair value of the specialty fluids reporting unit are the target market long-term growth rate and the discount rate. The Company performed a sensitivity analysis of both of those assumptions. A one percent decrease in the target market long-term growth rate and a one percent increase in the discount rate would result in the fair value exceeding the carrying value by thirteen percent and nine percent, respectively. The business performance for 2016 was slightly below expectations for 2016 used in the previous impairment analysis. Although management believes its estimate of fair value is reasonable, if the specialty fluids reporting unit's financial performance falls below expectations or there are negative revisions to key assumptions, the Company may be required to recognize an impairment charge.

As of December 31, 2016, goodwill of \$272 million is allocated to the crop protection reporting unit. As of fourth quarter testing, crop protection had an estimated fair value that exceeded the carrying value including goodwill by 25 percent. The crop protection reporting unit is directly impacted by the agricultural market. Two of the most critical assumptions used in the calculation of the fair value of the crop protection reporting unit are the target market long-term growth rate and the discount rate. The Company performed a sensitivity analysis of both of those assumptions. A one percent decrease in the target market long-term growth rate and a one percent increase in the discount rate would result in the fair value exceeding the carrying value by five percent and two percent, respectively. The business performance for 2016 did not meet expectations for 2016 used in the previous impairment analysis. Although management believes its estimate of fair value is reasonable, if the crop protection reporting unit's financial performance falls below expectations or there are negative revisions to key assumptions, the Company may be required to recognize an impairment charge.

### Indefinite-lived Intangible Assets

The Company conducts testing of indefinite-lived intangible assets annually in the fourth quarter or more frequently when events and circumstances indicate an impairment may have occurred. The carrying value of an indefinite-lived intangible asset is considered to be impaired when the fair value, as established by appraisal or based on discounted future cash flows of certain related products, is less than the carrying value.

Indefinite-lived intangible assets, consisting of various tradenames, are tested for potential impairment by comparing the estimated fair value to the carrying amount. The Company uses an income approach, specifically the relief from royalty method, to test indefinite-lived intangible assets. The estimated fair value of tradenames is determined based on an assumed royalty rate savings, discounted by the calculated market participant WACC plus a risk premium.

The Company had \$529 million in indefinite-lived intangible assets at the time of impairment testing. There was no impairment of the Company's indefinite-lived intangible assets as a result of the tests performed during fourth quarter 2016.

The Company will continue to monitor both goodwill and indefinite-lived intangible assets for any indication of triggering events which might require additional testing before the next annual impairment test.





## MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

### Environmental Costs

The Company accrues environmental remediation costs when it is probable that the Company has incurred a liability at a contaminated site and the amount can be reasonably estimated. When a single amount cannot be reasonably estimated but the cost can be estimated within a range, the Company accrues the minimum undiscounted amount. This undiscounted accrued amount reflects liabilities expected to be paid within approximately 30 years and the Company's assumptions about remediation requirements at the contaminated site, the nature of the remedy, the outcome of discussions with regulatory agencies and other potentially responsible parties at multi-party sites, and the number and financial viability of other potentially responsible parties. Changes in the estimates on which the accruals are based, unanticipated government enforcement action, or changes in health, safety, environmental, and chemical control regulations and testing requirements could result in higher or lower costs. Estimated future environmental expenditures for undiscounted remediation costs ranged from the best estimate or minimum of \$295 million to the maximum of \$503 million and from the best estimate or minimum of \$308 million to the maximum of \$516 million at December 31, 2016 and December 31, 2015, respectively. The estimated future costs are considered to be reasonably possible and include the amounts accrued at both December 31, 2016 and December 31, 2015.

The Company also establishes reserves for closure and post-closure costs associated with the environmental and other assets it maintains. Environmental assets, as defined by GAAP, include but are not limited to waste management units, such as landfills, water treatment facilities, and surface impoundments. When these types of assets are constructed or installed, a loss contingency reserve is established for the anticipated future costs associated with the retirement or closure of the asset based on its expected life and the applicable regulatory closure requirements. The Company recognizes the asset retirement obligations in the period in which they are incurred if a reasonable estimate of fair value can be made. The asset retirement obligations are discounted to expected present value and subsequently adjusted for changes in fair value. These future estimated costs are charged to earnings over the estimated useful life of the assets. Currently, the Company's environmental assets are expected to reach the end of their useful lives at different times over the next 50 years. If the Company changes its estimate of the environmental asset retirement obligation costs or its estimate of the useful lives of these assets, expenses charged to earnings will be impacted. For sites that have environmental asset retirement obligations, the best estimate for these asset retirement obligation costs accrued to date over the sites' estimated useful lives was \$26 million and \$28 million at December 31, 2016 and December 31, 2015, respectively.

The Company monitors conditional obligations and recognizes loss contingencies associated with them when and to the extent that more detailed information becomes available concerning applicable retirement costs.

The Company's total amount reserved for environmental loss contingencies, including the remediation and closure and post-closure costs described above, was \$321 million and \$336 million at December 31, 2016 and December 31, 2015, respectively. This loss contingency reserve represents the best estimate or minimum for remediation costs (undiscounted) and the best estimate of the amount accrued to date over the regulated assets' estimated useful lives for asset retirement obligation costs (discounted).

### Pension and Other Postretirement Benefits

The Company maintains defined benefit pension plans that provide eligible employees with retirement benefits. Additionally, Eastman provides a subsidy for life insurance, health care, and dental benefits for eligible retirees hired prior to January 1, 2007, and a subsidy for health care and dental benefits for retirees' eligible survivors. The estimated amounts of the costs and obligations related to these benefits reflect the Company's assumptions related to general economic conditions (particularly interest rates) and expected return on plan assets. For valuing the obligations and assets of the Company's U.S. and non-U.S. defined benefit pension plans, the Company assumed weighted average

discount rates of 3.89 percent and 2.33 percent, respectively, and a weighted average expected return on plan assets of 7.49 percent and 5.02 percent, respectively at December 31, 2016. The Company assumed a weighted average discount rate of 3.91 percent for its other postretirement benefit plans and an expected return on plan assets of 3.75 percent for its voluntary employees' beneficiary association retiree trust at December 31, 2016. The estimated cost of providing plan benefits also depends on demographic assumptions including retirements, mortality, turnover, and plan participation.

The Company performed a five-year experience study of the assumptions for the U.S. plans in 2014 which included a review of the mortality tables. As a result of the experience study, the Company continues to use the RP-2000 table with scale AA static improvement scale and no collar adjustment.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF  
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The projected benefit obligation as of December 31, 2016 and 2017 expense are affected by year-end 2016 assumptions. The following table illustrates the sensitivity to changes in the Company's long-term assumptions in the expected return on plan assets and assumed discount rate for all pension and other postretirement benefit plans. The sensitivities below are specific to the time periods noted. They also may not be additive, so the impact of changing multiple factors simultaneously cannot be calculated by combining the individual sensitivities shown.

| Change in Assumption                                      | Impact on 2017 Pre-tax Benefits Expense (Excludes mark-to-market impact) for Pension Plans | Impact on December 31, 2016 Projected Benefit Obligation for Pension Plans |               | Impact on 2017 Pre-tax Benefits Expense (Excludes mark-to-market impact) for Other Postretirement Benefit Plans | Impact on December 31, 2016 Benefit Obligation for Other Postretirement Benefit Plans |
|---|--|--|---------------|---|---|
|   |  | U.S.   | Non-U.S.      |   |   |
| 25 basis point decrease in discount rate                  | -\$3 Million   | +\$50 Million  | +\$41 Million | -\$1 Million  | +\$17 Million   |
| 25 basis point increase in discount rate                  | +\$2 Million   | -\$48 Million  | -\$37 Million | +\$1 Million  | -\$17 Million   |
| 25 basis point decrease in expected return on plan assets | +\$7 Million   | No Impact  | No Impact     | <+\$0.5 Million   | No Impact   |
| 25 basis point increase in expected return on plan assets | -\$7 Million   | No Impact  | No Impact     | <-\$0.5 Million   | No Impact   |

The expected return on plan assets and assumed discount rate used to calculate the Company's pension and other postretirement benefit obligations are established each December 31. The expected return on plan assets is based upon prior performance and the long-term expected returns in the markets in which the trusts invest their funds, primarily in U.S. and non-U.S. fixed income, U.S. and non-U.S. public equity, private equity, and real estate. Moreover, the expected return on plan assets is a long-term assumption and on average is expected to approximate the actual return on plan assets. Actual returns will be subject to year-to-year variances and could vary materially from assumptions. The assumed discount rate is based upon a portfolio of high-grade corporate bonds, which are used to develop a yield curve. This yield curve is applied to the expected durations of the pension and other postretirement benefit obligations. Because future health care benefits under the U.S. benefit plan have been fixed at a certain contribution amount, changes in the health care cost trend assumptions do not have a material impact on the results of operations.

In 2016, the Company changed the approach used to calculate service and interest cost components of net periodic benefit costs for its significant defined benefit pension and other postretirement benefit plans. The Company elected to calculate service and interest costs by applying the specific spot rates along the yield curve to the plans' projected cash flows. The change does not affect the measurement of the total benefit obligation or the annual net periodic benefit cost or credit of the plans because the change in the service and interest costs will be offset in the mark-to-market ("MTM") actuarial gain or loss which, as described in the next paragraph, typically is recognized in the fourth quarter of each year or in any other quarters in which an interim remeasurement is triggered. For additional information, see

Note 11, "Retirement Plans" to the Company's consolidated financial statements in Part II, Item 8 of this Annual Report.

## MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The Company uses fair value accounting for plan assets. If actual experience differs from long-term assumptions for asset returns and actuarial assumptions (primarily discount rates) which were used in determining the current year expense, the difference is recognized immediately as part of the MTM net gain or loss in fourth quarter each year, and any other quarter in which an interim remeasurement is triggered. The MTM net loss applied to earnings from continuing operations in 2016, 2015, and 2014 due to the actual experience versus assumptions of returns on plan assets and actuarial assumptions (primarily discount rates) for the defined benefit pension and other postretirement benefit plans were a net loss of \$97 million, net loss of \$115 million, and net loss of \$304 million, respectively. The 2016 MTM net loss included an actuarial loss of approximately \$170 million, resulting primarily from the Company's December 31, 2016 weighted-average assumed discount rate of 3.55 percent, down from the prior year, and changes in other actuarial assumptions. Overall asset values increased approximately \$75 million due to asset values appreciating in excess of the assumed weighted-average rate of return. The actual return was approximately \$250 million, or an approximately 9 percent gain, which was above the expected return of approximately \$175 million, or approximately 7 percent.

While changes in obligations do not correspond directly to cash funding requirements, it is an indication of the amount the Company will be required to contribute to the plans in future years. The amount and timing of such cash contributions is dependent upon interest rates, actual returns on plan assets, retirement, attrition rates of employees, and other factors. For further information regarding pension and other postretirement benefit obligations, see Note 11, "Retirement Plans", to the Company's consolidated financial statements in Part II, Item 8 of this Annual Report.

### Litigation and Contingent Liabilities

From time to time, the Company and its operations are parties to or targets of lawsuits, claims, investigations and proceedings, including product liability, personal injury, asbestos, patent and intellectual property, commercial, contract, environmental, antitrust, health and safety, and employment matters, which are handled and defended in the ordinary course of business. The Company accrues a contingent loss liability for such matters when it is probable that a liability has been incurred and the amount can be reasonably estimated. When a single amount cannot be reasonably estimated but the cost can be estimated within a range, the Company accrues the minimum amount. The Company expenses legal costs, including those expected to be incurred in connection with a loss contingency, as incurred. Based upon facts and information currently available, the Company believes the amounts reserved are adequate for such pending matters; however, results of operations could be adversely affected by monetary damages, costs or expenses, and charges against earnings in particular periods.

### Income Taxes

Amounts of deferred tax assets and liabilities on the Company's balance sheet are based on temporary differences between the financial reporting and tax bases of assets and liabilities, applying enacted tax rates expected to be in effect for the year in which the differences are expected to reverse. The ability to realize deferred tax assets is evaluated through the forecasting of taxable income, and domestic and foreign taxes, using historical and projected future operating results, the reversal of existing temporary differences, and the availability of tax planning strategies. Valuation allowances are recognized to reduce deferred tax assets when it is more likely than not that a tax benefit will not be realized. In the event that the actual outcome of future tax consequences differs from management estimates and assumptions, the resulting change to the provision for income taxes could have a material adverse impact on the consolidated results of operations and statement of financial position. As of December 31, 2016 and 2015, valuation allowances of \$278 million and \$254 million, respectively, have been provided against the deferred tax assets. The Company recognizes income tax positions that are more likely than not to be realized and accrues interest related to unrecognized income tax positions, which is included as a component of the income tax provision on the balance sheet.

A provision for U.S. income taxes has not been recognized for undistributed profits of our non-U.S. subsidiaries that we have determined to be indefinitely reinvested outside the U.S. If management intentions or U.S. tax law changes in the future, there may be a significant negative impact on the provision for income taxes to recognize an incremental tax liability in the period the change occurs.

## MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

### NON-GAAP FINANCIAL MEASURES

Non-GAAP financial measures, and the accompanying reconciliations of the non-GAAP financial measures to the most comparable GAAP measures, are presented in "2016 Overview", "Results of Operations", "Summary by Operating Segment", and "Outlook" in this MD&A.

#### Company Use of Non-GAAP Financial Measures

In addition to evaluating the Company's financial condition, results of operations, liquidity, and cash flows as reported in accordance with GAAP, Eastman management also evaluates Company and operating segment performance, and makes resource allocation and performance evaluation decisions, excluding the effect of transactions, costs, and losses or gains that do not directly arise from Eastman's normal, or "core", business and operations, or are otherwise of an unusual or non-recurring nature. These transactions, costs, and losses or gains relate to, among other things, cost reductions, growth and profitability improvement initiatives, and other events outside of core business operations (such as asset impairments and restructuring charges and gains, costs of and related to acquisitions, gains and losses from and costs related to dispositions of businesses, financing transaction costs, and MTM losses or gains for pension and other postretirement benefit plans). Because non-core, unusual, or non-recurring transactions, costs, and losses or gains may materially affect the Company's, or any particular operating segment's, financial condition or results in a specific period in which they are recognized, Eastman believes it is appropriate to evaluate both the financial measures prepared and calculated in accordance with GAAP and the related non-GAAP financial measures excluding the effect on our results of these non-core, unusual, or non-recurring items. In addition to using such measures to evaluate results in a specific period, management evaluates such non-GAAP measures, and believes that investors may also evaluate such measures, because such measures may provide more complete and consistent comparisons of the Company's, and its segments', operational performance on a period-over-period historical basis and, as a result, provide a better indication of expected future trends. Management discloses these non-GAAP measures, and the related reconciliations to the most comparable GAAP financial measures, because it believes investors use these metrics in evaluating longer term period-over-period performance, and to allow investors to better understand and evaluate the information used by management to assess the Company's, and its operating segments', performance, make resource allocation decisions and evaluate organizational and individual performance in determining certain performance-based compensation. Non-GAAP measures do not have definitions under GAAP, and may be defined differently by, and not be comparable to, similarly titled measures used by other companies. As a result, management cautions investors not to place undue reliance on any non-GAAP measure, but to consider such measures with the most directly comparable GAAP measure.

#### Non-GAAP Measures in this Annual Report

The following non-core items are excluded by management in its evaluation of certain results in this Annual Report:

- MTM pension and other postretirement benefit plans loss, net, which are actuarial gains and losses resulting from the changes in discount rates and other actuarial assumptions and the difference between actual and expected returns on plan assets during the period;
- Asset impairments and restructuring charges, net, of which asset impairments are non-cash transactions impacting profitability;
- Acquisition integration, transaction, and financing costs;
- Costs resulting from the sale of acquired inventories at fair value, net of the last-in, first-out ("LIFO") impact for certain of these inventories (as required by acquisition accounting, these inventories were marked to fair value);
- Early debt extinguishment and other related costs resulting from the repayment of borrowings;
-

Cost of disposition of claims against operations that were discontinued by Solutia prior to the Company's 2012 acquisition of Solutia; and

Gain from the sale of the Company's 50 percent interest in the Primester joint venture.



MANAGEMENT'S DISCUSSION AND ANALYSIS OF  
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## Non-GAAP Financial Measures -- Excluded Non-Core Items

| (Dollars in millions)   | 2016  | 2015  | 2014  |
|---|-------|-------|-------|
| Non-core items impacting operating earnings:                          |       |       |       |
| Mark-to-market pension and other postretirement benefits loss, net    | \$97  | \$115 | \$304 |
| Asset impairments and restructuring charges, net                      | 45    | 183   | 77    |
| Acquisition integration and transaction costs                         | 9     | 28    | 46    |
| Additional costs of acquired inventories                              | —     | 7     | 24    |
| Non-core items impacting earnings before income taxes:                |       |       |       |
| Early debt extinguishment and other related costs                     | 85    | —     | —     |
| Cost of disposition of claims against discontinued Solutia operations | 5     | —     | —     |
| Gain from sale of equity investment in Primester joint venture        | (17 ) | —     | —     |
| Taminco acquisition financing costs                                   | —     | —     | 13    |

The non-core item "mark-to-market pension and other postretirement benefits loss, net" does not include a \$44 million credit, \$4 million credit, and \$22 million cost for defined benefit pension and other postretirement benefit plans credits or costs for the years ended December 31, 2016, 2015, and 2014, respectively. The calculated MTM gains and losses included expected amounts of and percentage returns on assets of approximately \$175 million (7 percent), \$190 million (7 percent), and \$185 million (7 percent) for the years ended December 31, 2016, 2015, and 2014, respectively, compared with actual amounts of and percentage returns on plan assets of approximately \$250 million (9 percent), \$15 million loss (-1 percent), and \$255 million (9 percent) for the years ended December 31, 2016, 2015, and 2014, respectively. For more detail about MTM pension and other postretirement benefit plans net gains and losses, including actual and expected return on plan assets and the components of the net gain or loss, see "Critical Accounting Estimates - Pension and Other Postretirement Benefits" above and Note 11, "Retirement Plans", "Summary of Changes" - Actuarial (gain) loss, Curtailment gain, Actual return on plan assets, and Reserve for third party contributions and "Summary of Benefit Costs and Other Amounts Recognized in Other Comprehensive Income" - Curtailment gain and Mark-to-market pension and other postretirement benefits (gain) loss, net to the Company's consolidated financial statements in Part II, Item 8 of this Annual Report.

As described under "Critical Accounting Estimates - Pension and Other Postretirement Benefits" above, in 2016, the Company elected to change its method of calculating service and interest costs components of net periodic benefit costs for pension and other postretirement benefit plans. The change in the approach for full-year 2016 pre-tax expense was an increase to service cost of approximately \$2 million and a reduction in interest cost of approximately \$22 million compared to the previous method. The net benefit from the change in approach of approximately \$20 million is included in the \$44 million credit for 2016 described in the paragraph above and was offset by a portion of the \$97 million MTM net loss as part of the annual remeasurement of the plans in 2016. For additional information, see Note 11, "Retirement Plans" to the Company's consolidated financial statements in Part II, Item 8 of this Annual Report.

This MD&A includes the effect of the foregoing on the following financial measures:

Net earnings attributable to Eastman,  
Gross profit,  
Selling, general, and administrative ("SG&A") expenses,  
Research and development ("R&D") expenses,  
Operating earnings,  
Net interest expense,  
Other (income) charges, net,  
Earnings from continuing operations, and

- Diluted earnings per share.

## MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

### Other Non-GAAP Financial Measures

#### Alternative Non-GAAP Cash Flow Measures

In addition to the non-GAAP measures presented in this Annual Report and other periodic reports, from time to time management evaluates and discloses to investors and securities analysts the non-GAAP measure cash provided by operating activities excluding certain non-core, unusual, or non-recurring items ("cash provided by operating activities, as adjusted") when analyzing, among other things, business performance, liquidity and financial position, and performance-based compensation. Management uses this non-GAAP measure in conjunction with the GAAP measure cash provided by operating activities because it believes it is a more appropriate metric to evaluate the cash flows from Eastman's core operations that are available for organic and inorganic growth initiatives and because it allows for a more consistent period-over-period presentation of such amounts. In its evaluation, management generally excludes the impact of certain non-core activities and decisions of management because such activities and decisions are not considered core, ongoing components of operations and the decisions to undertake or not to undertake such activities may be made irrespective of the cash generated from operations. From time to time, management discloses this non-GAAP measure and the related reconciliation to investors and securities analysts to allow them to better understand and evaluate the information used by management in its decision making processes and because management believes investors and securities analysts use similar measures to assess Company performance, liquidity, and financial position over multiple periods and to compare these with other companies.

Similarly, from time to time, Eastman may disclose to investors and securities analysts an alternative non-GAAP measure of "free cash flow", which management defines as cash provided by operating activities, as adjusted, described above, less the amount of capital expenditures. Management believes such items are generally funded from available cash and, as such, should be considered in determining free cash flow. Management believes this is an appropriate metric to assess the Company's ability to fund priorities for uses of cash. The priorities for cash after funding operations include payment of quarterly dividends, additional repayment of debt, inorganic growth opportunities, and from time to time repurchasing shares. Management believes this metric is useful to investors and securities analysts in order to provide them with information similar to that used by management in evaluating financial performance and potential future cash available for various initiatives and assessing organizational performance in determining certain performance-based compensation and because management believes investors and securities analysts often use a similar measure of free cash flow to compare the results, and value, of comparable companies. In addition, Eastman may disclose to investors and securities analysts an alternative non-GAAP measure of "free cash flow yield", which management defines as annual free cash flow divided by the Company's market capitalization. Management believes this metric is useful to investors and securities analysts in comparing cash flow generation with that of peer and other companies.

#### Alternative Non-GAAP Earnings Measures

From time to time, Eastman may also disclose to investors and securities analysts the non-GAAP earnings measures "Adjusted EBITDA", "EBITDA Margin", and "Return on Invested Capital" (or "ROIC"). Management defines Adjusted EBITDA as EBITDA (net earnings or net earnings per share before interest, taxes, depreciation and amortization) adjusted to exclude the same non-core, unusual, and non-recurring items as are excluded from the Company's other non-GAAP earnings measures for the same periods. EBITDA Margin is Adjusted EBITDA divided by the GAAP measure sales revenue in the Company's income statement for the same periods. Management defines ROIC as net income plus interest expense after tax divided by average total borrowings plus average stockholders' equity for the periods presented, each derived from the GAAP measures in the Company's financial statements for the periods presented. Management believes that Adjusted EBITDA, EBITDA Margin, and ROIC are useful as

supplemental measures in evaluating the performance of and returns from Eastman's operating businesses, and from time to time uses such measures in internal performance calculations. Further, management understands that investors and securities analysts often use similar measures of Adjusted EBITDA, EBITDA Margin, and ROIC to compare the results, returns, and value of the Company with those of other companies.

## MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

### 2016 OVERVIEW

The Company's products and operations are managed and reported in four operating segments: Additives & Functional Products ("AFP"), Advanced Materials ("AM"), Chemical Intermediates ("CI"), and Fibers. Eastman is focused on consistent earnings growth through a market-driven approach that takes advantage of the Company's existing technology platforms, global market and manufacturing presence, and leading positions in key end markets such as transportation, building and construction, and consumables. Management believes that the Company's end-market diversity is a source of strength, and that many of the markets into which the Company's products are sold are benefiting from longer-term global trends such as energy efficiency, a rising middle class in emerging economies, and an increased focus on health and wellness. Management believes that these trends, combined with the diversity of the Company's end markets, facilitate more consistent demand for the Company's products over time.

The Company generated sales revenue of \$9.0 billion and \$9.6 billion for 2016 and 2015, respectively. The sales revenue decrease of \$640 million in 2016 is primarily due to lower selling prices in all operating segments and lower Fibers segment sales volume more than offsetting higher sales volume in the other operating segments.

Operating earnings were \$1.4 billion both in 2016 and 2015. Excluding the non-core items referenced in "Non-GAAP Financial Measures", adjusted operating earnings were \$1.5 billion in 2016 and \$1.7 billion in 2015. Adjusted operating earnings decreased in 2016 due to increased AM segment earnings more than offset by lower earnings in the other operating segments. Operating earnings were positively impacted by cost reduction actions of approximately \$100 million taken throughout 2016.

Net earnings and EPS attributable to Eastman and adjusted net earnings and EPS attributable to Eastman were as follows:

|   | 2016    |        | 2015    |        |
|---|---------|--------|---------|--------|
| (Dollars in millions, except diluted EPS)       | \$      | EPS    | \$      | EPS    |
| Net earnings attributable to Eastman            | \$854   | \$5.75 | \$848   | \$5.66 |
| Total non-core items, net of tax <sup>(1)</sup> | 149     | 1.01   | 243     | 1.62   |
| Net earnings excluding non-core items           | \$1,003 | \$6.76 | \$1,091 | \$7.28 |

(1) See "Results of Operations - Earnings from Continuing Operations and Diluted Earnings per Share" for the tax effected amount of each non-core item.

The Company generated \$1.4 billion of cash from operating activities in 2016, compared to \$1.6 billion of cash generated from operating activities during 2015. The decrease in cash from operating activities was primarily due to lower net earnings excluding non-core items in 2016 compared with 2015 and management's decision to contribute an additional \$150 million to the Company's U.S. defined pension plans in fourth quarter 2016 rather than in future years.

### RESULTS OF OPERATIONS

The Company's results of operations as presented in the Company's consolidated financial statements in Part II, Item 8 of this Annual Report are summarized and analyzed below. During 2014, the Company completed four acquisitions as described in Part I, Item 1, "Business - Corporate Overview" of this Annual Report, which are referred to as the "acquired businesses". The inclusion of results of operations of each acquired business in Eastman's consolidated results of operations from the date of acquisitions may limit comparability in certain instances to prior period results.

#### Sales

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|                             | 2016 Compared to |         |        | 2015 Compared to |         |        |
|-----------------------------|------------------|---------|--------|------------------|---------|--------|
|                             | 2015             |         |        | 2014             |         |        |
| (Dollars in millions)       | 2016             | 2015    | Change | 2015             | 2014    | Change |
| Sales                       | \$9,008          | \$9,648 | (7 )%  | \$9,648          | \$9,527 | 1 %    |
| Acquired business effect    |                  |         | — %    |                  |         | 13 %   |
| Volume / product mix effect |                  |         | 1 %    |                  |         | (2 )%  |
| Price effect                |                  |         | (7 )%  |                  |         | (8 )%  |
| Exchange rate effect        |                  |         | (1 )%  |                  |         | (2 )%  |

MANAGEMENT'S DISCUSSION AND ANALYSIS OF  
FINANCIAL CONDITION AND RESULTS OF OPERATIONS

## 2016 Compared to 2015

Sales revenue decreased \$640 million in 2016 compared to 2015, primarily due to lower selling prices in all operating segments and lower Fibers segment sales volume more than offsetting higher sales volume in the other operating segments.

## 2015 Compared to 2014

Sales revenue increased \$121 million in 2015 compared to 2014, primarily due to sales volume from acquired businesses partially offset by lower selling prices, particularly in the CI segment, primarily attributed to lower raw material prices.

## Gross Profit

|   | 2016 Compared to<br>2015 |         |        | 2015 Compared to<br>2014 |         |        |
|---|--------------------------|---------|--------|--------------------------|---------|--------|
| (Dollars in millions)   | 2016                     | 2015    | Change | 2015                     | 2014    | Change |
| Gross Profit  | \$2,350                  | \$2,580 | (9 )%  | \$2,580                  | \$2,221 | 16 %   |
| Mark-to-market pension and other postretirement benefit loss, net | 78                       | 84      |        | 84                       | 240     |        |
| Additional costs of acquired inventories                          | —                        | 7       |        | 7                        | 24      |        |
| Gross Profit excluding non-core items                             | \$2,428                  | \$2,671 | (9 )%  | \$2,671                  | \$2,485 | 7 %    |

## 2016 Compared to 2015

Gross profit in 2016 decreased compared with 2015. Gross profit included a \$78 million and \$84 million MTM pension and other postretirement benefit loss, net in 2016 and 2015, respectively. Gross profit in 2015 was negatively impacted \$7 million in the AM segment by the sale of Commonwealth inventories, which were marked to fair value in the acquisition. Excluding these non-core items, gross profit decreased in 2016 compared with 2015 primarily due to CI and Fibers segment results. Gross profit in 2016 includes the benefit of lower labor and manufacturing costs from corporate cost reduction actions taken throughout 2016.

## 2015 Compared to 2014

Gross profit increased \$359 million in 2015 compared with 2014, primarily due to a \$156 million reduction in the MTM pension and other postretirement benefit loss, net in 2015 compared to 2014. Excluding non-core items, gross profit increased primarily due to lower raw material and energy costs exceeding lower selling prices by \$255 million and gross profit from acquired businesses. Gross profit was negatively impacted \$201 million by commodity hedges, particularly for propane, lower sales volume of \$92 million as lower Fibers segment sales volume was partially offset by higher AM segment sales volume and improved product mix, and an unfavorable shift in foreign currency exchange rates of \$66 million.

## Selling, General and Administrative Expenses

|  | 2016 Compared to<br>2015 |       |        | 2015 Compared to<br>2014 |       |        |
|--|--------------------------|-------|--------|--------------------------|-------|--------|
| (Dollars in millions)  | 2016                     | 2015  | Change | 2015                     | 2014  | Change |
| Selling, General & Administrative Expenses                             | \$703                    | \$771 | (9 )%  | \$771                    | \$755 | 2 %    |
| Mark-to-market pension and other postretirement benefit loss, net      | (14 )                    | (18 ) |        | (18 )                    | (57 ) |        |
| Acquisition integration and transaction costs                          | (9 )                     | (28 ) |        | (28 )                    | (46 ) |        |
| Selling, General, and Administrative Expenses excluding non-core items | \$680                    | \$725 | (6 )%  | \$725                    | \$652 | 11 %   |





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## 2016 Compared to 2015

SG&A expenses in 2016 were lower compared to 2015. SG&A expenses included a \$14 million and \$18 million MTM pension and other postretirement benefit loss, net in 2016 and 2015, respectively. Included in 2016 SG&A expenses are transaction costs for final resolution of the 2011 Sterling Chemicals, Inc. acquisition purchase price and integration costs for the Commonwealth business acquired in December 2014. Included in 2015 SG&A expenses are integration and transaction costs associated with the Taminco and Commonwealth acquisitions. Excluding these non-core items, SG&A expenses decreased in 2016 compared with 2015 primarily due to lower costs resulting from corporate cost reduction actions taken throughout 2016.

## 2015 Compared to 2014

SG&A expenses in 2015 were slightly higher compared to 2014. SG&A expenses included an \$18 million and \$57 million MTM pension and other postretirement benefit loss, net in 2015 and 2014, respectively. Excluding non-core items, SG&A expenses were higher primarily due to the additional SG&A expenses of the acquired businesses and higher variable compensation expense, partially offset by the decrease in expense due to foreign currency exchange rates.

## Research and Development Expenses

|   | 2016 Compared to<br>2015 |       |        | 2015 Compared to<br>2014 |       |        |
|---|--------------------------|-------|--------|--------------------------|-------|--------|
| (Dollars in millions)   | 2016                     | 2015  | Change | 2015                     | 2014  | Change |
| Research & Development Expenses                                   | \$219                    | \$242 | (10 )% | \$242                    | \$227 | 7 %    |
| Mark-to-market pension and other postretirement benefit loss, net | (5 )                     | (13 ) |        | (13 )                    | (7 )  |        |
| Research & Development Expenses excluding non-core item           | \$214                    | \$229 | (7 )%  | \$229                    | \$220 | 4 %    |

## 2016 Compared to 2015

R&D expenses were lower for 2016 compared to 2015. R&D expenses included a \$5 million and \$13 million MTM pension and other postretirement benefit adjustment loss, net in 2016 and 2015, respectively. Excluding this non-core item, R&D expenses were lower for 2016 compared to 2015 primarily due to corporate cost reduction actions taken throughout 2016. The Company continues to focus R&D resources on new product introductions and increased growth related spending.

## 2015 Compared to 2014

R&D expenses were higher for 2015 compared to 2014. R&D expenses included a \$13 million and \$7 million MTM pension and other postretirement benefit adjustment loss in 2015 and 2014, respectively. Excluding this non-core item, R&D expenses were higher in 2015 compared to 2014 primarily due to the additional R&D expenses of the acquired businesses.

## Asset Impairments and Restructuring Charges, Net

|   | For years ended<br>December 31, |      |      |
|---|---------------------------------|------|------|
| (Dollars in millions)                     | 2016                            | 2015 | 2014 |
| Asset impairments                         | \$12                            | \$85 | \$28 |
| Gain on sale of assets, net               | (2 )                            | (1 ) | (7 ) |
| Intangible asset and goodwill impairments | —                               | 22   | 24   |

|  |      |       |      |
|--|------|-------|------|
| Severance charges                      | 32   | 68    | 13   |
| Site closure and restructuring charges | 3    | 9     | 19   |
| Total                                  | \$45 | \$183 | \$77 |

2016

In fourth quarter 2016 the Company impaired a capital project in the AFP segment that resulted in a charge of \$12 million.

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## MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

As part of the Company's previously announced plan to reduce costs, the Company recognized restructuring charges of \$34 million primarily for severance in 2016. Management anticipates total cost savings of approximately \$50 million to be recognized mostly in 2017 primarily in SG&A expenses and cost of sales.

In 2016, there was a gain of \$2 million in the AFP segment for the sale of previously impaired assets at the Crystex<sup>®</sup> insoluble sulfur R&D site in France.

### 2015

The Company took actions during fourth quarter 2015 to reduce non-operations workforce resulting in restructuring charges of \$51 million for severance. These actions were taken to offset the impacts of low oil prices, a strengthened U.S. dollar, and the continued weak worldwide economic and business conditions. Management expected total cost savings of approximately \$55 million, which were realized in 2016, primarily in SG&A expenses and cost of sales.

As a result of the annual impairment testing of indefinite-lived intangible assets in 2015, the Company recognized intangible asset impairments of \$18 million in the AM segment primarily to reduce the carrying value of the V-KOOL<sup>®</sup> window films products tradename to the estimated fair value. The estimated fair value was determined using an income approach, specifically, the relief from royalty method. The impairment resulted from a decrease in projected revenues since the tradename was acquired from Solutia in 2012. The decrease in projected revenues was primarily due to the Asian economic downturn impacting car sales growth in those geographic markets.

In 2015, net asset impairments and restructuring charges included \$81 million of asset impairments and \$17 million of restructuring charges, including severance, in the Fibers segment due to the closure of the Workington, UK acetate tow manufacturing site. Management expected annual cost savings in the Fibers segment of approximately \$20 million as a result of the closure which cost savings have been realized as of the end of 2016. Additionally, in 2015, management decided not to continue a growth initiative that was reported in "Other". This resulted in the Company recognizing asset impairments of \$8 million and restructuring charges of \$3 million.

Additionally, during 2015, net asset impairments and restructuring charges included \$4 million of restructuring charges primarily for severance associated with the integration of Taminco.

### 2014

In 2014, asset impairments of \$18 million and restructuring charges, including severance, of \$24 million were recognized in the AFP segment for costs of the closure of a Crystex<sup>®</sup> insoluble sulfur R&D facility in France.

As a result of the annual impairment testing of indefinite-lived intangible assets in 2014, the Company recognized an intangible asset impairment of \$22 million in the AFP segment to adjust the carrying value of the Crystex<sup>®</sup> tradename to the estimated fair value. This impairment resulted from a decrease in projected revenue since the tradename was acquired as part of the Solutia acquisition. The estimated fair value was determined using an income approach, specifically the relief from royalty method.

In addition, during 2014, a change in estimate of certain costs for the 2012 termination of the operating agreement for the São Jose dos Campos, Brazil site resulted in a restructuring charge of \$5 million to previously recognized asset impairments and restructuring charges.

During 2014, the Company recognized gains from the sales of previously impaired assets at the former Photovoltaics production facility in Germany and a former polymers production facility in China of \$5 million and \$2 million,

respectively.

In 2014, charges in the AM segment included \$10 million of asset impairments, including intangible assets, and \$2 million of restructuring charges primarily due to the closure of a production facility in Taiwan for the Flexvue® product line. In addition, there were \$5 million of restructuring charges for severance associated with the integration of Solutia.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF  
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## Operating Earnings

|   | 2016 Compared to 2015 |         |        | 2015 Compared to 2014 |         |        |
|---|-----------------------|---------|--------|-----------------------|---------|--------|
| (Dollars in millions)   | 2016                  | 2015    | Change | 2015                  | 2014    | Change |
| Operating earnings  | \$1,383               | \$1,384 | — %    | \$1,384               | \$1,162 | 19 %   |
| Mark-to-market pension and other postretirement benefit loss, net | 97                    | 115     |        | 115                   | 304     |        |
| Asset impairments and restructuring charges, net                  | 45                    | 183     |        | 183                   | 77      |        |
| Acquisition integration and transaction costs                     | 9                     | 28      |        | 28                    | 46      |        |
| Additional costs of acquired inventories                          | —                     | 7       |        | 7                     | 24      |        |
| Operating earnings excluding non-core items                       | \$1,534               | \$1,717 | (11 )% | \$1,717               | \$1,613 | 6 %    |

## Net Interest Expense

|  | 2016 Compared to 2015 |       |        | 2015 Compared to 2014 |       |        |
|--|-----------------------|-------|--------|-----------------------|-------|--------|
| (Dollars in millions)                        | 2016                  | 2015  | Change | 2015                  | 2014  | Change |
| Gross interest costs                         | \$288                 | \$286 |        | \$286                 | \$210 |        |
| Less: Capitalized interest                   | 7                     | 7     |        | 7                     | 7     |        |
| Interest expense                             | 281                   | 279   | 1 %    | 279                   | 203   | 37 %   |
| Less: Interest income                        | 26                    | 16    |        | 16                    | 16    |        |
| Net interest expense                         | \$255                 | \$263 | (3 )%  | \$263                 | \$187 | 41 %   |
| Less: Taminco acquisition financing costs    | —                     | —     |        | —                     | 3     |        |
| Net interest expense excluding non-core item | \$255                 | \$263 | (3 )%  | \$263                 | \$184 | 43 %   |

Net interest expense decreased \$8 million in 2016 compared to 2015 as a result of the Company refinancing certain outstanding public debt with proceeds of the sale of new euro-denominated debt securities and term loan borrowings. These transactions will result in an estimated net reduction of interest expense of approximately \$20 million in 2017.

Net interest expense increased \$76 million in 2015 compared to 2014, primarily due to interest on the additional \$3 billion of debt incurred in fourth quarter 2014 to finance the Taminco acquisition.

## Early Debt Extinguishment and Other Related Costs

In November 2016, the Company sold additional euro-denominated 1.50% notes due May 2023 in the principal amount of €200 million (\$213 million) and euro-denominated 1.875% notes due November 2026 in the principal amount of €500 million (\$534 million). In December 2016, the Company borrowed \$300 million under a second five-year term loan agreement ("2021 Term Loan"). Proceeds from the notes and 2021 Term Loan borrowings were used for the early repayment of the 2.4% notes due June 2017 (\$500 million principal) and 6.30% notes due November 2018 (\$160 million principal) and partial redemptions of 4.5% notes due January 2021 (\$65 million principal), 3.6% notes due August 2022 (\$150 million principal), 7 1/4% debentures due January 2024 (\$47 million principal), 7 5/8% debentures due June 2024 (\$11 million principal), 3.8% notes due March 2025 (\$100 million principal), and 7.60% debentures due February 2027 (\$28 million principal). The early repayments resulted in a charge of \$76 million for early debt extinguishment costs and related derivatives and hedging items.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF  
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On May 26, 2016, the Company sold euro-denominated 1.50% notes due 2023 in the principal amount of €550 million (\$614 million). Proceeds from the sale of the notes, net of transaction costs, were used for the early repayment of \$500 million of 2.4% notes due June 2017 and repayment of other borrowings. The early repayment resulted in a charge of \$9 million for early debt extinguishment costs primarily attributable to the early redemption premium and related unamortized costs.

For additional information regarding the early debt extinguishment costs, see Note 9, "Borrowings", to the Company's consolidated financial statements in Part II, Item 8 of this Annual Report.

## Other (Income) Charges, Net

| (Dollars in millions)  | 2016    | 2015    | 2014     |
|--|---------|---------|----------|
| Foreign currency transaction losses (gains), net                               | \$ 27   | \$ 6    | \$ (7 )  |
| Financing costs related to the acquisition of Taminco                          | —       | —       | 10       |
| (Income) loss from equity investments and other investment (gains) losses, net | (15 )   | (15 )   | (13 )    |
| Gain from sale of equity investment in Primester joint venture                 | (17 )   | —       | —        |
| Other, net   | (1 )    | 1       | (5 )     |
| Other (income) charges, net  | \$ (6 ) | \$ (8 ) | \$ (15 ) |
| Financing costs related to the acquisition of Taminco                          | —       | —       | (10 )    |
| Cost of disposition of claims against discontinued Solutia operations          | (5 )    | —       | —        |
| Gain from sale of equity investment in Primester joint venture                 | 17      | —       | —        |
| Other (income) charges, net excluding non-core items                           | \$ 6    | \$ (8 ) | \$ (25 ) |

Included in other (income) charges, net are losses or gains on foreign exchange transactions, equity investments, business venture investments, and non-operating assets. Net losses from foreign exchange non-qualifying derivatives were partially offset by foreign currency transaction gains, net, which include the revaluation of foreign entity assets and liabilities, both items impacted primarily by the euro in 2016. See Note 10, "Derivative and Non-Derivative Financial Instruments", to the Company's consolidated financial statements in Part II, Item 8 of this Annual Report.

Included in 2016 other (income) charges, net is a gain of \$17 million from the sale of the Company's interest in the Primester joint venture equity investment. For additional information, see Note 6, "Equity Investments", to the Company's consolidated financial statements in Part II, Item 8 of this Annual Report. Also included in 2016 other charges (income), net is cost of disposition of claims against operations that were discontinued by Solutia prior to the Company's acquisition of Solutia in 2012.

#### Provision for Income Taxes from Continuing Operations

| (Dollars in millions)                                 | 2016 Compared to 2015 |       |        | 2015 Compared to 2014 |       |        |
|---|-----------------------|-------|--------|-----------------------|-------|--------|
|   | 2016                  | 2015  | Change | 2015                  | 2014  | Change |
| Provision for income taxes from continuing operations | \$190                 | \$275 | (31 )% | \$275                 | \$235 | 17 %   |
| Effective tax rate                                    | 18 %                  | 24 %  |        | 24 %                  | 24 %  |        |

The 2016 effective tax rate was lower than 2015 due to a benefit in the foreign rate variance as a result of higher earnings in foreign jurisdictions partially offset by a reduction in the U.S. federal tax manufacturing deduction due to a decrease in domestic taxable income. The 2016 effective tax rate includes a tax benefit of \$16 million related to foreign tax credits as a result of the amendment of prior year income tax returns, a \$16 million one-time benefit for the restoration of tax basis for which depreciation deductions were previously limited, and a \$9 million tax benefit primarily due to adjustments to the tax provision to reflect the finalization of 2014 foreign income tax returns.

## MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The effective tax rate was 24 percent for both 2015 and 2014. The 2015 effective tax rate reflected a benefit from both the U.S. federal tax manufacturing deduction due to an increase in domestic taxable income and increased U.S. federal tax credits, compared to 2014. This was offset by a reduction in the foreign rate variance as a result of an unfavorable shift in foreign income to higher tax jurisdictions and limited benefit from the asset impairment of the Workington, UK acetate tow manufacturing facility. Both years reflect a benefit from the extension of favorable U.S. federal tax provisions, which resulted in a net benefit of approximately \$15 million primarily related to R&D credits, and deferral of certain earnings of foreign subsidiaries from U.S. income taxes.

### Earnings from Continuing Operations and Diluted Earnings per Share

|  | 2016    |        | 2015    |        | 2014    |        |
|--|---------|--------|---------|--------|---------|--------|
| (Dollars in millions, except per share amounts)  | \$      | EPS    | \$      | EPS    | \$      | EPS    |
| Earnings from continuing operations, net of tax  | \$854   | \$5.75 | \$848   | \$5.66 | \$749   | \$4.95 |
| Mark-to-market pension and other postretirement benefit loss, net of tax <sup>(1)</sup>          | 68      | 0.46   | 70      | 0.47   | 202     | 1.34   |
| Asset impairments and restructuring charges, net of tax <sup>(1)</sup>                           | 28      | 0.19   | 151     | 1.00   | 63      | 0.42   |
| Acquisition transaction, integration, and financing costs, net of tax <sup>(2)</sup>             | 5       | 0.04   | 18      | 0.12   | 39      | 0.26   |
| Additional costs of acquired inventories, net of tax <sup>(2)</sup>                              | —       | —      | 4       | 0.03   | 15      | 0.10   |
| Early debt extinguishment and other related costs, net of tax <sup>(2)(3)</sup>                  | 56      | 0.37   | —       | —      | —       | —      |
| Cost of disposition of claims against discontinued Solutia operations, net of tax <sup>(2)</sup> | 3       | 0.02   | —       | —      | —       | —      |
| Gain from sale of equity investment in Primester joint venture, net of tax <sup>(2)</sup>        | (11)    | (0.07) | —       | —      | —       | —      |
| Earnings from continuing operations excluding non-core items, net of tax                         | \$1,003 | \$6.76 | \$1,091 | \$7.28 | \$1,068 | \$7.07 |

<sup>(1)</sup> Blended tax rates for the tax jurisdictions where the expenses are deductible were used.

<sup>(2)</sup> A U.S. corporate tax rate comprised of the U.S. federal rate plus a blended state rate was used.

<sup>(3)</sup> For more information, see Note 9, "Borrowings", to the Company's consolidated financial statements in Part II, Item 8 of this Annual Report.

### Net Earnings and Diluted Earnings per Share

|   | 2016  |        | 2015  |        | 2014  |        |
|---|-------|--------|-------|--------|-------|--------|
| (Dollars in millions, except per share amounts)   | \$    | EPS    | \$    | EPS    | \$    | EPS    |
| Earnings from continuing operations, net of tax   | \$854 | \$5.75 | \$848 | \$5.66 | \$749 | \$4.95 |
| Earnings from discontinued operations, net of tax | —     | —      | —     | —      | 2     | 0.02   |
| Net earnings                                      | \$854 | \$5.75 | \$848 | \$5.66 | \$751 | \$4.97 |

In 2014, the Company recognized \$2 million, net of tax, in earnings from discontinued operations from final settlement of commercial litigation related to the previously discontinued polyethylene terephthalate ("PET") business.

### SUMMARY BY OPERATING SEGMENT

The Company's products and operations are managed and reported in four operating segments: Additives & Functional Products ("AFP"), Advanced Materials ("AM"), Chemical Intermediates ("CI"), and Fibers. For additional financial and product information for each operating segment, see "Business - Business Segments" in Part I, Item 1 of this Annual Report and Note 20, "Segment Information", to the Company's consolidated financial statements in Part II, Item 8 of this Annual Report.





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## Additives &amp; Functional Products Segment

| (Dollars in millions)                            | 2016 Compared to 2015 |         |         |      | 2015 Compared to 2014 |         |        |       |
|--|-----------------------|---------|---------|------|-----------------------|---------|--------|-------|
|  | 2016                  | 2015    | Change  |      | 2015                  | 2014    | Change |       |
|  |                       |         | \$      | %    |                       |         | \$     | %     |
| Sales  | \$2,979               | \$3,159 | \$(180) | (6)% | \$3,159               | \$2,640 | \$519  | 20 %  |
| Acquired business effect                         |                       |         | —       | — %  |                       |         | 750    | 29 %  |
| Volume / product mix effect                      |                       |         | 46      | 1 %  |                       |         | (43 )  | (2 )% |
| Price effect                                     |                       |         | (214)   | (7)% |                       |         | (97 )  | (4 )% |
| Exchange rate effect                             |                       |         | (12 )   | — %  |                       |         | (91 )  | (3 )% |
| Operating earnings                               | 601                   | 660     | (59 )   | (9)% | 660                   | 462     | 198    | 43 %  |
| Asset impairments and restructuring charges, net | 10                    | —       | 10      | —    | 62                    | (62 )   |        |       |
| Additional costs of acquired inventories         | —                     | —       | —       | —    | 15                    | (15 )   |        |       |
| Operating earnings excluding non-core items      | 611                   | 660     | (49 )   | (7)% | 660                   | 539     | 121    | 22 %  |

## 2016 Compared to 2015

Sales revenue in 2016 decreased compared to 2015, due to lower selling prices primarily attributed to lower raw material prices and competitive pressure across the segment, particularly in Asia Pacific. The impact of lower selling prices was partially offset by higher sales volume across the segment.

Operating earnings in 2016 included \$10 million of asset impairment and restructuring charges, net including the impairment of a capital project resulting in a charge of \$12 million partially offset by a \$2 million gain for the sale of previously impaired assets at the Crystex® insoluble sulfur R&D site in France. Excluding these non-core items, operating earnings decreased in 2016 compared to 2015 primarily due to lower selling prices more than offsetting lower raw material and energy costs by \$74 million, partially offset by higher sales volumes of \$20 million.

## 2015 Compared to 2014

Sales revenue in 2015 increased compared to 2014, primarily due to sales of products of the acquired Taminco specialty amines and crop protection businesses and aviation turbine oil business. These revenues were partially offset by lower coatings and inks products selling prices, primarily attributed to lower raw material prices, and an unfavorable shift in foreign currency exchange rates.

Operating earnings in 2015 increased compared to 2014. Operating earnings in 2014 included \$62 million of asset impairments and restructuring charges, net, primarily \$42 million for the closure of a Crystex® insoluble sulfur R&D facility in France and a \$22 million intangible asset impairment of the Crystex® tradename. The impairment of the Crystex® tradename was a result of a decrease in projected revenue since the tradename was acquired. Operating earnings in 2014 included \$7 million of additional costs of the acquired Taminco specialty amines and crop protection business inventories and \$8 million of additional costs of the acquired aviation turbine oil business inventories.

Excluding non-core items, operating earnings increased in 2015 compared to 2014 primarily due to earnings of the acquired businesses, and lower raw material and energy costs exceeding lower selling prices. These items were partially offset by the negative impact of commodity hedges, primarily for propane and an unfavorable shift in foreign currency exchange rates.

## MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

### Growth Initiatives

In 2016, the Company continued expansion of the Crystex<sup>®</sup> insoluble sulfur rubber additives manufacturing facility in Kuantan, Malaysia, expected to be operational in second half 2017, and retrofitted part of an existing manufacturing facility in Nienburg, Germany. These actions are expected to allow the Company to capitalize on recent enhancements of technology for the manufacture of Crystex<sup>®</sup> insoluble sulfur by improving the Company's cost position and introducing new products for the tire markets.

An example of the Company's continuing innovation and market development efforts is the recently commercialized Eastman Tetrashield<sup>™</sup> performance polyester resins. These polyester resins provide a combination of improved performance and sustainability, particularly for the automotive coatings, industrial, and food packaging markets. Additional examples where the Company is pursuing innovation through other technologies include next generation Crystex<sup>®</sup> and resins and cellulose esters for tires.

The Company's global manufacturing presence is a key element of the AFP segment's growth strategy. For example, the segment expects to capitalize on industrial growth in Asia from its manufacturing capacity expansion in Kuantan, Malaysia and cellulose ester products sourced from our low cost cellulose and acetyl manufacturing stream in North America.

### Advanced Materials Segment

| (Dollars in millions)                            | 2016 Compared to 2015 |         |              |       | 2015 Compared to 2014 |         |              |       |
|--|-----------------------|---------|--------------|-------|-----------------------|---------|--------------|-------|
|  | 2016                  | 2015    | Change<br>\$ | %     | 2015                  | 2014    | Change<br>\$ | %     |
| Sales  | \$2,457               | \$2,414 | \$43         | 2 %   | \$2,414               | \$2,378 | \$36         | 2 %   |
| Acquired business effect                         |                       |         | —            | — %   |                       |         | 123          | 5 %   |
| Volume / product mix effect                      |                       |         | 119          | 5 %   |                       |         | 88           | 4 %   |
| Price effect                                     |                       |         | (67 )        | (3 )% |                       |         | (84 )        | (3 )% |
| Exchange rate effect                             |                       |         | (9 )         | — %   |                       |         | (91 )        | (4 )% |
| Operating earnings                               | 471                   | 384     | 87           | 23 %  | 384                   | 276     | 108          | 39 %  |
| Additional costs of acquired inventories         | —                     | 7       | (7 )         |       | 7                     | 1       | 6            |       |
| Asset impairments and restructuring charges, net | —                     | 18      | (18 )        |       | 18                    | 16      | 2            |       |
| Operating earnings excluding non-core items      | 471                   | 409     | 62           | 15 %  | 409                   | 293     | 116          | 40 %  |

### 2016 Compared to 2015

Sales revenue in 2016 increased compared to 2015 due to higher sales volume of premium products, including Eastman Tritan<sup>®</sup> copolyester, Saflex<sup>®</sup> acoustic interlayers, and automotive performance films, partially offset by lower selling prices, primarily for other copolyesters, primarily attributed to lower raw material prices.

Operating earnings in 2015 included \$18 million of indefinite-lived intangible asset impairments, primarily to reduce the carrying value of trade names in the window films market to their estimated current fair value. Operating earnings

in 2015 also included additional costs of acquired Commonwealth inventories of \$7 million.

Excluding these non-core items, operating earnings in 2016 increased compared to 2015 primarily due to the combined impact of higher sales volume and improved product mix of premium products and lower unit costs due to higher capacity utilization of \$71 million.

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2015 Compared to 2014

Sales revenue in 2015 increased compared to 2014, due to sales of products of the acquired Commonwealth performance films business and increased sales volume, partially offset by an unfavorable shift in foreign currency exchange rates and lower selling prices, primarily for copolyesters, primarily attributed to lower raw material prices.

Operating earnings in 2015 increased compared to 2014. Operating earnings in 2015 included \$18 million of indefinite-lived intangible asset impairments, primarily to reduce the carrying value of tradenames in the window films market to their estimated current fair value. Operating earnings in 2015 also included additional costs of acquired Commonwealth inventories of \$7 million. Included in 2014 operating earnings are asset impairments, including intangible assets, and restructuring charges of \$12 million primarily for the closure of a production facility in Taiwan for the Flexvue® product line and \$4 million of asset impairments related to a change in estimate of certain costs for the fourth quarter 2012 termination of the operating agreement for the São Jose dos Campos, Brazil site.

Excluding these non-core items, operating earnings in 2015 increased compared to 2014 due to lower raw material and energy costs exceeding lower selling prices by \$76 million and higher sales volume and improved product mix, especially relative increased sales of optical film solutions and premium interlayers products, of \$46 million. Operating earnings also benefited from earnings of the acquired business. These items were partially offset by the negative impact of commodity hedges of \$22 million and an unfavorable shift in foreign currency exchange rates of \$13 million.

Growth Initiatives

The acquisition of Commonwealth in December 2014 further expanded the AM segment's product portfolio and channel network in the diverse window film markets, enabled further manufacturing and distribution efficiencies, and added industry leading paint protection film technology to expand AM segment offerings in after-market automotive and protective film markets.

The Company is continuing an additional 60,000 metric ton expansion of Eastman Tritan® copolyester capacity at the Kingsport, Tennessee manufacturing facility expected to be operational in first half 2018 to meet expected future demand in the durable goods and health and wellness markets. Through recent debottlenecks and working capital management, management expects to have adequate Eastman Tritan® copolyester manufacturing capacity to meet demand growth in advance of the capacity expansion in 2018.

The Company continued construction of a manufacturing facility for polyvinyl butyral ("PVB") resin at the Kuantan, Malaysia site expected to be operational in second half 2017. This manufacturing capacity will support expected global growth in the transportation and building and construction markets and allow the Company to better serve customers in the Asia Pacific region.

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## Chemical Intermediates Segment

| (Dollars in millions)                       | 2016 Compared to 2015 |         |         |       | 2015 Compared to 2014 |         |         |       |
|---|-----------------------|---------|---------|-------|-----------------------|---------|---------|-------|
|   | 2016                  | 2015    | Change  |       | 2015                  | 2014    | Change  |       |
|   |                       |         | \$      | %     |                       |         | \$      | %     |
| Sales                                       | \$2,534               | \$2,811 | \$(277) | (10)% | \$2,811               | \$3,034 | \$(223) | (7)%  |
| Acquired business effect                    |                       |         | —       | —%    |                       |         | 373     | 12%   |
| Volume / product mix effect                 |                       |         | 48      | 2%    |                       |         | (47)    | (1)%  |
| Price effect                                |                       |         | (317)   | (11)% |                       |         | (527)   | (17)% |
| Exchange rate effect                        |                       |         | (8)     | (1)%  |                       |         | (22)    | (1)%  |
| Operating earnings                          | 171                   | 294     | (123)   | (42)% | 294                   | 352     | (58)    | (16)% |
| Additional costs of acquired inventories    | —                     | —       | —       |       | —                     | 8       | (8)     |       |
| Operating earnings excluding non-core items | 171                   | 294     | (123)   | (42)% | 294                   | 360     | (66)    | (18)% |

## 2016 Compared to 2015

Sales revenue in 2016 decreased compared to 2015, due to lower selling prices partially offset by higher sales volume of olefin-based and functional amines products. The lower selling prices were primarily attributed to the lower raw material prices and competitive pressures due to lower oil prices for most of the year.

Operating earnings decreased in 2016 compared to 2015 primarily due to lower selling prices more than offsetting lower raw material and energy costs by \$181 million, partially offset by the reduced impact of commodity hedge losses on raw material costs of \$28 million and higher sales volume of \$16 million.

## 2015 Compared to 2014

Sales revenue in 2015 decreased compared to 2014, primarily due to lower selling prices more than offsetting sales of products of the acquired Taminco functional amines business. The lower selling prices were primarily in response to lower raw material prices and competitive pressures resulting from weakened demand in Asia Pacific.

Operating earnings in 2014 included \$8 million of additional costs of the acquired Taminco functional amines product lines inventories. Excluding this non-core item, operating earnings decreased in 2015 compared to 2014, primarily due to the negative impact of commodity hedges, primarily for propane, partially offset by earnings from the acquired Taminco functional amines businesses and lower raw material and energy costs exceeding lower selling prices.

## Cost and Strategic Initiatives

In 2016, the Company announced that as part of its strategy to increase emphasis on specialty businesses and products it is pursuing strategic options to divest or otherwise monetize its excess ethylene capacity position and certain commodity olefin intermediates product lines. Eastman will retain its cost-advantaged integrated position to propylene which supports specialty derivatives throughout the Company. This process is expected to continue through first half 2017.

In 2012, the Company entered into an agreement with Enterprise Products Partners L.P. to purchase propylene from a planned propane dehydrogenation plant to further improve the Company's long-term competitive cost position. This plant is expected to be operational in 2017. Prior to completion of the plant, the Company continues to benefit from a propylene market contract with an advantaged cost position for purchased propylene.



MANAGEMENT'S DISCUSSION AND ANALYSIS OF  
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## Fibers Segment

| (Dollars in millions)                            | 2016 Compared to 2015 |         |         |       | 2015 Compared to 2014 |         |         |       |
|--|-----------------------|---------|---------|-------|-----------------------|---------|---------|-------|
|  |                       |         | Change  |       |                       |         | Change  |       |
|  | 2016                  | 2015    | \$      | %     | 2015                  | 2014    | \$      | %     |
| Sales  | \$992                 | \$1,219 | \$(227) | (19)% | \$1,219               | \$1,457 | \$(238) | (16)% |
| Volume / product mix effect                      |                       |         | (150)   | (13)% |                       |         | (219)   | (15)% |
| Price effect                                     |                       |         | (74 )   | (6 )% |                       |         | (10 )   | (1 )% |
| Exchange rate effect                             |                       |         | (3 )    | — %   |                       |         | (9 )    | — %   |
| Operating earnings                               | 310                   | 292     | 18      | 6 %   | 292                   | 474     | (182)   | (38)% |
| Asset impairments and restructuring charges, net | —                     | 98      | (98 )   |       | 98                    | —       | 98      |       |
| Operating earnings excluding non-core item       | 310                   | 390     | (80 )   | (21)% | 390                   | 474     | (84 )   | (18)% |

## 2016 Compared to 2015

Sales revenue in 2016 decreased compared to 2015, primarily due to lower sales volume and lower selling prices, particularly for acetate tow. Lower acetate tow sales volume was primarily due to reduced sales in China attributed to weaker demand and customer backward integration and inventory destocking. Lower acetate tow selling prices were primarily due to lower industry capacity utilization rates.

Excluding the non-core item, operating earnings in 2016 decreased compared to 2015 due primarily to approximately \$90 million of lower sales volume and lower selling prices exceeding lower raw material and energy costs, partially offset by lower operating costs resulting from changes in segment business operations and assets.

## 2015 Compared to 2014

Sales revenue in 2015 decreased compared to 2014, primarily due to lower acetate tow sales volume attributed to customer inventory destocking, especially in China, and lower acetyl chemicals sales volume due to decreased sales to the cellulose acetate flake joint venture in Kingsport, Tennessee.

Operating earnings in 2015 included asset impairments and restructuring charges, net of \$98 million for the closure of the Workington, UK acetate tow manufacturing site. Excluding this non-core item, operating earnings in 2015 decreased compared to 2014 primarily due to \$112 million of lower acetate tow and acetyl chemicals sales volume, partially offset by approximately \$10 million of cost savings resulting from closure of the Workington, UK acetate tow manufacturing facility in 2015.

## Cost Initiatives

As a result of challenging market conditions for acetate tow, the Company closed its Workington, UK acetate tow manufacturing facility in 2015. Management expected annual cost savings in the Fibers segment of approximately \$20 million as a result of the closure, which cost savings have been realized as of the end of 2016. Following an increase in flake capacity at the Kingsport, Tennessee site in 2015, the Fibers segment could supply all its acetate tow and yarn spinning capacity from this low cost flake asset. In order to fully utilize the increased capacity and reduce fixed costs, in June 2016, the Company sold its 50 percent interest in Primester, which manufactures cellulose acetate at the Company's Kingsport, Tennessee site.



MANAGEMENT'S DISCUSSION AND ANALYSIS OF  
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|   |        |        |        |
|---|--------|--------|--------|
| Other<br>(Dollars in millions)  | 2016   | 2015   | 2014   |
| Sales   | \$46   | \$45   | \$18   |
| Operating loss  |        |        |        |
| Growth initiatives and businesses not allocated to operating segments                       | \$(82) | \$(87) | \$(58) |
| Pension and other postretirement benefits expenses, net not allocated to operating segments | (44 )  | (76 )  | (293 ) |
| Restructuring and acquisition integration and transaction costs                             | (44 )  | (83 )  | (51 )  |
| Operating loss before non-core items  | (170)  | (246)  | (402)  |
| Mark-to-market pension and other postretirement benefit plans loss, net                     | 97     | 115    | 304    |
| Acquisition integration and transaction costs   | 9      | 28     | 46     |
| Asset impairments and restructuring charges, net  | 35     | 67     | (1 )   |
| Operating loss excluding non-core items   | \$(29) | \$(36) | \$(53) |

Sales revenue and costs related to growth initiatives, R&D costs, certain components of pension and other postretirement benefits, and other expenses and income not identifiable to an operating segment are not included in segment operating results for any of the periods presented and are included in "Other". Sales revenue in 2016 and 2015 is primarily sales from the microfiber technology platform. Sales revenue in 2015 increased compared to 2014, primarily due to sales of products of the acquired Knowlton business, part of the Eastman microfiber technology platform.

Included in 2016 operating losses are restructuring costs of \$34 million primarily for severance resulting from the Company's previously announced plan to reduce costs, primarily in 2017. Also included in 2016 operating losses were transaction costs for final resolution of the 2011 Sterling Chemicals, Inc. acquisition purchase price and integration costs for the Commonwealth business acquired in December 2014.

Included in 2015 operating losses are integration and transaction costs of \$28 million, primarily for the acquired Taminco and Commonwealth businesses. Included in 2015 operating losses are \$51 million of severance costs for a corporate reduction in force, \$11 million of asset impairments and restructuring charges resulting from management's decision not to continue a growth initiative, and \$4 million of severance associated with the integration of Taminco.

Included in 2014 operating losses were transaction costs of \$22 million for the acquisitions of Taminco, Commonwealth, the aviation turbine oil business, and Knowlton. Also included in 2014 operating losses were integration costs of \$24 million for the acquired Solutia, aviation turbine oil, Commonwealth, Knowlton, and Taminco businesses. Included in 2014 operating losses were \$4 million for severance related to the integration of Solutia. Included in 2014 was a \$5 million gain for sales of previously impaired assets at the former Photovoltaics production facility in Germany.

The Company continues to explore and invest in R&D initiatives that are aligned with macro trends in sustainability, consumerism, and energy efficiency such as high performance materials and advanced cellulose. An example of such an initiative is the Eastman microfiber technology platform which leverages the Company's core competency in polyesters, spinning capability, and in-house application expertise, for use in a wide range of applications including liquid and air filtration, high strength packaging in nonwovens, and performance apparel in textiles.

# MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

## SALES BY CUSTOMER LOCATION

| (Dollars in millions)           | Sales Revenue |         |         |      |         |         |        |      |
|---------------------------------|---------------|---------|---------|------|---------|---------|--------|------|
|                                 | 2016          | 2015    | Change  |      | 2015    | 2014    | Change |      |
|                                 |               |         | \$      | %    |         |         | \$     | %    |
| United States and Canada        | \$4,025       | \$4,350 | \$(325) | (7)% | \$4,350 | \$4,384 | \$(34) | (1)% |
| Asia Pacific                    | 2,163         | 2,333   | (170)   | (7)% | 2,333   | 2,540   | (207)  | (8)% |
| Europe, Middle East, and Africa | 2,305         | 2,422   | (117)   | (5)% | 2,422   | 2,091   | 331    | 16%  |
| Latin America                   | 515           | 543     | (28)    | (5)% | 543     | 512     | 31     | 6%   |
|                                 | \$9,008       | \$9,648 | \$(640) | (7)% | \$9,648 | \$9,527 | \$121  | 1%   |

### 2016 Compared to 2015

Sales revenue in United States and Canada decreased in 2016 compared to 2015, primarily due to lower selling prices in all operating segments, particularly in the CI and AFP segments.

Sales revenue in Asia Pacific decreased in 2016 compared to 2015, primarily due to lower selling prices in all operating segments and lower Fibers segment sales volume partially offset by higher sales volume in the other operating segments.

Sales revenue in Europe, Middle East, and Africa decreased in 2016 compared to 2015, primarily due to lower selling prices in all operating segments.

Sales revenue in Latin America decreased in 2016 compared to 2015, primarily due to lower selling prices in all operating segments, particularly in the CI and AFP segments, partially offset by higher CI, Fibers, and AFP segments sales volume.

### 2015 Compared to 2014

Sales revenue in United States and Canada decreased slightly in 2015 compared to 2014, primarily due to lower selling prices in all operating segments, particularly in the CI segment, mostly offset by sales of products of the acquired Taminco, Commonwealth, Knowlton, and aviation turbine oil businesses.

Sales revenue in Asia Pacific decreased in 2015 compared to 2014, primarily due to lower Fibers segment sales volume, particularly for acetate tow, and lower selling prices, partially offset by sales of products of the acquired Taminco, Commonwealth and aviation turbine oil businesses.

Sales revenue in Europe, Middle East, and Africa increased in 2015 compared to 2014, primarily due to sales of products of the acquired Taminco businesses, partially offset by an unfavorable shift in foreign currency exchange rates.

Sales revenue in Latin America increased slightly in 2015 compared to 2014, primarily due to sales of products of the acquired Taminco and Commonwealth businesses, partially offset by lower sales volume and lower selling prices in all operating segments.

See "Business - Business Segments" in Part I, Item 1 of this Annual Report for regional segment sales revenues by customer location.



MANAGEMENT'S DISCUSSION AND ANALYSIS OF  
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## LIQUIDITY, CAPITAL RESOURCES, AND OTHER FINANCIAL INFORMATION

## Cash Flows

| (Dollars in millions)  | 2016    | 2015    | 2014     |
|--|---------|---------|----------|
| Net cash provided by (used in):                              |         |         |          |
| Operating activities   | \$1,385 | \$1,624 | \$1,433  |
| Investing activities   | (655 )  | (693 )  | (4,091 ) |
| Financing activities   | (838 )  | (844 )  | 2,639    |
| Effect of exchange rate changes on cash and cash equivalents | (4 )    | (8 )    | (4 )     |
| Net change in cash and cash equivalents                      | (112 )  | 79      | (23 )    |
| Cash and cash equivalents at beginning of period             | 293     | 214     | 237      |
| Cash and cash equivalents at end of period                   | \$181   | \$293   | \$214    |

## 2016 Compared to 2015

Cash provided by operating activities decreased \$239 million in 2016 compared with 2015. The decrease in cash from operating activities was primarily due to lower net earnings excluding non-core items in 2016 compared with 2015 and management's decision to contribute an additional \$150 million to the Company's U.S. defined pension plans in fourth quarter 2016 rather than in future years.

Cash used in investing activities decreased \$38 million in 2016 compared with 2015. The decrease was primarily due to \$37 million higher proceeds primarily from the sale of Primester, \$26 million less additions to properties and equipment, and \$19 million less cash used for acquisitions partially offset by \$44 million of cash used for the December 2016 settlement of a 2017 forward starting interest rate swap in connection with early debt repayment, which was included in "Other items, net" in the Consolidated Statements of Cash Flows.

Total financing cash used in 2016 was similar to that of 2015 with \$77 million less used in the net repayment of borrowings offset by increases in share repurchases and dividend payments of \$42 million and \$34 million, respectively. Cash used in financing activities in 2016 included cash used in repayment of \$1.6 billion of outstanding debt (including \$67 million early redemption premium and related fees), \$400 million total repayments of accounts receivable securitization agreement (the "A/R Facility") borrowings, repayment of \$100 million of the first five-year term loan agreement ("2019 Term Loan") borrowings, and \$150 million net decrease in commercial paper borrowings partially offset by proceeds from the \$1.3 billion sale of public debt securities due 2023 and 2026, \$298 million of 2021 Term Loan borrowings net of issuance fees, and \$200 million of A/R Facility borrowings. For additional information, see Note 9, "Borrowings", to the Company's consolidated financial statements in Part II, Item 8 of this Annual Report.

## 2015 Compared to 2014

Cash provided by operating activities increased \$191 million in 2015 compared with 2014. The increase in cash from operating activities was primarily due to higher earnings and lower working capital requirements partially offset by higher interest payments. The decrease in working capital requirements was primarily due to the impact of declining raw material and energy costs in 2015 compared with 2014. Interest payments were higher in 2015 as compared with 2014 primarily due to a full year of interest payments on borrowings for the 2014 acquisitions.

Cash used in investing activities decreased \$3.4 billion in 2015 compared with 2014. The decrease was primarily due to cash used for acquisitions in 2014. Cash used for additions to properties and equipment was \$652 million in 2015 and \$593 million in 2014.



## MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Cash used in financing activities was \$844 million in 2015 compared with cash provided by financing activities of \$2.6 billion in 2014. The increase in cash used is primarily due to the repayment of borrowings in 2015 compared to proceeds from borrowings in 2014 used for acquisitions. During 2015, the Company repaid \$650 million of borrowings under the 2019 Term Loan agreement and the \$250 million 3% notes due 2015 using available cash and \$200 million borrowings under the A/R Facility and \$195 million commercial paper borrowings. During 2014, the Company had net proceeds of \$3.4 billion from new debt and repaid \$190 million of commercial paper borrowings. Share repurchases totaled \$103 million in 2015 compared with \$410 million in 2014. Dividend payments were \$238 million in 2015 and \$210 million in 2014.

### Liquidity and Capital Resources

The Company had cash and cash equivalents as follows:

| (Dollars in millions)     | December 31, |       |       |
|---------------------------|--------------|-------|-------|
|                           | 2016         | 2015  | 2014  |
| Cash and cash equivalents | \$181        | \$293 | \$214 |

The Company has access to a \$1.25 billion revolving credit agreement (the "Credit Facility") expiring October 2021. Borrowings under the Credit Facility are subject to interest at varying spreads above quoted market rates and a commitment fee is paid on the total unused commitment. The Credit Facility provides liquidity support for commercial paper borrowings and general corporate purposes.

The Company also has access to a \$250 million A/R Facility agreement that expires April 2019. Eastman Chemical Financial Corporation ("ECFC"), a subsidiary of the Company, has an agreement to sell interests in trade receivables under the A/R Facility to a third party purchaser. Third party creditors of ECFC have first priority claims on the assets of ECFC before those assets would be available to satisfy the Company's general obligations. Borrowings under the A/R Facility are subject to interest rates based on a spread over the lender's borrowing costs, and ECFC pays a fee to maintain availability of the A/R Facility.

The Credit and A/R Facilities and other borrowing agreements contain a number of customary covenants and events of default, including requirements to maintain certain financial ratios. The Company was in compliance with all such covenants for all periods presented. Total available borrowings under the Credit and A/R Facilities were \$1.50 billion as of December 31, 2016. Changes in available borrowings were primarily due to repayment of borrowings under the A/R Facility. The Company would not have violated applicable covenants for these periods if the total available amounts of the facilities had been borrowed. For information, see Note 9, "Borrowings", to the Company's consolidated financial statements in Part II, Item 8 of this Annual Report.

Cash flows from operations, cash and cash equivalents, and other sources of liquidity are expected to be available and sufficient to meet foreseeable cash requirements. However, the Company's cash flows from operations can be affected by numerous factors including risks associated with global operations, raw material availability and cost, demand for and pricing of Eastman's products, capacity utilization, and other factors described under "Risk Factors" in this MD&A. Eastman management believes maintaining a financial profile consistent with an investment grade credit rating is important to its long-term strategic and financial flexibility.



MANAGEMENT'S DISCUSSION AND ANALYSIS OF  
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## Debt and Other Commitments

Debt and other commitments are summarized in the following table:

(Dollars in millions) Payments Due for

| Period          | Debt Securities | Credit Facilities and Other | Interest Payable | Purchase Obligations | Operating Leases | Other Liabilities <sup>(1)</sup> | Total    |
|-----------------|-----------------|-----------------------------|------------------|----------------------|------------------|----------------------------------|----------|
| 2017            | \$—             | \$ 283                      | \$ 229           | \$ 211               | \$ 62            | \$ 239                           | \$1,024  |
| 2018            | —               | 37                          | 231              | 208                  | 49               | 82                               | 607      |
| 2019            | 249             | 250                         | 227              | 186                  | 36               | 74                               | 1,022    |
| 2020            | 796             | 30                          | 199              | 186                  | 29               | 88                               | 1,328    |
| 2021            | 184             | 232                         | 185              | 160                  | 24               | 84                               | 869      |
| 2022 and beyond | 4,533           | —                           | 1,788            | 2,052                | 65               | 1,074                            | 9,512    |
| Total           | \$5,762         | \$ 832                      | \$ 2,859         | \$ 3,003             | \$ 265           | \$ 1,641                         | \$14,362 |

Amounts represent the current estimated cash payments required to be made by the Company primarily for pension and other postretirement benefits, environmental loss contingency reserves, accrued compensation benefits, uncertain tax liabilities, and commodity and foreign exchange hedging in the periods indicated. Due to uncertainties in the timing of the effective settlement of tax positions with respect to taxing authorities, management is unable to determine the timing of payments related to uncertain tax liabilities and these amounts are included in the "2022 and beyond" line item.

At December 31, 2016, the Company's borrowings totaled approximately \$6.6 billion with various maturities. During 2016, the Company refinanced certain outstanding public debt with proceeds of the sale of new euro-denominated debt securities and term loan borrowings, resulting in lowered interest expense and extended weighted average maturity of outstanding debt while retaining adequate levels of pre-payable debt for efficient future deleveraging. These transactions will result in an estimated net reduction of interest expense of approximately \$20 million in 2017. For information on debt securities, credit facilities and other, and interest payable, see Note 9, "Borrowings", to the Company's consolidated financial statements in Part II, Item 8 of this Annual Report.

For information about purchase obligations and operating leases, see Note 12, "Commitments and Off Balance Sheet Arrangements", to the Company's consolidated financial statements in Part II, Item 8 of this Annual Report.

The amount and timing of such pension and other postretirement benefit payments included in other liabilities is dependent upon interest rates, health care cost trends, actual returns on plan assets, retirement and attrition rates of employees, continuation or modification of the benefit plans, and other factors. Such factors can significantly impact the amount and timing of any future contributions by the Company. Excess contributions are periodically made by management in order to keep the plans' funded status above 80 percent under the funding provisions of the Pension Protection Act to avoid partial benefit restrictions on accelerated forms of payment. The Company's U.S. defined benefit pension plans are not currently under any benefit restrictions. See Note 11, "Retirement Plans", to the Company's consolidated financial statements in Part II, Item 8 of this Annual Report, for more information regarding pension and other postretirement benefit obligations.

The resolution of uncertainties related to environmental matters included in other liabilities may have a material adverse effect on the Company's consolidated results of operations in the period recognized, however, because of expected sharing of costs, the availability of legal defenses, and the Company's preliminary assessment of actions that may be required, management does not believe that the Company's liability for these environmental matters, individually or in the aggregate, will be material to the Company's consolidated financial position or cash flows. See Note 1, "Significant Accounting Policies", to the Company's consolidated financial statements in Part II, Item 8 of this

Annual Report for the Company's accounting policy for environmental costs and see Note 13, "Environmental Matters and Asset Retirement Obligations", to the Company's consolidated financial statements in Part II, Item 8 of this Annual Report for more information regarding outstanding environmental matters and asset retirement obligations.

## MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

### Off Balance Sheet Arrangements

For information about off balance sheet arrangements, see Note 12, "Commitments and Off Balance Sheet Arrangements" - "Guarantees" and "Other Off Balance Sheet Arrangements", to the Company's consolidated financial statements in Part II, Item 8 of this Annual Report. Management's current expectation is that the likelihood of material residual guarantee payments or future payment or performance related to non-performance under other guarantees is remote.

### Capital Expenditures

Capital expenditures were \$626 million, \$652 million, and \$593 million in 2016, 2015, and 2014, respectively. Capital expenditures in 2016 were primarily for AFP and AM segment expansions in Kuantan, Malaysia, an AM segment expansion of Eastman Tritan® copolyester capacity in Kingsport, Tennessee, and Longview, Texas site modernization projects. The Company expects that 2017 capital spending will be approximately \$575 million.

The Company had capital expenditures related to environmental protection and improvement of approximately \$45 million, \$52 million, and \$69 million in 2016, 2015, and 2014, respectively. The Company does not currently expect near term environmental capital expenditures arising from requirements of environmental laws and regulations to materially impact the Company's planned level of annual capital expenditures for environmental control facilities.

### Stock Repurchases and Dividends

In February 2014, the Company's Board of Directors authorized repurchase of up to an additional \$1 billion of the Company's outstanding common stock at such times, in such amounts, and on such terms, as determined to be in the best interests of the Company. As of December 31, 2016, a total of 6,542,190 shares have been repurchased under this authorization for a total amount of \$498 million.

The Board of Directors has declared a cash dividend of \$0.51 per share during the first quarter of 2017, payable on April 3, 2017 to stockholders of record on March 15, 2017.

### Other

Eastman did not have any material relationships with unconsolidated entities or financial partnerships, including special purpose entities, for the purpose of facilitating off-balance sheet arrangements with contractually narrow or limited purposes. Thus, the Company is not materially exposed to any financing, liquidity, market, or credit risk related to any such relationships.

### INFLATION

In recent years, general economic inflation has not had a material adverse impact on Eastman's costs. The cost of raw materials is generally based on market prices, although derivative financial instruments are utilized, as appropriate, to mitigate short-term market price fluctuations. Management expects the volatility of raw material and energy costs to continue and the Company will continue to pursue pricing and hedging strategies and ongoing cost control initiatives to offset the effects. For additional information see Note 10, "Derivative and Non-Derivative Financial Instruments", to the Company's consolidated financial statements in Part II, Item 8 of this Annual Report.

### RECENTLY ISSUED ACCOUNTING STANDARDS

For information regarding the impact of recently issued accounting standards, see Note 23, "Recently Issued Accounting Standards", to the Company's consolidated financial statements in Part II, Item 8 of this Annual Report.

## OUTLOOK

Eastman is focused on consistent earnings growth through a market-driven approach that takes advantage of the Company's existing technology platforms, global market and manufacturing presence, leading positions in key end markets, vertically integrated manufacturing streams, and advantaged cost positions. This focus is supported by the Company's end-market and geographic diversity as it serves global markets and offers both original equipment manufacturing and after-market products in a variety of end markets, such as transportation, building and construction, and consumables.

## MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Management expects continued slow global economic growth and challenges in the Fibers segment. Management expects that market prices for commodity products and raw material and energy costs will continue to be volatile, and will continue to evaluate and use pricing strategies to mitigate this volatility. The negative impact of our current commodity hedges is expected to be less than in recent years. Management also expects the strength of the U.S. dollar to continue to have an overall negative impact on the Company's results, partially offset by hedging of foreign currencies, particularly the euro.

For 2017, management also expects:

- operating results to continue to benefit from organic growth and improved product mix from continued market adoption of specialty products;
- cost reduction actions to result in cost savings of approximately \$100 million;
- cash generated by operating activities of approximately \$1.6 billion;
- capital spending to be approximately \$575 million;
- priorities for uses of available cash in 2017 to include payment of the quarterly dividend, repayment of debt, funding targeted growth initiatives, and repurchasing shares; and
- the full year effective tax rate on reported earnings before income tax to be approximately 23 percent, excluding non-core items.

Based on the foregoing expectations and assumptions, management expects adjusted 2017 earnings per share excluding any non-core, unusual, or non-recurring items to be eight to twelve percent higher than adjusted 2016 earnings per share excluding non-core items of \$6.76. The Company's 2017 financial results forecasts do not include non-core items (such as MTM pension and other post-retirement benefit gains and losses) and any unusual or non-recurring items. Accordingly, management is unable to reconcile projected 2017 earnings excluding non-core and any unusual or non-recurring items to projected reported GAAP earnings without unreasonable efforts.

See "Risk Factors" below.

## RISK FACTORS

In addition to factors described elsewhere in this Annual Report, the following are the most significant known factors, risks, and uncertainties that could cause actual results to differ materially from those in the forward-looking statements made in this Annual Report and elsewhere from time to time. See "Forward-Looking Statements".

Continued uncertain conditions in the global economy and the financial markets could negatively impact the Company.

Continued uncertain conditions in the global economy and global capital markets may adversely affect the Company's results of operations, financial condition, and cash flows. The Company's business and operating results were affected by the impact of the last global recession, including the credit market crisis, declining consumer and business confidence, fluctuating commodity prices, volatile exchange rates, and other challenges that affected the global economy. Continuing deterioration and weakness of the global economy and financial markets and uncertainty over timing and extent of recovery have adversely affected the Company's results of operations, financial condition, and cash flows. In addition, the Company's ability to access the credit and capital markets under attractive rates and terms could be constrained, which may negatively impact the Company's liquidity or ability to pursue certain growth initiatives.

Volatility in costs for strategic raw material and energy commodities or disruption in the supply of these commodities could adversely affect our financial results.

The Company is reliant on certain strategic raw material and energy commodities for its operations and utilizes risk management tools, including hedging, as appropriate, to mitigate market fluctuations in raw material and energy costs. These risk mitigation measures cannot eliminate all exposure to market fluctuations and have from time to time reduced the positive impact of unexpected decreases of the market price of purchased raw materials. In addition, natural disasters, plant interruptions, changes in laws or regulations, war or other outbreak of hostilities or terrorism, and breakdown or degradation of transportation infrastructure used for delivery of strategic raw material and energy commodities, could adversely impact both the cost and availability of these commodities.

## MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Loss or financial weakness of any of the Company's largest customers could adversely affect our financial results.

Although the Company has an extensive customer base, loss of, or material financial weakness of, certain of our largest customers could adversely affect the Company's financial condition and results of operations until such business is replaced. No assurances can be made that the Company would be able to regain or replace any lost customers.

The Company's business is subject to operating risks common to chemical manufacturing businesses, including cyber risks, any of which could disrupt manufacturing operations or related infrastructure and adversely affect results of operations.

As a global specialty chemicals manufacturing company, our business is subject to operating risks common to chemical manufacturing, storage, handling, and transportation including explosions, fires, inclement weather, natural disasters, mechanical failure, unscheduled downtime, transportation interruptions, remediation, chemical spills, discharges or releases of toxic or hazardous substances or gases. Significant limitation on the Company's ability to manufacture products due to disruption of manufacturing operations or related infrastructure could have a material adverse effect on the Company's sales revenue, costs, results of operations, and financial condition. Disruptions could occur due to internal factors such as computer or equipment malfunction (accidental or intentional), operator error, or process failures; or external factors such as computer or equipment malfunction at third-party service providers, natural disasters, pandemic illness, changes in laws or regulations, war or other outbreak of hostilities or terrorism, cyber attacks, or breakdown or degradation of transportation infrastructure used for delivery of supplies to the Company or for delivery of products to customers. The Company has in the past experienced cyber attacks and breaches of its computer information systems, and although none of these has had a material adverse effect on the Company's operations, no assurances can be provided that any future disruptions due to these, or other, circumstances will not have a material effect on operations. Such disruptions could result in an unplanned event that could be significant in scale and could negatively impact operations, neighbors, and the environment, and could have a negative impact on the Company's results of operations.

Growth initiatives may not achieve desired business or financial objectives and may require a significant use of resources in excess of those estimated or budgeted for such initiatives.

The Company continues to identify and pursue growth opportunities through both organic growth initiatives and inorganic initiatives. These growth opportunities include development and commercialization or licensing of innovative new products and technologies and related employee leadership, expertise, and skill development and retention, expansion into new markets and geographic regions, and alliances, ventures, and acquisitions that complement and extend the Company's portfolio of businesses and capabilities. There can be no assurance that such innovation, development and commercialization or licensing efforts, investments, or acquisitions and alliances (including integration of acquired businesses) will result in financially successful commercialization of products, or acceptance by existing or new customers, or successful entry into new markets or otherwise achieve their underlying strategic business objectives or that they will be beneficial to the Company's results of operations. There also can be no assurance regarding the timing of completion of proposed acquisitions or licensing, expected benefits of proposed acquisitions or licensing, completion of integration plans, and synergies therefrom. There also can be no assurance that capital projects for growth efforts can be completed within the time or at the costs projected due, among other things, to demand for and availability of construction materials and labor and obtaining regulatory approvals and operating permits and reaching agreement on terms of key agreements and arrangements with potential suppliers and customers. Any such delays or cost overruns or the inability to obtain such approvals or to reach such agreements on acceptable terms could negatively affect the returns from any proposed or current investments and projects.





## MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Significant acquisitions expose the Company to risks and uncertainties, the occurrence of any of which could materially adversely affect the Company's business, financial condition, and results of operations.

While acquisitions have been and continue to be a part of the Company's growth strategy, acquisitions of large companies (such as the acquisition of Taminco and Solutia) subject the Company to a number of risks and uncertainties, the occurrence of any of which could have a material adverse effect on Eastman. These include, but are not limited to the possibilities that the financial performance of the acquired business may be significantly worse than expected; that significant additional indebtedness may constrain the Company's ability to access the credit and capital markets at attractive interest rates and favorable terms, which may negatively impact the Company's liquidity or ability to pursue certain growth initiatives; that the Company may not be able to achieve the cost, revenue, tax, or other "synergies" expected from any acquisition, or that there may be delays in achieving any such synergies; that management's time and effort may be dedicated to the new business resulting in a loss of focus on the successful operation of the Company's existing businesses; and that the Company may be required to expend significant additional resources in order to integrate any acquired business into Eastman or that the integration efforts will not achieve the expected benefits.

The Company's substantial global operations subject it to risks of doing business in foreign countries, which could adversely affect its business, financial condition and results of operations.

More than half of the Company's sales for 2016 were to customers outside of North America. The Company expects sales from international markets to continue to represent a significant portion of its sales. Also, a significant portion of manufacturing capacity is located outside of the United States. Accordingly, the Company's business is subject to risks related to the differing legal, political, cultural, social and regulatory requirements and economic conditions of many jurisdictions. Fluctuations in exchange rates may affect product demand and may adversely affect the profitability in U.S. dollars of products and services provided in foreign countries. In addition, the U.S. or foreign countries may impose additional taxes or otherwise tax Eastman's foreign income, or adopt other restrictions on foreign trade or investment, including currency exchange controls or limitations on imports or exports. Certain legal and political risks are also inherent in the operation of a company with Eastman's global scope. For example, it may be more difficult for Eastman to enforce its agreements or collect receivables through foreign legal systems, and the laws of some countries may not protect the Company's intellectual property rights to the same extent as the laws of the United States. Failure of foreign countries to have laws to protect Eastman's intellectual property rights or an inability to effectively enforce such rights in foreign countries could result in loss of valuable proprietary information. There is also risk that foreign governments may nationalize private enterprises in certain countries where Eastman operates. Social and cultural norms in certain countries may not support compliance with Eastman's corporate policies including those that require compliance with substantive laws and regulations. Also, changes in general economic and political conditions in countries where Eastman operates are a risk to the Company's financial performance. As Eastman continues to operate its business globally, its success will depend, in part, on its ability to anticipate and effectively manage these and other related risks. There can be no assurance that the consequences of these and other factors relating to its multinational operations will not have an adverse effect on Eastman's business, financial condition or results of operations.

Legislative or regulatory actions could increase the Company's future compliance costs.

The Company and its facilities and businesses are subject to complex health, safety, and environmental laws and regulations, both in the U.S. and internationally, which require and will continue to require significant expenditures to remain in compliance with such laws and regulations. The Company's accruals for such costs and associated liabilities are subject to changes in estimates on which the accruals are based. For example, any amount accrued for environmental matters reflects the Company's assumptions about remediation requirements at the contaminated site,

the nature of the remedy, the outcome of discussions with regulatory agencies and other potentially responsible parties at multi-party sites, and the number and financial viability of other potentially responsible parties. Changes in the estimates on which the accruals are based, unanticipated government enforcement action, or changes in health, safety, environmental, chemical control regulations, and testing requirements could result in higher costs. Specifically, pending and proposed U.S. Federal legislation and regulation increase the likelihood that the Company's manufacturing sites will in the future be impacted by regulation of greenhouse gas emissions and energy policy, which legislation and regulation, if enacted, may result in capital expenditures, increases in costs for raw materials and energy, limitations on raw material and energy source and supply choices, and other direct compliance costs.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF  
FINANCIAL CONDITION AND RESULTS OF OPERATIONS

In addition to the foregoing most significant known risk factors to the Company, there may be other factors, not currently known to the Company, which could, in the future, materially adversely affect the Company, its business, financial condition, or results of operations. The foregoing discussion of the most significant risk factors to the Company does not necessarily present them in order of importance. This disclosure, including that under "Outlook" and other forward-looking statements and related disclosures made by the Company in this Annual Report and elsewhere from time to time, represents management's best judgment as of the date the information is given. The Company does not undertake responsibility for updating any of such information, whether as a result of new information, future events, or otherwise, except as required by law. Investors are advised, however, to consult any further public Company disclosures (such as in filings with the Securities and Exchange Commission or in Company press releases) on related subjects.

## ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Eastman has exposure to various market risks principally due to changes in foreign currency exchange rates, the pricing of various commodities, and interest rates. In an effort to manage these risks, the Company employs various strategies, including pricing, inventory management, and hedging. The Company enters into derivative contracts which are governed by policies, procedures, and internal processes set forth by its Board of Directors.

The Company determines its exposures to market risk by utilizing sensitivity analyses, which measure the potential losses in fair value resulting from one or more selected hypothetical changes in foreign currency exchange rates, commodity prices, or interest rates.

### Foreign Currency Risk

Due to a portion of the Company's operating cash flows and borrowings being denominated in foreign currencies, the Company is exposed to market risk from changes in foreign currency exchange rates. The Company continually evaluates its foreign currency exposure based on current market conditions and the locations in which the Company conducts business. The Company manages most foreign currency exposures on a consolidated basis, which allows the Company to net certain exposures and take advantage of natural offsets. In order to mitigate foreign currency risk, the Company from time to time enters into derivative instruments to hedge the cash flows related to certain sales and purchase transactions expected within a rolling three year period and denominated in foreign currencies, and enters into forward exchange contracts to hedge certain firm commitments denominated in foreign currencies. The gains and losses on these contracts offset changes in the value of related exposures. Additionally, to mitigate foreign currency risk, the Company from time to time enters into non-derivative instruments to hedge the foreign currency exposure of the net investment in certain foreign operations. The foreign currency change in the designated investment values of the foreign subsidiaries will generally be offset by a foreign currency change in the carrying value of the euro-denominated borrowings. It is the Company's policy to enter into foreign currency derivative and non-derivative instruments only to the extent considered necessary to meet its objectives as stated above. The Company does not enter into foreign currency derivative financial instruments for speculative purposes.

At December 31, 2016, the market risk associated with certain cash flows under these derivative transactions assuming a 10 percent adverse move in the U.S. dollar relative to these foreign currencies was \$39 million, with an additional \$4 million exposure for each additional one percentage point adverse change in those foreign currency rates. At December 31, 2015, the market risk associated with cash flows under these derivative transactions assuming a 10 percent adverse move in the U.S. dollar relative to those currencies was \$67 million, with an additional \$7 million exposure for each additional one percentage point adverse change in those exchange rates. Since the Company utilizes currency-sensitive derivative instruments for hedging anticipated foreign currency transactions, a loss in fair value from those instruments is generally offset by an increase in the value of the underlying anticipated transactions.

In fourth quarter 2016, contemporaneous with its sale on November 21, 2016 of additional euro-denominated 1.50% notes due May 2023 in the principal amount of €200 million (\$213 million) and euro-denominated 1.875% notes due November 2026 in the principal amount of €500 million (\$534 million), the Company designated these borrowings as non-derivative hedges of a portion of their net investment in one of their euro functional currency denominated subsidiaries to protect the designated net investment against foreign currency fluctuations.

In second quarter 2016, contemporaneous with its sale on May 26, 2016 of euro-denominated 1.50% notes due May 2023 in the principal amount of €550 million (\$614 million), the Company designated these borrowings as a non-derivative hedge of a portion of its net investment in one of its euro functional currency denominated subsidiaries

to protect the designated net investment against foreign currency fluctuations.

At December 31, 2016, a 10 percent fluctuation in the euro currency rate would have a \$131 million impact on the designated net investment values in the foreign subsidiaries. Though, a foreign currency change in the designated investment values of the foreign subsidiaries will generally be offset by a foreign currency change in the carrying value of the euro-denominated borrowings. As a result of the designation of the euro-denominated borrowings as hedges of the net investments, foreign currency translation gains and losses on the borrowings are recorded as a component of the "Change in cumulative translation adjustment" within "Other comprehensive income (loss), net of tax" in the Consolidated Statements of Earnings, Comprehensive Income and Retained Earnings.

## Commodity Risk

The Company is exposed to fluctuations in market prices for certain of its raw materials and energy, as well as contract sales of certain commodity products. To mitigate short-term fluctuations in market prices for certain commodities, principally propane, ethane, natural gas, paraxylene, ethylene, and benzene, as well as selling prices for ethylene, the Company from time to time enters into derivative transactions to hedge the cash flows related to certain sales and purchase transactions expected within a rolling three year period. At December 31, 2016 and December 31, 2015, the market risk associated with these derivative contracts, assuming an instantaneous parallel shift in the underlying commodity price of 10 percent and no corresponding change in the selling price of finished goods, was \$37 million and \$41 million, respectively, with an additional \$4 million of exposure at each date for each one percentage point move in closing price thereafter.

## Interest Rate Risk

The Company is exposed to interest rate risks primarily as a result of its borrowing and investing activities, which include long-term borrowings used to maintain liquidity and to fund its business operations and capital requirements. The nature and amount of the Company's long-term and short-term debt may vary from time to time as a result of business requirements, market conditions, and other factors. The Company manages global interest rate exposure as part of our regular operational and financing strategies. The Company had variable interest rate borrowings (including credit facility borrowings and commercial paper borrowings) of \$829 million and \$980 million at December 31, 2016 and 2015, respectively. These borrowings represented approximately 15 percent of total outstanding debt and bore weighted average interest rates of 1.69 percent and 1.17 percent at December 31, 2016 and 2015, respectively. A hypothetical 10 percent increase in the average interest rate applicable to these borrowings would change our annualized interest expense by approximately \$1 million as of both December 31, 2016 and 2015.

The Company may enter into interest rate swaps, collars, or similar instruments with the objective of reducing interest rate volatility relating to our borrowing costs. As of December 31, 2016 and 2015, the Company had interest rate swaps outstanding with notional values totaling \$75 million and \$500 million, respectively. For purposes of calculating the market risks associated with the fair value of interest-rate-sensitive instruments, the Company uses a hypothetical 10 percent increase in interest rates. The corresponding market risk associated with interest rate swaps hedging the interest rate risk on the 3.8% bonds maturing March 2025 was \$1 million at December 31, 2016. The corresponding market risk associated with interest rate swaps hedging the interest rate risk for the future issuance of debt was \$10 million at December 31, 2015.

|         |  |            |
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## MANAGEMENT'S RESPONSIBILITY FOR FINANCIAL STATEMENTS

Management is responsible for the preparation and integrity of the accompanying consolidated financial statements of Eastman Chemical Company ("Eastman" or the "Company") appearing on pages 67 through 126. Eastman has prepared these consolidated financial statements in accordance with accounting principles generally accepted in the United States, and the statements of necessity include some amounts that are based on management's best estimates and judgments.

Eastman's accounting systems include extensive internal controls designed to provide reasonable assurance of the reliability of its financial records and the proper safeguarding and use of its assets. Such controls are based on established policies and procedures, are implemented by trained, skilled personnel with an appropriate segregation of duties, and are monitored through a comprehensive internal audit program. The Company's policies and procedures prescribe that the Company and all employees are to maintain the highest ethical standards and that its business practices throughout the world are to be conducted in a manner that is above reproach.

The accompanying consolidated financial statements have been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, who were responsible for conducting their audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Their report is included herein.

The Board of Directors exercises its responsibility for these financial statements through its Audit Committee, which consists entirely of non-management Board members. The independent registered public accounting firm and internal auditors have full and free access to the Audit Committee. The Audit Committee meets periodically with PricewaterhouseCoopers LLP and Eastman's director of internal auditing, both privately and with management present, to discuss accounting, auditing, policies and procedures, internal controls, and financial reporting matters.

|                         |   |
|-------------------------|---|
| /s/ Mark J. Costa       | /s/ Curtis E. Espeland                                  |
| Mark J. Costa           | Curtis E. Espeland                                      |
| Chief Executive Officer | Executive Vice President and<br>Chief Financial Officer |
| February 27, 2017       | February 27, 2017                                       |



Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of  
Eastman Chemical Company

In our opinion, the consolidated financial statements listed in the accompanying index present fairly, in all material respects, the financial position of Eastman Chemical Company (the “Company”) and its subsidiaries at December 31, 2016 and 2015, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2016 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company 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). The Company’s management is responsible for these financial statements, for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in Management’s Report on Internal Control over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on these financial statements and on the Company’s internal control over financial reporting based on our integrated 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 and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting 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 audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

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 (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) 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 (iii) 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.

/s/PricewaterhouseCoopers LLP  
Cincinnati, OH  
February 27, 2017

CONSOLIDATED STATEMENTS OF EARNINGS,  
COMPREHENSIVE INCOME AND RETAINED EARNINGS

|  | For years ended December 31, |         |         |
|--|------------------------------|---------|---------|
| (Dollars in millions, except per share amounts)            | 2016                         | 2015    | 2014    |
| Sales  | \$9,008                      | \$9,648 | \$9,527 |
| Cost of sales  | 6,658                        | 7,068   | 7,306   |
| Gross profit   | 2,350                        | 2,580   | 2,221   |
| Selling, general and administrative expenses               | 703                          | 771     | 755     |
| Research and development expenses                          | 219                          | 242     | 227     |
| Asset impairments and restructuring charges, net           | 45                           | 183     | 77      |
| Operating earnings   | 1,383                        | 1,384   | 1,162   |
| Net interest expense                                       | 255                          | 263     | 187     |
| Early debt extinguishment and other related costs          | 85                           | —       | —       |
| Other (income) charges, net                                | (6)                          | (8)     | (15)    |
| Earnings from continuing operations before income taxes    | 1,049                        | 1,129   | 990     |
| Provision for income taxes from continuing operations      | 190                          | 275     | 235     |
| Earnings from continuing operations                        | 859                          | 854     | 755     |
| Earnings from discontinued operations, net of tax          | —                            | —       | 2       |
| Net earnings   | 859                          | 854     | 757     |
| Less: Net earnings attributable to noncontrolling interest | 5                            | 6       | 6       |
| Net earnings attributable to Eastman                       | \$854                        | \$848   | \$751   |
| Amounts attributable to Eastman stockholders               |                              |         |         |
| Earnings from continuing operations, net of tax            | \$854                        | \$848   | \$749   |
| Earnings from discontinued operations, net of tax          | —                            | —       | 2       |
| Net earnings attributable to Eastman                       | \$854                        | \$848   | \$751   |
| Basic earnings per share attributable to Eastman           |                              |         |         |
| Earnings from continuing operations                        | \$5.80                       | \$5.71  | \$5.01  |
| Earnings from discontinued operations                      | —                            | —       | 0.02    |
| Basic earnings per share attributable to Eastman           | \$5.80                       | \$5.71  | \$5.03  |
| Diluted earnings per share attributable to Eastman         |                              |         |         |
| Earnings from continuing operations                        | \$5.75                       | \$5.66  | \$4.95  |
| Earnings from discontinued operations                      | —                            | —       | 0.02    |
| Diluted earnings per share attributable to Eastman         | \$5.75                       | \$5.66  | \$4.97  |

CONSOLIDATED STATEMENTS OF EARNINGS,  
COMPREHENSIVE INCOME AND RETAINED EARNINGS (continued)

|   | For years ended December 31, |     |      |     |      |     |
|---|------------------------------|-----|------|-----|------|-----|
| (Dollars in millions, except per share amounts)                                   | 2016                         |     | 2015 |     | 2014 |     |
| Comprehensive Income  |                              |     |      |     |      |     |
| Net earnings including noncontrolling interest                                    | \$                           | 859 | \$   | 854 | \$   | 757 |
| Other comprehensive income (loss), net of tax                                     |                              |     |      |     |      |     |
| Change in cumulative translation adjustment                                       | (97                          | )   | (216 | )   | (201 | )   |
| Defined benefit pension and other postretirement benefit plans:                   |                              |     |      |     |      |     |
| Prior service credit arising during the period                                    | 64                           |     | 87   |     | —    |     |
| Amortization of unrecognized prior service credits included in net periodic costs | (30                          | )   | (19  | )   | (17  | )   |
| Derivatives and hedging:  |                              |     |      |     |      |     |
| Unrealized gain (loss) during period  | 93                           |     | (48  | )   | (230 | )   |
| Reclassification adjustment for losses included in net income, net                | 79                           |     | 83   |     | —    |     |
| Total other comprehensive income (loss), net of tax                               | 109                          |     | (113 | )   | (448 | )   |
| Comprehensive income including noncontrolling                                     | 968                          |     | 741  |     | 309  |     |

|                      |          |          |          |
|----------------------|----------|----------|----------|
| interest             |          |          |          |
| Comprehensive        |          |          |          |
| income attributable  | 5        | 6        | 6        |
| to noncontrolling    |          |          |          |
| interest             |          |          |          |
| Comprehensive        |          |          |          |
| income attributable  | \$ 963   | \$ 735   | \$ 303   |
| to Eastman           |          |          |          |
| Retained Earnings    |          |          |          |
| Retained earnings at | \$ 5,146 | \$ 4,545 | \$ 4,012 |
| beginning of period  |          |          |          |
| Net earnings         |          |          |          |
| attributable to      | 854      | 848      | 751      |
| Eastman              |          |          |          |
| Cash dividends       | (279 )   | (247 )   | (218 )   |
| declared             |          |          |          |
| Retained earnings at | \$ 5,721 | \$ 5,146 | \$ 4,545 |
| end of period        |          |          |          |

The accompanying notes are an integral part of these consolidated financial statements.

## CONSOLIDATED STATEMENTS OF FINANCIAL POSITION

|  | December<br>31,<br>2016 | December<br>31,<br>2015 |
|--|-------------------------|-------------------------|
| (Dollars in millions, except per share amounts)  |                         |                         |
| Assets   |                         |                         |
| Current assets   |                         |                         |
| Cash and cash equivalents  | \$ 181                  | \$ 293                  |
| Trade receivables, net of allowance for doubtful accounts  | 812                     | 792                     |
| Miscellaneous receivables  | 399                     | 246                     |
| Inventories  | 1,404                   | 1,479                   |
| Other current assets   | 70                      | 68                      |
| Total current assets   | 2,866                   | 2,878                   |
| Properties   |                         |                         |
| Properties and equipment at cost   | 11,699                  | 11,234                  |
| Less: Accumulated depreciation   | 6,423                   | 6,104                   |
| Net properties   | 5,276                   | 5,130                   |
| Goodwill   | 4,461                   | 4,518                   |
| Intangible assets, net of accumulated amortization   | 2,469                   | 2,650                   |
| Other noncurrent assets  | 385                     | 404                     |
| Total assets   | \$ 15,457               | \$ 15,580               |
| Liabilities and Stockholders' Equity   |                         |                         |
| Current liabilities  |                         |                         |
| Payables and other current liabilities   | \$ 1,512                | \$ 1,625                |
| Borrowings due within one year   | 283                     | 431                     |
| Total current liabilities  | 1,795                   | 2,056                   |
| Long-term borrowings   | 6,311                   | 6,577                   |
| Deferred income tax liabilities  | 1,206                   | 928                     |
| Post-employment obligations  | 1,018                   | 1,297                   |
| Other long-term liabilities  | 519                     | 701                     |
| Total liabilities  | 10,849                  | 11,559                  |
| Commitments and contingencies (Note 12)  |                         |                         |
| Stockholders' equity   |                         |                         |
| Common stock (\$0.01 par value per share – 350,000,000 shares authorized; shares issued – 217,707,600 and 216,899,964 for 2016 and 2015, respectively) | 2                       | 2                       |
| Additional paid-in capital   | 1,915                   | 1,863                   |
| Retained earnings  | 5,721                   | 5,146                   |
| Accumulated other comprehensive loss   | (281)                   | (390)                   |
|  | 7,357                   | 6,621                   |
| Less: Treasury stock at cost (71,269,474 shares for 2016 and 69,137,973 shares for 2015)   | 2,825                   | 2,680                   |
| Total Eastman stockholders' equity   | 4,532                   | 3,941                   |
| Noncontrolling interest  | 76                      | 80                      |
| Total equity   | 4,608                   | 4,021                   |
| Total liabilities and stockholders' equity   | \$ 15,457               | \$ 15,580               |
| The accompanying notes are an integral part of these consolidated financial statements.  |                         |                         |

## CONSOLIDATED STATEMENTS OF CASH FLOWS

|  | For years ended<br>December 31, |        |          |
|--|---------------------------------|--------|----------|
| (Dollars in millions)  | 2016                            | 2015   | 2014     |
| Operating activities   |                                 |        |          |
| Net earnings   | \$859                           | \$854  | \$757    |
| Adjustments to reconcile net earnings to net cash provided by operating activities:          |                                 |        |          |
| Depreciation and amortization  | 580                             | 571    | 450      |
| Mark-to-market loss on pension and other postretirement benefit plans                        | 97                              | 115    | 304      |
| Asset impairment charges   | 9                               | 107    | 52       |
| Early debt extinguishment and other related costs  | 85                              | —      | —        |
| Gains on sale of assets  | (17 )                           | —      | (5 )     |
| Provision for deferred income taxes  | 177                             | 107    | 99       |
| Changes in operating assets and liabilities, net of effect of acquisitions and divestitures: |                                 |        |          |
| (Increase) decrease in trade receivables   | (29 )                           | 114    | 19       |
| (Increase) decrease in inventories   | 54                              | (26 )  | (61 )    |
| Increase (decrease) in trade payables  | 7                               | (102 ) | (30 )    |
| Pension and other postretirement contributions in excess of expenses                         | (329 )                          | (217 ) | (176 )   |
| Variable compensation less than expenses   | 17                              | 71     | 27       |
| Other items, net   | (125 )                          | 30     | (3 )     |
| Net cash provided by operating activities  | 1,385                           | 1,624  | 1,433    |
| Investing activities   |                                 |        |          |
| Additions to properties and equipment  | (626 )                          | (652 ) | (593 )   |
| Proceeds from sale of assets   | 41                              | 4      | 13       |
| Acquisitions, net of cash acquired   | (26 )                           | (45 )  | (3,509 ) |
| Other items, net   | (44 )                           | —      | (2 )     |
| Net cash used in investing activities  | (655 )                          | (693 ) | (4,091 ) |
| Financing activities   |                                 |        |          |
| Net increase (decrease) in commercial paper and other borrowings                             | (150 )                          | 195    | (190 )   |
| Proceeds from borrowings   | 1,848                           | 250    | 3,565    |
| Repayment of borrowings  | (2,126 )                        | (950 ) | (125 )   |
| Dividends paid to stockholders   | (272 )                          | (238 ) | (210 )   |
| Treasury stock purchases   | (145 )                          | (103 ) | (410 )   |
| Dividends paid to noncontrolling interests   | (8 )                            | (6 )   | (9 )     |
| Proceeds from stock option exercises and other items, net                                    | 15                              | 8      | 18       |
| Net cash (used in) provided by financing activities  | (838 )                          | (844 ) | 2,639    |
| Effect of exchange rate changes on cash and cash equivalents                                 | (4 )                            | (8 )   | (4 )     |
| Net change in cash and cash equivalents  | (112 )                          | 79     | (23 )    |
| Cash and cash equivalents at beginning of period   | 293                             | 214    | 237      |
| Cash and cash equivalents at end of period   | \$181                           | \$293  | \$214    |
| The accompanying notes are an integral part of these consolidated financial statements.      |                                 |        |          |

## NOTES TO THE AUDITED CONSOLIDATED FINANCIAL STATEMENTS

### 1. SIGNIFICANT ACCOUNTING POLICIES

#### Financial Statement Presentation

The consolidated financial statements of Eastman Chemical Company ("Eastman" or the "Company") and subsidiaries are prepared in conformity with accounting principles generally accepted ("GAAP") in the United States and of necessity include some amounts that are based upon management estimates and judgments. Future actual results could differ from such current estimates. The consolidated financial statements include assets, liabilities, sales revenue, and expenses of all majority-owned subsidiaries and joint ventures in which a controlling interest is maintained. Eastman accounts for other joint ventures and investments in minority-owned companies where it exercises significant influence on the equity basis. Intercompany transactions and balances are eliminated in consolidation. Certain prior period data has been reclassified in the Consolidated Financial Statements and accompanying footnotes to conform to current period presentation. Results for 2016 include a \$47 million correction of prior periods' cumulative foreign currency translation adjustment related to the Solutia Inc. ("Solutia") and Taminco Corporation ("Taminco") acquisitions. See Note 5, "Goodwill and Other Intangible Assets" and Note 15, "Stockholders' Equity".

In April 2015, the Financial Accounting Standards Board ("FASB") issued new guidance for debt issuance costs as a part of the simplification initiative. Under this guidance, debt issuance costs are to be presented as a direct reduction from the carrying amount of the debt liability, consistent with the presentation of debt discounts. The amortization of debt issuance costs will be reported as interest expense. The recognition and measurement guidance for debt issuance costs is not affected by the guidance. Beginning March 31, 2016, the new guidance was applied on a retrospective basis which resulted in a reclassification of \$31 million from "Other noncurrent assets" to "Long-term borrowings" in the Unaudited Consolidated Statements of Financial Position at December 31, 2015. See Note 9, "Borrowings".

In January 2016, Eastman changed its organizational and management structure following completion of the integration of recently acquired businesses to better align similar strategies and business models. As a result, beginning first quarter 2016, the Company's products and operations are managed and reported in four operating segments: Additives & Functional Products ("AFP"), Advanced Materials ("AM"), Chemical Intermediates ("CI"), and Fibers. For further information, see Note 5, "Goodwill and Other Intangible Assets" and Note 20, "Segment Information".

Information related to the Commonwealth Laminating and Coating, Inc. acquisition completed on December 11, 2014, the Taminco acquisition completed on December 5, 2014, the Knowlton Technologies, LLC acquisition completed on August 6, 2014, and the BP plc Global Aviation Turbine Engine Oil Business acquisition completed on June 2, 2014 is in Note 2, "Acquisitions". As of the date of acquisition, results of the acquired businesses are included in Eastman results.

#### Cash and Cash Equivalents

Cash and cash equivalents include cash, time deposits, and readily marketable securities with original maturities of three months or less.

#### Fair Value Measurements

The Company records recurring and non-recurring financial assets and liabilities as well as all non-financial assets and liabilities subject to fair value measurement at the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. These fair value principles prioritize valuation inputs across three broad levels. Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or



liabilities. Level 2 inputs are quoted prices for similar assets and liabilities in active markets or inputs that are observable for the asset or liability, either directly or indirectly through market corroboration, for substantially the full term of the financial instrument. Level 3 inputs are unobservable inputs based on the Company's assumptions used to measure assets and liabilities at fair value. An asset or liability's classification within the various levels is determined based on the lowest level input that is significant to the fair value measurement.

## NOTES TO THE AUDITED CONSOLIDATED FINANCIAL STATEMENTS

### Accounts Receivable and Allowance for Doubtful Accounts

Trade accounts receivable are recorded at the invoiced amount and do not bear interest. The Company maintains allowances for doubtful accounts for estimated losses resulting from the inability of its customers to make required payments. The allowances are based on the number of days an individual receivable is delinquent and management's regular assessment of the financial condition of the Company's customers. The Company considers a receivable delinquent if it is unpaid after the terms of the related invoice have expired. The Company evaluates the allowance based on a monthly assessment of the aged receivables. Write-offs are recorded at the time a customer receivable is deemed uncollectible. Allowance for doubtful accounts was \$10 million and \$13 million at December 31, 2016 and 2015, respectively. The Company does not enter into receivables of a long-term nature, also known as financing receivables, in the normal course of business.

### Inventories

Inventories are valued at the lower of cost or market. The Company determines the cost of most raw materials, work in process, and finished goods inventories in the United States and Switzerland by the last-in, first-out ("LIFO") method. The cost of all other inventories is determined by the average cost method, which approximates the first-in, first-out ("FIFO") method. The Company writes-down its inventories for estimated obsolescence or unmarketable inventory equal to the difference between the carrying value of inventory and the estimated market value based upon assumptions about future demand and market conditions.

### Properties

The Company records properties at cost. Maintenance and repairs are charged to earnings; replacements and betterments are capitalized. When Eastman retires or otherwise disposes of assets, it removes the cost of such assets and related accumulated depreciation from the accounts. The Company records any profit or loss on retirement or other disposition into earnings. Asset impairments are reflected as increases in accumulated depreciation for properties that have been placed in service. In instances when an asset has not been placed in service and is impaired, the associated costs are removed from the appropriate property accounts.

### Depreciation and Amortization

Depreciation expense is calculated based on historical cost and the estimated useful lives of the assets, generally using the straight-line method. Estimated useful lives for buildings and building equipment generally range from 20 to 50 years. Estimated useful lives generally ranging from 3 to 33 years are applied to machinery and equipment in the following categories: computer software (3 to 5 years); office furniture and fixtures and computer equipment (5 to 10 years); vehicles, railcars, and general machinery and equipment (5 to 20 years); and manufacturing-related improvements (20 to 33 years). Accelerated depreciation is reported when the estimated useful life is shortened and continues to be reported in cost of sales.

Amortization expense for definite-lived intangible assets is generally determined using a straight-line method over the estimated useful life of the asset.

For additional information, see Note 5, "Goodwill and Other Intangible Assets".

### Impairment of Long-Lived Assets

#### Definite-lived Assets

Properties and equipment and definite-lived intangible assets to be held and used by the Company are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. The review of these long-lived assets is performed at the asset group level, which is the lowest level for which identifiable cash flows are largely independent of the cash flows of other assets and liabilities. If the carrying amount is not considered to be recoverable, an analysis of fair value is triggered. An impairment is recognized for the excess of the carrying amount of the asset over the fair value. Fair value is either salvage value determined through market analysis or alternative future use.

## NOTES TO THE AUDITED CONSOLIDATED FINANCIAL STATEMENTS

### Goodwill

The Company conducts testing of goodwill annually in the fourth quarter or more frequently when events and circumstances indicate an impairment may have occurred. The testing of goodwill is performed at the "reporting unit" level which the Company has determined to be its "components". Components are defined as an operating segment or one level below an operating segment, and in order to be a reporting unit, the component must 1) be a "business" as defined by applicable accounting standards (an integrated set of activities and assets that is capable of being conducted and managed for the purpose of providing a return in the form of dividends, lower costs, or other economic benefits directly to the investors or other owners, members, or participants); 2) have discrete financial information available; and 3) be reviewed regularly by Company operating segment management. The Company aggregates certain components into reporting units based on economic similarities.

The Company uses an income approach and applies a fair value methodology based on discounted cash flows in testing the carrying value of goodwill for each reporting unit. Key assumptions and estimates used in the Company's 2016 goodwill impairment testing included projections of revenues, expenses, and cash flows determined using the Company's annual multi-year strategic plan and a market participant tax rate. The most critical assumptions are the estimated discount rate and a projected long-term growth rate. The Company believes these assumptions are consistent with those of a hypothetical market participant would use given circumstances that were present at the time the estimates were made. However, actual results and amounts may be significantly different from the Company's estimates. In addition, the use of different estimates or assumptions could result in materially different determinations. In order to determine the discount rate, the Company uses a market perspective weighted average cost of capital ("WACC") approach. The WACC is calculated incorporating weighted average returns on debt and equity from market participants. Therefore, changes in the market, which are beyond the control of the Company, may have an impact on future calculations of estimated fair value.

If the estimated fair value of a reporting unit is determined to be less than the carrying value of the net assets of the reporting unit including goodwill, additional steps, including an allocation of the estimated fair value to the assets and liabilities of the reporting unit, would be necessary to determine the amount, if any, of goodwill impairment.

### Indefinite-lived Intangible Assets

The Company conducts testing of indefinite-lived intangible assets annually in the fourth quarter or more frequently when events and circumstances indicate an impairment may have occurred. The carrying value of indefinite-lived intangible assets is considered to be impaired when the fair value, as established by appraisal or based on discounted future cash flows of certain related products, is less than the respective carrying value.

Indefinite-lived intangible assets, consisting of various tradenames, are tested for potential impairment by comparing the estimated fair value to the carrying amount. The Company uses an income approach, specifically the relief from royalty method, to test indefinite-lived intangible assets. The estimated fair value of the tradenames is determined based on an assumed royalty rate savings, discounted by the calculated market participant WACC plus a risk premium.

### Investments

The consolidated financial statements include the accounts of the Company and all its subsidiaries and entities or joint ventures in which a controlling interest is maintained.

Investments in affiliates over which the Company has significant influence but not a controlling interest are carried on the equity basis. Under the equity method of accounting, these investments are included in other noncurrent

assets. The Company includes its share of earnings and losses of such investments in other (income) charges, net, and its share of "Other comprehensive income (loss), net of tax" ("OCI") located in the Consolidated Statements of Earnings, Comprehensive Income and Retained Earnings and in the appropriate component of Accumulated other comprehensive income (loss) ("AOCI") located in the Consolidated Statements of Financial Position.

## NOTES TO THE AUDITED CONSOLIDATED FINANCIAL STATEMENTS

### Pension and Other Postretirement Benefits

The Company maintains defined benefit pension plans that provide eligible employees with retirement benefits. Additionally, Eastman provides a subsidy toward life insurance, health care, and dental benefits for eligible retirees hired prior to January 1, 2007, and a subsidy for health care and dental benefits for retirees' eligible survivors. The estimated amounts of the costs and obligations related to these benefits reflect the Company's assumptions related to general economic conditions (particularly interest rates), expected return on plan assets, rate of compensation increase or decrease for employees, and health care cost trends. The estimated cost of providing plan benefits also depends on demographic assumptions including retirements, mortality, turnover, and plan participation.

Eastman's pension and other postretirement benefit plans costs consist of two elements: 1) ongoing costs recognized quarterly, which are comprised of service and interest costs, expected returns on plan assets, and amortization of prior service credits; and 2) mark-to-market ("MTM") gains and losses recognized annually, in the fourth quarter of each year, resulting from changes in actuarial assumptions for discount rates and the differences between actual and expected returns on plan assets. Any interim remeasurements triggered by a curtailment, settlement, or significant plan changes are recognized as an MTM adjustment in the quarter in which such remeasurement event occurs.

For additional information, see Note 11, "Retirement Plans".

### Environmental Costs

The Company accrues environmental remediation costs when it is probable that the Company has incurred a liability at a contaminated site and the amount can be reasonably estimated. When a single amount cannot be reasonably estimated but the cost can be estimated within a range, the Company accrues the minimum undiscounted amount. This undiscounted accrued amount reflects liabilities expected to be paid out within approximately 30 years and the Company's assumptions about remediation requirements at the contaminated site, the nature of the remedy, the outcome of discussions with regulatory agencies and other potentially responsible parties at multi-party sites, and the number and financial viability of other potentially responsible parties. Changes in the estimates on which the accruals are based, unanticipated government enforcement action, or changes in health, safety, environmental, and chemical control regulations and testing requirements could result in higher or lower costs.

The Company also establishes reserves for closure and post-closure costs associated with the environmental and other assets it maintains. Environmental assets include but are not limited to waste management units, such as landfills, water treatment facilities, and surface impoundments. When these types of assets are constructed or installed, a loss contingency reserve is established for the anticipated future costs associated with the retirement or closure of the asset based on its expected life and the applicable regulatory closure requirements. The Company recognizes the asset retirement obligations in the period in which they are incurred if a reasonable estimate of fair value can be made. The asset retirement obligations are discounted to expected present value and subsequently adjusted for changes in fair value. These future estimated costs are charged into earnings over the estimated useful life of the assets. Currently, the Company's environmental assets are expected to reach the end of their useful lives at different times over the next 50 years. If the Company changes its estimate of the environmental asset retirement obligation costs or its estimate of the useful lives of these assets, the expenses charged to earnings will be impacted. The Company also monitors conditional obligations and recognizes loss contingencies associated with them when and to the extent that more detailed information becomes available concerning applicable retirement costs.

The current portion of accruals for environmental liabilities is included in payables and other current liabilities and the long-term portion is included in other long-term liabilities. These accruals exclude claims for recoveries from insurance companies or other third parties. Environmental costs are capitalized if they extend the life of the related property, increase its capacity, or mitigate or prevent future contamination. The cost of operating and maintaining

environmental control facilities is charged to expense as incurred.

For additional information see Note 13, "Environmental Matters and Asset Retirement Obligations".

## NOTES TO THE AUDITED CONSOLIDATED FINANCIAL STATEMENTS

### Derivative and Non-Derivative Financial Instruments

The Company is exposed to market risks, such as changes in foreign currency exchange rates, commodity prices, and interest rates. To mitigate these market risks and their effects on the cash flows of the underlying transactions and investments in foreign subsidiaries, the Company uses various derivative and non-derivative financial instruments when appropriate. Designation is performed on a specific exposure basis to support hedge accounting. The Company does not enter into derivative transactions for speculative purposes.

In relation to foreign currency exchange rate risk, from time to time, the Company may enter into currency option and forward contracts to hedge probable anticipated, but not yet committed, export sales and purchase transactions expected within a rolling three year period and denominated in foreign currencies (principally the euro and the Japanese yen); and forward exchange contracts to hedge certain firm commitments denominated in foreign currencies. Additionally, the Company may enter into derivative or non-derivative net investment hedges to hedge the foreign currency exposure of its net investments in certain foreign operations.

In relation to commodity price risk, from time to time, the Company may enter into option and forward commodity contracts to hedge probable costs or sales of certain raw material and energy sources used by the Company. These commodity and energy sources are primarily related to propane, ethane, natural gas, paraxylene, ethylene, and benzene. The Company currently hedges commodity price risks using derivative financial instruments within a rolling three year period beyond its current fiscal year. The Company weights its hedge portfolio more heavily in the first year with declining coverage over the remaining periods.

In relation to interest rate risk, from time to time, the Company may enter into interest rate derivative instruments to assist in managing interest expense using a mix of fixed and variable rate debt. These interest rate derivative instruments include primarily cash flow forward starting interest rate swaps, cash flow Treasury locks, and fair value fixed-to-floating swaps.

The Company's qualifying derivative contracts are accounted for as hedges because the derivative instruments are designated and demonstrated to be effective as hedges of the underlying risks. Gains and losses resulting from effective hedges of existing liabilities, firm commitments, or anticipated transactions are deferred and recognized when the offsetting gains and losses are recognized on the related hedged items and are reported as a component of operating earnings. Derivative assets and liabilities are recorded at fair value.

The effective portion of the gain or loss on the non-derivative net investment hedges are reported as a component of the "Change in cumulative translation adjustment" ("CTA") within OCI located in the Consolidated Statements of Earnings, Comprehensive Income and Retained Earnings. Gains and losses representing either hedge ineffectiveness or hedge components excluded from the assessment of effectiveness are recognized in current earnings.

The gains or losses on nonqualifying derivatives or derivatives that are not designated as hedges are marked to market and immediately recorded into earnings from continuing operations.

Deferred option premiums are included in the fair market value of the hedges. The related obligation for payment is generally included in other liabilities and is paid in the period in which the options are exercised or expire.

For additional information see Note 10, "Derivative and Non-Derivative Financial Instruments".

### Litigation and Contingent Liabilities



The Company and its operations from time to time are, and in the future may be, parties to or targets of lawsuits, claims, investigations, and proceedings, including product liability, personal injury, asbestos, patent and intellectual property, commercial, contract, environmental, antitrust, health and safety, and employment matters, which are handled and defended in the ordinary course of business. The Company accrues a contingent loss liability for such matters when it is probable that a liability has been incurred and the amount can be reasonably estimated. When a single amount cannot be reasonably estimated but the cost can be estimated within a range, the Company accrues the minimum amount. The Company expenses legal costs, including those expected to be incurred in connection with a loss contingency, as incurred.

## NOTES TO THE AUDITED CONSOLIDATED FINANCIAL STATEMENTS

### Revenue Recognition and Customer Incentives

The Company recognizes revenue when persuasive evidence of an arrangement exists, delivery has occurred or services have been rendered, the price to the customer is fixed or determinable, and collectability is reasonably assured. Revenue for products is recognized when title and risk of loss transfer to the customer.

The Company records estimated obligations for customer programs and incentive offerings, which consist primarily of revenue or volume-based amounts that a customer must achieve over a specified period of time, as a reduction of revenue from each underlying revenue transaction as the customer progresses toward goals specified in incentive agreements. These estimates are based on a combination of forecasts of customer sales and actual sales volume and revenues against established goals, the customer's current level of purchases, Eastman's knowledge of customer purchasing habits, and industry pricing practice. The incentive payment rate may be variable, based upon the customer reaching higher sales volume or revenue levels over a specified period of time in order to receive an agreed upon incentive payment.

### Shipping and Handling Fees and Costs

Shipping and handling fees related to sales transactions are billed to customers and are recorded as sales revenue. Shipping and handling costs incurred are recorded in cost of sales.

### Restructuring of Operations

The Company records restructuring charges incurred in connection with consolidation of operations, exited business or product lines, or shutdowns of specific sites that are expected to be substantially completed within twelve months. These restructuring charges are recorded as incurred, and are associated with site closures, legal and environmental matters, demolition, contract terminations, obsolete inventory, or other costs directly related to the restructuring. The Company records severance charges for employee separations when the separation is probable and reasonably estimable. In the event employees are required to perform future service, the Company records severance charges ratably over the remaining service period of those employees.

### Share-based Compensation

The Company recognizes compensation expense in the financial statements for stock options and other share-based compensation awards based upon the grant-date fair value over the substantive vesting period. For additional information, see Note 18, "Share-Based Compensation Plans and Awards" and Note 23, "Recently Issued Accounting Standards".

### Research and Development

All costs identified as research and development ("R&D") costs are charged to expense when incurred with the exception of third-party reimbursed and government-funded R&D. Expenses for third-party reimbursed and government-funded R&D are deferred until reimbursement is received to ensure appropriate matching of revenue and expense, provided specific criteria are met.

### Income Taxes

The provision for income taxes has been determined using the asset and liability approach of accounting for income taxes. Under this approach, deferred taxes represent the future tax consequences expected to occur when the reported amounts of assets and liabilities are recovered or paid. The provision for income taxes represents income taxes paid or

payable for the current year plus the change in deferred taxes during the year. Deferred taxes result from differences between the financial and tax bases of the Company's assets and liabilities and are adjusted for changes in tax rates and tax laws when changes are enacted. Valuation allowances are recorded to reduce deferred tax assets when it is more likely than not that a tax benefit will not be realized. Provision has been made for income taxes on unremitted earnings of subsidiaries and affiliates, except for subsidiaries in which earnings are deemed to be indefinitely reinvested.

The Company recognizes income tax positions that meet the more likely than not threshold and accrues interest related to unrecognized income tax positions which is recorded as a component of the income tax provision.

## NOTES TO THE AUDITED CONSOLIDATED FINANCIAL STATEMENTS

## Acquisition Accounting

In general, the acquisition method of accounting requires recognition of assets acquired and liabilities assumed at their respective fair values at the date of acquisition. For assets and liabilities other than intangible assets and property, plant, and equipment, the Company estimates fair value using the exit price approach which is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly market. An exit price is determined from the viewpoint of unrelated market participants as a whole, in the principal or most advantageous market, and may result in the Company valuing assets or liabilities at a fair value that is not reflective of the Company's intended use of the assets or liabilities. Any amount of the purchase price paid that is in excess of the estimated fair values of net assets acquired or liabilities assumed is recorded in the line item goodwill on the Company's consolidated balance sheets.

For intangible assets, the Company uses the income, market, or cost approach (or a combination thereof) for the valuation as appropriate, and uses valuation inputs in these models and analyses that are based on market participant assumptions. Management values property, plant, and equipment using the cost approach supported where available by observable market data which includes consideration of obsolescence. See Note 2, "Acquisitions". Management's judgment is used to determine the estimated fair values assigned to assets acquired and liabilities assumed, as well as asset lives for property, plant, and equipment and amortization periods for intangible assets, and can materially affect the Company's results of operations.

## 2.ACQUISITIONS

## Taminco Corporation

On December 5, 2014, the Company completed its acquisition of the Taminco Corporation ("Taminco"), a global specialty chemical company. In the acquisition, each outstanding share of Taminco common stock was cancelled and converted automatically into the right to receive \$26.00 in cash ("Acquisition Consideration"). Additionally, each outstanding option to acquire shares of Taminco common stock issued under any of Taminco's equity incentive plans, whether or not then vested, was converted into the right to receive, in cash and for each share of Taminco common stock subject to such option, the amount by which the value of the Acquisition Consideration exceeded such option's exercise price. The fair value of total consideration transferred was \$2.8 billion, consisting of cash of \$1.7 billion, net of cash acquired, and repayment of Taminco's debt of \$1.1 billion. The acquisition was accounted for as a business combination. Taminco's former specialty amines and crop protection businesses are now operated as part of the AFP segment and its former functional amines business is now operated as part of the CI segment. The businesses acquired from Taminco are providing additional opportunities for growth to Eastman in agriculture, personal care, coatings, and oil and gas markets.

The funding of the cash portion of the purchase price, repayment of Taminco's debt, and acquisition costs were provided primarily from borrowings, including the \$2.0 billion net proceeds from the public offering of notes on November 20, 2014 and borrowings of \$1.0 billion on December 5, 2014 under a five-year term loan agreement ("2019 Term Loan"). See Note 9, "Borrowings".

The following table summarizes the final purchase price allocation for the Taminco acquisition:

Assets acquired and liabilities assumed

| (Dollars in millions)    | As of<br>December<br>5, 2014 | 2015 Net<br>Adjustments<br>to Fair Value | December<br>31, 2015 |
|--------------------------|------------------------------|--|----------------------|
| Current assets           | \$ 266                       | \$ 1                                     | \$ 267               |
| Properties and equipment | 658                          | 3  | 661                  |

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|  |          |       |   |          |
|--|----------|-------|---|----------|
| Intangible assets                          | 1,002    | (17   | ) | 985      |
| Other noncurrent assets                    | 37       | 5     |   | 42       |
| Goodwill                                   | 1,509    | 46    |   | 1,555    |
| Current liabilities                        | (161     | ) 4   |   | (157 )   |
| Long-term liabilities                      | (546     | ) (42 | ) | (588 )   |
| Total purchase price, net of cash acquired | \$ 2,765 | \$ —  |   | \$ 2,765 |

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## NOTES TO THE AUDITED CONSOLIDATED FINANCIAL STATEMENTS

The Company used the income, market, or cost approach (or a combination thereof) for the valuation as appropriate, and used valuation inputs in these models and analyses that were based on market participant assumptions. Market participants are considered to be buyers and sellers unrelated to Eastman in the principal or most advantageous market for the asset or liability. For certain items, the carrying value was determined to be a reasonable approximation of fair value based on information available to Eastman management. Current assets consist primarily of inventory, cash, and trade receivables. The fair value and gross contractual amounts trade receivables acquired from Taminco on December 5, 2014 was \$94 million. Properties acquired included a number of manufacturing, sales, and distribution sites and related facilities, land and leased sites that include leasehold improvements, and machinery and equipment for use in manufacturing operations. Management valued properties using the cost approach supported where available by observable market data which includes consideration of obsolescence.

Acquired intangible assets are definite-lived assets and consist primarily of customer relationships, developed technologies, and contracts. Customer relationships acquired are in industries such as agriculture and personal care. The Company has concluded that it has a favorable methanol supply contract. In addition, assets acquired include technologies related to many products protected by a number of existing patents and trade secrets. Management valued customer relationships using the excess from earnings method, contracts using the Black Scholes model, and developed technologies using the relief from royalty method. All valuation methods are forms of the income approach supported by observable market data for peer chemical companies.

Intangible assets acquired

| (Dollars in millions)         | Fair Value | Weighted-Average Amortization Period (Years) |
|-------------------------------|------------|--|
| Amortizable intangible assets |            |  |
| Customer relationships        | \$ 604     | 24   |
| Developed technologies        | 201        | 17   |
| Contracts                     | 180        | 5  |
| Total                         | \$ 985     |  |

Other noncurrent assets consist primarily of deferred tax assets and investments. In connection with the acquisition, the Company recorded goodwill, which represents the excess of the purchase price over the estimated fair value of tangible and intangible assets acquired, net of liabilities assumed. The goodwill is attributed primarily to Taminco as a going concern and the fair value of expected cost synergies and revenue growth from combining the Eastman and Taminco businesses. The going concern element represents the ability to earn a higher return on the combined assembled collection of assets and businesses of Taminco than if those assets and businesses were to be acquired and managed separately. Other relevant elements of goodwill are the benefits of access to certain markets and work force. Goodwill from the Taminco acquisition has been allocated to certain of the Company's operating segments as set out in the table below. None of the goodwill is deductible for tax purposes.

Goodwill by segment

|                                 |         |
|---------------------------------|---------|
| (Dollars in millions)           |         |
| Additives & Functional Products | \$916   |
| Chemical Intermediates          | 639     |
| Total                           | \$1,555 |

Current liabilities consist primarily of trade payables, deferred tax liabilities, and accrued charges. Long-term liabilities are primarily deferred tax liabilities, pension and other postretirement welfare plan obligations, and asset retirement liabilities. Management also evaluated probable loss contingencies, including those for legal, asset retirement, and environmental matters, as prescribed under GAAP. Due to the lack of observable market inputs, assumed liabilities for asset retirement and environmental loss contingencies that were both probable and estimable were recorded based upon estimates of future cash outflows for such contingencies as of the acquisition date. See Note

13, "Environmental Matters and Asset Retirement Obligations".

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## NOTES TO THE AUDITED CONSOLIDATED FINANCIAL STATEMENTS

In 2015 and 2014, the Company recognized \$3 million and \$14 million, respectively, in transaction costs, and \$15 million and \$1 million, respectively, in integration costs. In 2014 the Company recognized \$13 million in pre-close financing costs related to the acquisition. Transaction costs and integration costs were expensed as incurred and are included in the "Selling, general and administrative expenses" line item and pre-close financing costs are included in the "Other (income) charges, net" and "Net interest expense" line items in the Consolidated Statements of Earnings, Comprehensive Income, and Retained Earnings. As required by purchase accounting, acquired inventories were marked to fair value. These inventories were sold in 2014 resulting in a \$15 million increase in cost of sales.

Beginning December 2014, the Company's consolidated results of operations included the results of the acquired Taminco businesses. Sales revenue of \$84 million and an operating loss of \$9 million from the acquired Taminco businesses were included in the Company's consolidated results of operations for 2014. The operating loss includes the additional costs of acquired inventories, transaction costs, integration costs, and pre-close financing costs.

The unaudited pro forma financial results for the years ended December 31, 2014 and 2013 combine the consolidated results of Eastman and Taminco giving effect to the acquisition of Taminco as if it had been completed on January 1, 2013, the beginning of the comparable annual reporting period prior to the year of acquisition. Such unaudited pro forma financial results do not give pro forma effect to any other transaction or event. The unaudited pro forma financial results presented below do not include any anticipated synergies or other expected benefits of the acquisition. This unaudited pro forma financial information is presented for informational purposes only and is not indicative of future operations or results had the acquisition been completed as of January 1, 2013 or any other date.

The unaudited pro forma financial results include certain adjustments for additional depreciation and amortization expense based upon the fair value step-up and estimated useful lives of Taminco depreciable fixed assets and definite-life amortizable assets acquired in the transaction. The unaudited pro forma results also include adjustments to net interest expense. The provision for income taxes from continuing operations also has been adjusted for all periods, based upon the foregoing adjustments to historical results.

|   | Years Ended<br>December 31, |          |
|---|-----------------------------|----------|
| (Unaudited, dollars in millions)              | 2014                        | 2013     |
| Pro forma sales                               | \$10,819                    | \$10,550 |
| Pro forma earnings from continuing operations | 834                         | 1,101    |

Unaudited pro forma earnings from continuing operations for 2013 have been adjusted to include certain items, such as pre-close financing, integration, and transaction costs historically recorded by Eastman and Taminco in 2014 and directly attributable to the acquisition, which will not have an ongoing impact. Additionally, the unaudited pro forma financial results for 2013 have been adjusted to reflect the additional costs of acquired inventories. These non-recurring costs have been eliminated from unaudited pro forma earnings from continuing operations for 2014.

## Commonwealth Laminating and Coating, Inc.

On December 11, 2014, the Company acquired Commonwealth Laminating and Coating, Inc. ("Commonwealth") for a total cash purchase price of \$438 million. The acquisition was accounted for as a business combination and is reported in the AM segment. The acquisition of Commonwealth strengthens the Company's window film product portfolio, adds industry leading protective film technology, and increases scale cost efficiencies. There was no change to the final purchase price allocation from the preliminary allocation in the Company's 2014 Annual Report on Form 10-K, see Note 2, "Acquisitions", to the consolidated financial statements in Part II, Item 8 of the Company's 2014 Annual Report on Form 10-K.





## NOTES TO THE AUDITED CONSOLIDATED FINANCIAL STATEMENTS

The following table summarizes the final purchase price allocation for the Commonwealth acquisition:

Assets acquired and liabilities assumed

| (Dollars in millions)   | As of<br>December<br>11, 2014 |
|-------------------------|-------------------------------|
| Current assets          | \$ 51                         |
| Machinery and equipment | 38                            |
| Goodwill                | 274                           |
| Intangible assets       | 125                           |
| Long-term liabilities   | (50 )                         |
| Total purchase price    | \$ 438                        |

Current assets consist primarily of inventory acquired. Machinery and equipment acquired included a manufacturing operation in Martinsville, Virginia. Management valued machinery and equipment using the cost approach supported by published industry sources.

Acquired intangible assets included customer relationships and developed technologies in the window film industry. Also acquired was the SunTek® brand name that is business-to-business in nature. Management valued intangible assets using the relief from royalty and multi-period excess earnings methods, both forms of the income approach supported by observable market data for peer chemical companies.

Intangible assets acquired

| (Dollars in millions)             | Fair<br>Value | Weighted-Average Amortization Period (Years) |
|-----------------------------------|---------------|--|
| Amortizable intangible assets     |               |  |
| Customer relationships            | \$ 72         | 14   |
| Developed technologies            | 41            | 18   |
| Indefinite-lived intangible asset |               |  |
| Brand name                        | 12            |  |
| Total                             | \$ 125        |  |

In connection with this acquisition, the Company recorded goodwill equal to the excess of the purchase price over the estimated fair value of net tangible and intangible assets acquired and liabilities assumed. None of the goodwill is deductible for tax purposes.

In 2014, the Company recognized \$5 million in transaction costs. In 2015 and 2014, the Company recognized \$7 million and \$2 million, respectively, in integration costs. Transaction costs and integration costs were expensed as incurred and are included in the "Selling, general and administrative expenses" line item in the Consolidated Statements of Earnings, Comprehensive Income, and Retained Earnings. As required by purchase accounting, acquired inventories were marked to fair value. In 2015, the remaining portion of these inventories was sold resulting in an increase in cost of sales of \$7 million. Approximately one fifth of these inventories were sold in December 2014 resulting in a \$1 million increase in cost of sales.

Beginning in December 2014, the Company's consolidated results of operations included the results of Commonwealth. Based on applicable accounting and reporting guidance, the acquisition is not material to the Company's consolidated financial statements; therefore, pro forma financial information has not been presented.

BP plc's Global Aviation Turbine Engine Oil Business

On June 2, 2014, the Company acquired BP plc's global aviation turbine engine oil business ("aviation turbine oil business") for a total cash purchase price of \$283 million. The acquisition was accounted for as a business combination and is reported in the AFP segment. In combination with Eastman's Skydrol® aviation hydraulic fluids business, the acquired aviation turbine oil business enables Eastman to better supply the global aviation industry.

## NOTES TO THE AUDITED CONSOLIDATED FINANCIAL STATEMENTS

There was no change to the final purchase price allocation from the preliminary allocation in the Company's 2014 Annual Report on Form 10-K, see Note 2, "Acquisitions", to the consolidated financial statements in Part II, Item 8 of the Company's 2014 Annual Report on Form 10-K.

The following table summarizes the final purchase price allocation for the aviation turbine oil business acquisition:

| Assets acquired and liabilities assumed | As of |
|---|-------|
| (Dollars in millions)                   | June  |
|   | 2,    |
|   | 2014  |
| Current assets                          | \$42  |
| Machinery and equipment                 | 10    |
| Goodwill                                | 92    |
| Intangible assets                       | 139   |
| Total purchase price                    | \$283 |

Current assets consist primarily of inventory acquired. Machinery and equipment acquired included manufacturing operations in Linden, New Jersey and technology resources in Naperville, Illinois. Management valued machinery and equipment using the cost approach supported by published industry sources.

In connection with this acquisition, the Company recorded goodwill equal to the excess of the purchase price over the estimated fair value of net tangible and intangible assets acquired and liabilities assumed. All goodwill is expected to be deductible for tax purposes.

Intangible assets acquired included brands that are business-to-business in nature. Also acquired were customer relationships in the aviation industry. Management valued intangible assets using the relief from royalty and multi-period excess earnings methods, both forms of the income approach supported by observable market data for peer chemical companies.

## Intangible Assets acquired

| (Dollars in millions)         | Fair Value | Weighted-Average Amortization Period (Years) |
|-------------------------------|------------|--|
| Amortizable intangible assets |            |  |
| Brands                        | \$ 74      | 30   |
| Customer relationships        | 65         | 16   |
| Total                         | \$ 139     |  |

In 2014, the Company recognized \$3 million in transaction costs. In 2015 and 2014, the Company recognized \$1 million and \$3 million, respectively, in integration costs. Transaction costs and integration costs were expensed as incurred and are included in the "Selling, general and administrative expenses" line item in the Consolidated Statements of Earnings, Comprehensive Income, and Retained Earnings. As required by purchase accounting, acquired inventories were marked to fair value. These inventories were sold in 2014 resulting in an \$8 million increase in cost of sales.

Beginning in June 2014, the Company's consolidated results of operations included the results of the acquired aviation turbine oil business. Based on applicable accounting and reporting guidance, the acquisition is not material to the Company's consolidated financial statements; therefore, pro forma financial information has not been presented.



## NOTES TO THE AUDITED CONSOLIDATED FINANCIAL STATEMENTS

## Knowlton Technologies, LLC

On August 6, 2014, the Company acquired Knowlton Technologies, LLC. ("Knowlton"), a leader in the design, accelerated prototyping, and manufacture of wet-laid nonwovens in filtration, friction, and custom designed composite webs, for a total cash purchase price of \$42 million. The acquisition was accounted for as a business combination. The acquired Knowlton business is a developing business of the Eastman microfiber technology platform, the financial results of which are not identifiable to an operating segment and included in "Other". Current assets consisted primarily of \$14 million in accounts receivable and inventory acquired. Management valued properties and equipment, totaling \$19 million, using the cost approach supported where available by observable market data which includes consideration of obsolescence. Goodwill of \$7 million, which represents the excess of the purchase price over the estimated fair value of net tangible and intangible assets acquired and liabilities assumed, is expected to be deductible for tax purposes. Acquired intangible assets of \$6 million consist primarily of developed technologies with an amortization period of 15 years. Management valued intangible assets using the relief from royalty method, a form of the income approach supported by observable market data from peer chemical companies. Current liabilities of \$4 million consisted primarily of accounts payable. Values assigned were finalized in 2014.

## 3. INVENTORIES

| (Dollars in millions)                     | December 31, |         |
|---|--------------|---------|
|   | 2016         | 2015    |
| Finished goods                            | \$997        | \$1,063 |
| Work in process                           | 198          | 212     |
| Raw materials and supplies                | 473          | 500     |
| Total inventories at FIFO or average cost | 1,668        | 1,775   |
| Less: LIFO reserve                        | 264          | 296     |
| Total inventories                         | \$1,404      | \$1,479 |

Inventories valued on the LIFO method were approximately 60 percent of total inventories at both December 31, 2016 and 2015.

## 4. PROPERTIES AND ACCUMULATED DEPRECIATION

| (Dollars in millions)            | December 31, |          |
|----------------------------------|--------------|----------|
|                                  | 2016         | 2015     |
| Properties                       |              |          |
| Land                             | \$157        | \$163    |
| Buildings and building equipment | 1,256        | 1,148    |
| Machinery and equipment          | 9,646        | 9,333    |
| Construction in progress         | 640          | 590      |
| Properties and equipment at cost | \$11,699     | \$11,234 |
| Less: Accumulated depreciation   | 6,423        | 6,104    |
| Net properties                   | \$5,276      | \$5,130  |

Depreciation expense was \$412 million, \$402 million, and \$355 million for 2016, 2015, and 2014, respectively.

Cumulative construction-period interest of \$169 million and \$163 million, reduced by accumulated depreciation of \$111 million and \$107 million, is included in net properties at December 31, 2016 and 2015, respectively.

The Company capitalized \$7 million of interest in each year 2016, 2015, and 2014.



## NOTES TO THE AUDITED CONSOLIDATED FINANCIAL STATEMENTS

## 5. GOODWILL AND OTHER INTANGIBLE ASSETS

In first quarter 2016, as a result of the changes in Eastman's organizational and management structure, goodwill was reassigned to operating segments using a relative fair value allocation. In conjunction with the organizational changes, during first quarter 2016 Eastman performed an impairment assessment and concluded that no indication of an impairment existed. For further information on the organizational changes, see Note 1, "Significant Accounting Policies", and Note 20, "Segment Information".

Changes in the carrying amount of goodwill follow:

| (Dollars in millions)   | Additives<br>&<br>Functional<br>Products | Adhesives<br>&<br>Plasticizers | Advanced Chemical<br>Materials | Chemical<br>Intermediates | Other<br>Segments | Total   |
|---|--|--------------------------------|--------------------------------|---------------------------|-------------------|---------|
| Balance at December 31, 2014  | \$ 1,858                                 | \$ 118                         | \$ 1,297                       | \$ 1,200                  | \$ 13             | \$4,486 |
| Impairments   | —  | —                              | —                              | —                         | (3 )              | (3 )    |
| Adjustments resulting from the finalization of fair values related to the Taminco acquisition | 8  | —                              | —                              | 38                        | —                 | 46      |
| Currency translation adjustments and other  | (1 )                                     | (7 )                           | (4 )                           | 1                         | —                 | (11 )   |
| Balance at December 31, 2015  | \$ 1,865                                 | \$ 111                         | \$ 1,293                       | \$ 1,239                  | \$ 10             | \$4,518 |
| Transfers of goodwill resulting from resegmentation   | 583                                      | (111 )                         | —                              | (472 )                    | —                 | —       |
| Currency translation adjustments <sup>(1)</sup>   | (32 )                                    | —                              | (18 )                          | (7 )                      | —                 | (57 )   |
| Balance at December 31, 2016  | \$ 2,416                                 | \$ —                           | \$ 1,275                       | \$ 760                    | \$ 10             | \$4,461 |

<sup>(1)</sup> See Note 1, "Significant Accounting Policies", regarding correction of prior period foreign currency translation.

As of December 31, 2016, the reported balance of goodwill included accumulated impairment losses of \$23 million, \$12 million, and \$14 million in the AFP segment, CI segment, and other segments, respectively. As of December 31, 2015, the reported balance of goodwill included accumulated impairment losses of \$35 million and \$14 million in the Adhesives & Plasticizers segment and other segments, respectively.

The carrying amount of intangible assets follow:

|                                     |                                | December 31, 2016    |                          |                    | December 31, 2015    |                          |                    |
|-------------------------------------|--------------------------------|----------------------|--------------------------|--------------------|----------------------|--------------------------|--------------------|
| (Dollars in millions)               | Estimated Useful Life in Years | Gross Carrying Value | Accumulated Amortization | Net Carrying Value | Gross Carrying Value | Accumulated Amortization | Net Carrying Value |
| Amortizable intangible assets:      |                                |                      |                          |                    |                      |                          |                    |
| Customer relationships              | 15 - 25                        | \$1,542              | \$ 267                   | \$ 1,275           | \$1,547              | \$ 187                   | \$ 1,360           |
| Technology                          | 7 - 20                         | 675                  | 196                      | 479                | 680                  | 146                      | 534                |
| Contracts                           | 5                              | 180                  | 75                       | 105                | 180                  | 39                       | 141                |
| Other                               | 5 - 37                         | 99                   | 14                       | 85                 | 99                   | 10                       | 89                 |
| Indefinite-lived intangible assets: |                                |                      |                          |                    |                      |                          |                    |
| Tradenames                          |                                | 525                  | —                        | 525                | 526                  | —                        | 526                |
| Total identified intangible assets  |                                | \$3,021              | \$ 552                   | \$ 2,469           | \$3,032              | \$ 382                   | \$ 2,650           |

Amortization expense of definite-lived intangible assets related to continuing operations was \$166 million, \$163 million, and \$90 million for 2016, 2015, and 2014, respectively. Estimated amortization expense for future periods is \$165 million in each year for 2017 through 2019 and \$125 million in each year for 2020 through 2021.





## NOTES TO THE AUDITED CONSOLIDATED FINANCIAL STATEMENTS

As a result of the annual impairment testing of indefinite-lived intangible assets in 2015, the Company recognized intangible asset impairments of \$18 million on tradenames. See Note 16, "Asset Impairments and Restructuring", for additional information regarding impairments of tradenames.

## 6. EQUITY INVESTMENTS

In June 2016, Eastman sold its 50 percent interest in Primester, a joint venture which manufactures cellulose acetate at the Company's Kingsport, Tennessee site, to an affiliate of the joint venture partner for \$35 million. This investment was accounted for under the equity method. Eastman's net investment in the joint venture at the date of sale was \$18 million. Such amounts were included in "Other noncurrent assets" in the Unaudited Consolidated Statements of Financial Position and the gain of \$17 million was recorded in "Other charges (income), net" in the Unaudited Consolidated Statements of Earnings, Comprehensive Income and Retained Earnings.

Eastman owns 50 percent or less interest in other joint ventures which are accounted for under the equity method and included in "Other noncurrent assets". These include a 50 percent interest in a joint venture that has a manufacturing facility in Nanjing, China. The Nanjing facility produces Eastotac<sup>®</sup> hydrocarbon tackifying resins for pressure-sensitive adhesives, caulks, and sealants. These also include a joint venture with a 50 percent interest for the manufacture of compounded cellulose diacetate ("CDA") in Shenzhen, China. CDA is a bio-derived material, which is used in various injection molded applications, including but not limited to ophthalmic frames, tool handles, and other end use products. The Company owns a 45 percent interest in a joint venture with China National Tobacco Corporation that manufactures acetate tow in Hefei, China, for which the Company supplies 100 percent of the acetate flake raw material to the joint venture from the Company's manufacturing facility in Kingsport, Tennessee. Eastman also acquired in the Taminco acquisition, a 50 percent interest in a joint venture with Mitsubishi Gas Chemical Company in Nanjing, China, which manufactures amines and amine derivatives. At December 31, 2016 and 2015, the Company's investment in these joint ventures was approximately \$107 million and \$97 million, respectively.

## 7. PAYABLES AND OTHER CURRENT LIABILITIES

| (Dollars in millions)   | December 31, |          |
|---|--------------|----------|
|   | 2016         | 2015     |
| Trade creditors   | \$ 704       | \$ 699   |
| Accrued payrolls, vacation, and variable-incentive compensation | 196          | 227      |
| Accrued taxes   | 106          | 80       |
| Post-employment obligations                                     | 110          | 120      |
| Derivative hedging liability                                    | 72           | 218      |
| Other   | 324          | 281      |
| Total payables and other current liabilities                    | \$ 1,512     | \$ 1,625 |

The "Other" above consists primarily of accruals for other miscellaneous payables, dividends payable, interest payable, and the current portion of environmental liabilities.

## NOTES TO THE AUDITED CONSOLIDATED FINANCIAL STATEMENTS

## 8. PROVISION FOR INCOME TAXES

Components of earnings from continuing operations before income taxes and the provision (benefit) for U.S. and other income taxes from continuing operations follow:

| (Dollars in millions)   | For years ended<br>December 31, |         |       |
|---|---------------------------------|---------|-------|
|   | 2016                            | 2015    | 2014  |
| Earnings from continuing operations before income taxes                     |                                 |         |       |
| United States   | \$422                           | \$618   | \$627 |
| Outside the United States   | 627                             | 511     | 363   |
| Total   | \$1,049                         | \$1,129 | \$990 |
| Provision (benefit) for income taxes on earnings from continuing operations |                                 |         |       |
| United States Federal   |                                 |         |       |
| Current   | \$(80 )                         | \$87    | \$64  |
| Deferred  | 214                             | 119     | 135   |
| Outside the United States   |                                 |         |       |
| Current   | 91                              | 59      | 66    |
| Deferred  | (18 )                           | 16      | (35 ) |
| State and other   |                                 |         |       |
| Current   | 2                               | 22      | 6     |
| Deferred  | (19 )                           | (28 )   | (1 )  |
| Total   | \$190                           | \$275   | \$235 |

The following represents the deferred tax charge (benefit) recorded as a component of accumulated other comprehensive loss in stockholders' equity:

| (Dollars in millions)  | For years ended<br>December 31, |      |         |
|--|---------------------------------|------|---------|
|  | 2016                            | 2015 | 2014    |
| Defined benefit pension and other postretirement benefit plans | \$21                            | \$42 | \$(11 ) |
| Cumulative translation adjustment                              | —                               | —    | —       |
| Derivatives and hedging  | 105                             | 21   | (141 )  |
| Total  | \$126                           | \$63 | \$(152) |

Total income tax expense (benefit) included in the consolidated financial statements was composed of the following:

| (Dollars in millions)      | For years ended<br>December 31, |       |        |
|----------------------------|---------------------------------|-------|--------|
|                            | 2016                            | 2015  | 2014   |
| Continuing operations      | \$190                           | \$275 | \$235  |
| Discontinued operations    | —                               | —     | 2      |
| Other comprehensive income | 126                             | 63    | (152 ) |
| Total                      | \$316                           | \$338 | \$85   |

## NOTES TO THE AUDITED CONSOLIDATED FINANCIAL STATEMENTS

Differences between the provision for income taxes on earnings from continuing operations and income taxes computed using the U.S. Federal statutory income tax rate follow:

|  | For years ended<br>December 31, |       |        |
|--|---------------------------------|-------|--------|
| (Dollars in millions)                    | 2016                            | 2015  | 2014   |
| Amount computed using the statutory rate | \$366                           | \$393 | \$345  |
| State income taxes, net                  | (18 )                           | (3 )  | 4      |
| Foreign rate variance                    | (121 )                          | (93 ) | (105 ) |
| Domestic manufacturing deduction         | (7 )                            | (12 ) | (6 )   |
| Change in reserves for tax contingencies | —                               | (7 )  | (6 )   |
| General business credits                 | (20 )                           | (15 ) | (8 )   |
| U.S. tax on foreign earnings             | 25                              | 7     | 5      |
| Other                                    | (35 )                           | 5     | 6      |
| Provision for income taxes               | \$190                           | \$275 | \$235  |
| Effective income tax rate                | 18 %                            | 24 %  | 24 %   |

The 2016 effective tax rate was lower than 2015 due to a benefit in the foreign rate variance as a result of higher earnings in foreign jurisdictions partially offset by a reduction in the U.S. federal tax manufacturing deduction due to a decrease in domestic taxable income. The 2016 effective tax rate included a tax benefit of \$16 million related to foreign tax credits as a result of the amendment of prior year income tax returns, a \$16 million one-time benefit for the restoration of tax basis for which depreciation deductions were previously limited, and a \$9 million tax benefit primarily due to adjustments to the tax provision to reflect the finalization of 2014 foreign income tax returns.

The 2015 effective tax rate reflected a benefit from both the U.S. federal tax manufacturing deduction, due to an increase in domestic taxable income, and increased U.S. federal tax credits compared to 2014. This was offset by a reduction in the foreign rate variance as a result of an unfavorable shift in foreign income to higher tax jurisdictions and limited benefit from the asset impairment of the Workington, UK acetate tow manufacturing facility. Both years reflect a benefit from the extension of favorable U.S. federal tax provisions, which resulted in a net benefit of approximately \$15 million primarily related to R&D credits and deferral of certain earnings of foreign subsidiaries from U.S. income taxes.

## NOTES TO THE AUDITED CONSOLIDATED FINANCIAL STATEMENTS

The significant components of deferred tax assets and liabilities follow:

| (Dollars in millions)   | December 31, |           |
|---|--------------|-----------|
|   | 2016         | 2015      |
| Deferred tax assets   |              |           |
| Post-employment obligations                                       | \$378        | \$471     |
| Net operating loss carryforwards                                  | 337          | 349       |
| Tax credit carryforwards  | 248          | 276       |
| Environmental reserves  | 119          | 122       |
| Unrealized derivative loss  | 50           | 162       |
| Other   | 186          | 193       |
| Total deferred tax assets   | 1,318        | 1,573     |
| Less valuation allowance  | 278          | 254       |
| Deferred tax assets less valuation allowance                      | \$1,040      | \$1,319   |
| Deferred tax liabilities  |              |           |
| Property, plant, and equipment                                    | \$(1,237)    | \$(1,176) |
| Intangible assets   | (847 )       | (902 )    |
| Other   | (128 )       | (142 )    |
| Total deferred tax liabilities                                    | \$(2,212)    | \$(2,220) |
| Net deferred tax liabilities                                      | \$(1,172)    | \$(901 )  |
| As recorded in the Consolidated Statements of Financial Position: |              |           |
| Other noncurrent assets   | \$34         | \$27      |
| Deferred income tax liabilities                                   | (1,206 )     | (928 )    |
| Net deferred tax liabilities                                      | \$(1,172)    | \$(901 )  |

Unremitted earnings of subsidiaries outside the United States, considered to be reinvested indefinitely, totaled approximately \$2.1 billion at December 31, 2016. It is not practicable to determine the deferred tax liability for temporary differences related to those unremitted earnings.

For certain consolidated foreign subsidiaries, income and losses directly flow through to taxable income in the United States. These entities are also subject to taxation in the foreign tax jurisdictions. Net operating loss carryforwards exist to offset future taxable income in foreign tax jurisdictions and valuation allowances are provided to reduce deferred related tax assets if it is more likely than not that this benefit will not be realized. Changes in the estimated realizable amount of deferred tax assets associated with net operating losses for these entities could result in changes in the deferred tax asset valuation allowance in the foreign tax jurisdiction. At the same time, because these entities are also subject to tax in the United States, a deferred tax liability for the expected future taxable income will be established concurrently. Therefore, the impact of any reversal of valuation allowances on consolidated income tax expense will be only to the extent that there are differences between the United States statutory tax rate and the tax rate in the foreign jurisdiction. A valuation allowance of \$18 million at December 31, 2016 has been provided against the deferred tax asset resulting from these operating loss carryforwards.

At December 31, 2016, foreign net operating loss carryforwards totaled \$914 million. Of this total, \$49 million will expire in 1 to 20 years and \$865 million have no expiration date. A valuation allowance of approximately \$209 million has been provided against such net operating loss carryforwards.

At December 31, 2016, federal net operating loss carryforwards of \$20 million were available to offset future taxable income, which expire from 2027 to 2030. At December 31, 2016, foreign tax credit carryforwards of approximately \$140 million were available to reduce possible future U.S. income taxes and which expire from 2017 to 2021.

A partial valuation allowance of \$45 million has been provided for Solutia's state net operating loss carryforwards. The valuation allowance will be retained until there is sufficient positive evidence to conclude that it is more likely than not that the deferred tax assets will be realized or the related statute expires.

## NOTES TO THE AUDITED CONSOLIDATED FINANCIAL STATEMENTS

As a result of the Solutia acquisition transaction, Solutia realized a change of ownership for purposes of Section 382 of the Internal Revenue Code. Management does not currently expect this change to significantly limit the Company's ability to utilize Solutia's U.S. foreign tax credit carryforwards estimated to be approximately \$140 million at December 31, 2016.

Amounts due to and from tax authorities as recorded in the Consolidated Statements of Financial Position:

|  | December<br>31, |       |
|--|-----------------|-------|
| (Dollars in millions)                  | 2016            | 2015  |
| Miscellaneous receivables              | \$235           | \$ 92 |
| Payables and other current liabilities | \$56            | \$ 33 |
| Other long-term liabilities            | 60              | 32    |
| Total income taxes payable             | \$116           | \$ 65 |

A reconciliation of the beginning and ending amounts of unrecognized tax benefits is as follows:

| (Dollars in millions)                                      | 2016  | 2015                 | 2014  |
|--|-------|----------------------|-------|
| Balance at January 1                                       | \$125 | \$117                | \$51  |
| Adjustments based on tax positions related to current year | (7 )  | (12 ) <sup>(1)</sup> | —     |
| Additions based on acquisitions                            | —     | 27                   | 72    |
| Lapse of statute of limitations                            | (4 )  | (7 )                 | (6 )  |
| Settlements  | —     | —                    | —     |
| Balance at December 31                                     | \$114 | \$125                | \$117 |

<sup>(1)</sup> Revised from Note 8, "Provision For Income Taxes" to the Company's 2015 Annual Report on Form 10-K, which incorrectly reported Additions based on tax positions related to current year as zero.

As of December 31, 2016, 2015, and 2014, \$114 million, \$125 million, and \$117 million, respectively, of unrecognized tax benefits would, if recognized, impact the Company's effective tax rate.

Interest, net of tax, related to unrecognized tax benefits is recorded as a component of income tax expense. As of January 1, 2016, the Company had accrued a liability of \$4 million for interest, net of tax, and had accrued \$1 million for estimated tax penalties, net of tax benefit. During 2016, the Company recognized \$1 million of expense for interest, net of tax, and no penalties associated with unrecognized tax benefits, offset by \$1 million of income for interest, net of tax, and no penalties, net of tax, associated with the expiration of the statute of limitations. At December 31, 2016, the Company had accrued balances of \$4 million for interest, net of tax benefit, and \$1 million for penalties, net of tax benefit.

As of January 1, 2015, the Company had accrued a liability of \$4 million for interest, net of tax, and had \$3 million for tax penalties, net of tax benefit. During 2015, the Company recognized \$2 million of expense for interest, net of tax, and no penalties associated with unrecognized tax benefits, offset by \$2 million of income for interest, net of tax, and \$2 million of penalties, net of tax, associated with the expiration of the statute of limitations. At December 31, 2015, the Company had accrued balances of \$4 million for interest, net of tax benefit, and \$1 million for penalties, net of tax benefit.

As of January 1, 2014, the Company had accrued a liability of \$4 million for interest, net of tax, and had \$3 million for tax penalties, net of tax benefit. During 2014, the Company recognized \$1 million of expense for interest, net of tax, and no penalties associated with unrecognized tax benefits, offset by \$1 million of income for interest, net of tax, associated with the expiration of the statute of limitations. At December 31, 2014, the Company had accrued balances of \$4 million for interest, net of tax benefit, and \$3 million for penalties, net of tax benefit.

The Company files income tax returns in the United States and various state and foreign jurisdictions. The Company is no longer subject to U.S. Federal income tax examinations by tax authorities for years before 2011 and 2002 for Eastman and Solutia, respectively. With few exceptions, Eastman is no longer subject to state and local income tax examinations by tax authorities for years before 2010. Solutia and related subsidiaries are no longer subject to state and local income tax examinations for years before 2000. With few exceptions, the Company is no longer subject to foreign income tax examinations by tax authorities for tax years before 2007.



## NOTES TO THE AUDITED CONSOLIDATED FINANCIAL STATEMENTS

It is reasonably possible that, within the next twelve months, as a result of the resolution of federal, state, and foreign examinations and appeals, and the expiration of various statutes of limitation, unrecognized tax benefits could decrease by up to \$20 million.

## 9. BORROWINGS

|                                    | December 31, |         |
|------------------------------------|--------------|---------|
| (Dollars in millions)              | 2016         | 2015    |
| Borrowings consisted of:           |              |         |
| 2.4% notes due June 2017           | \$—          | \$998   |
| 6.30% notes due November 2018      | —            | 166     |
| 5.5% notes due November 2019       | 249          | 249     |
| 2.7% notes due January 2020        | 796          | 794     |
| 4.5% notes due January 2021        | 184          | 249     |
| 3.6% notes due August 2022         | 741          | 896     |
| 1.50% notes due May 2023           | 786          | —       |
| 7 1/4% debentures due January 2024 | 197          | 244     |
| 7 5/8% debentures due June 2024    | 43           | 54      |
| 3.8% notes due March 2025          | 689          | 791     |
| 1.875% notes due November 2026     | 519          | —       |
| 7.60% debentures due February 2027 | 195          | 222     |
| 4.8% notes due September 2042      | 493          | 492     |
| 4.65% notes due October 2044       | 870          | 869     |
| Credit facilities borrowings       | 549          | 550     |
| Commercial paper borrowings        | 280          | 430     |
| Capital leases                     | 3            | 4       |
| Total borrowings                   | 6,594        | 7,008   |
| Borrowings due within one year     | 283          | 431     |
| Long-term borrowings               | \$6,311      | \$6,577 |

In November 2016, the Company sold additional euro-denominated 1.50% notes due May 2023 in the principal amount of €200 million (\$213 million) and euro-denominated 1.875% notes due November 2026 in the principal amount of €500 million (\$534 million). Net proceeds from the euro-denominated notes were €695 million (\$742 million). In conjunction with the euro-denominated public debt offerings, the Company contemporaneously designated these borrowings as a non-derivative hedge of a portion of its net investment in one of its euro functional currency denominated subsidiaries. For further information, see Note 10, "Derivative and Non-Derivative Financial Instruments".

In fourth quarter 2016, proceeds from the notes and the second five-year term loan agreement ("2021 Term Loan") borrowings (see "Credit Facility and Commercial Paper Borrowings") were used for the early and full repayment of the 2.4% notes due June 2017 (\$500 million principal) and 6.30% notes due November 2018 (\$160 million principal) as well as the partial redemptions of 4.5% notes due January 2021 (\$65 million principal), 3.6% notes due August 2022 (\$150 million principal), 7 1/4% debentures due January 2024 (\$47 million principal), 7 5/8% debentures due June 2024 (\$11 million principal), 3.8% notes due March 2025 (\$100 million principal), and 7.60% debentures due February 2027 (\$28 million principal). Total consideration for these redemptions were \$1,119 million (\$1,061 million total principal and \$58 million for the early redemption premiums) and are reported as financing activities on the Consolidated Statements of Cash Flows. The early repayment resulted in a charge of \$76 million for early debt extinguishment costs and related derivatives and hedging items. The early debt extinguishment costs were primarily attributable to the early redemption premium and related unamortized costs. For further information on the related derivatives and hedging items, see Note 10, "Derivative and Non-Derivative Financial Instruments". The book value

of the redeemed debt was \$1,061 million.

## NOTES TO THE AUDITED CONSOLIDATED FINANCIAL STATEMENTS

On May 26, 2016, the Company sold euro-denominated 1.50% notes due May 2023 in the principal amount of €550 million (\$614 million). Proceeds from the sale of the notes, net of transaction costs, were €544 million (\$607 million) and were used for the early repayment of \$500 million of 2.4% notes due June 2017 and repayment of other borrowings. Total consideration for the partial redemption of 2.4% notes due June 2017 was \$507 million (\$500 million for the principal amount and \$7 million for the early redemption premium) and are reported as financing activities on the Consolidated Statements of Cash Flows. The early repayment resulted in a charge of \$9 million for early debt extinguishment costs primarily attributable to the early redemption premium and related unamortized costs. The book value of the redeemed debt was \$498 million. In conjunction with the euro-denominated public debt offering, the Company contemporaneously designated these borrowings as a non-derivative hedge of a portion of its net investment in one of its euro functional currency denominated subsidiaries. For further information, see Note 10, "Derivative and Non-Derivative Financial Instruments".

In December 2015, the Company repaid the \$250 million principal amount of the 3% notes due 2015 using available cash and other borrowings.

#### Credit Facility and Commercial Paper Borrowings

In connection with the 2014 acquisition of Taminco, Eastman borrowed \$1.0 billion under the 2019 Term Loan. As of December 31, 2016, the 2019 Term Loan agreement balance outstanding was \$250 million with an interest rate of 2.02 percent. In second quarter 2016, \$100 million of the Company's borrowings under the 2019 Term Loan were repaid using available cash. As of December 31, 2015, the 2019 Term Loan agreement balance outstanding was \$350 million with an interest rate of 1.67 percent. In December 2016, the Company borrowed \$300 million under the 2021 Term Loan. As of December 31, 2016, the 2021 Term Loan balance outstanding was \$299 million, net of debt issue costs, with an interest rate of 1.95 percent. Borrowings under the 2019 Term Loan and 2021 Term Loan agreements are subject to interest at varying spreads above quoted market rates.

The Company has access to a \$1.25 billion revolving credit agreement (the "Credit Facility") expiring October 2021. Borrowings under the Credit Facility are subject to interest at varying spreads above quoted market rates and a commitment fee is paid on the total unused commitment. The Credit Facility provides liquidity support for commercial paper borrowings and general corporate purposes. Commercial paper borrowings are classified as short-term. At December 31, 2016 and 2015, the Company had no outstanding borrowings under the Credit Facility. At December 31, 2016, the Company's commercial paper borrowings were \$280 million with a weighted average interest rate of 1.12 percent. At December 31, 2015, the Company's commercial paper borrowings were \$430 million with a weighted average interest rate of 0.80 percent.

The Company has access to a \$250 million accounts receivable securitization agreement (the "A/R Facility") that expires April 2019. Eastman Chemical Financial Corporation ("ECFC"), a subsidiary of the Company, has an agreement to sell interests in trade receivables under the A/R Facility to a third party purchaser. Third party creditors of ECFC have first priority claims on the assets of ECFC before those assets would be available to satisfy the Company's general obligations. Borrowings under the A/R Facility are subject to interest rates based on a spread over the lender's borrowing costs, and ECFC pays a fee to maintain availability of the A/R Facility. At December 31, 2016, the Company had no borrowings under the A/R Facility. In 2016, \$400 million of borrowings under the A/R Facility was repaid and \$200 million borrowed. At December 31, 2015, the Company's borrowings under the A/R Facility were \$200 million supported by trade receivables with an interest rate of 1.11 percent.

The Credit and A/R Facilities and the other borrowing agreements contain a number of customary covenants and events of default, including requirements to maintain certain financial ratios. The Company was in compliance with all such covenants for all periods presented. Total available borrowings under the Credit and A/R Facilities were \$1.50 billion as of December 31, 2016. Changes in available borrowings were primarily due to repayment of borrowings

under the A/R Facility. The Company would not have violated applicable covenants for these periods if the total available amounts of the facilities had been borrowed.

## NOTES TO THE AUDITED CONSOLIDATED FINANCIAL STATEMENTS

## Fair Value of Borrowings

The Company has classified its long-term borrowings at December 31, 2016 and 2015 under the fair value hierarchy as defined in the accounting policies in Note 1, "Significant Accounting Policies". The fair value for fixed-rate borrowings is based on current market prices and is classified in Level 1. The fair value for the Company's floating-rate borrowings, which relate to the term loans, the A/R Facility, and capital leases, equals the carrying value and is classified within Level 2.

## Fair Value Measurements at December 31, 2016

| (Dollars in millions) | Recorded<br>Amount<br>December<br>31, 2016 | Total<br>Fair<br>Value | Quoted<br>Prices in<br>Active<br>Markets<br>for<br>Identical<br>Assets<br>(Level 1) | Significant<br>Other<br>Observable<br>Inputs<br>(Level 2) | Significant<br>Unobservable<br>Inputs (Level<br>3) |
|-----------------------|--|------------------------|---|---|--|
| Long-term borrowings  | \$ 6,311                                   | \$6,586                | \$ 6,036  | \$ 550  | \$ —   |

## Fair Value Measurements at December 31, 2015

| (Dollars in millions) | Recorded<br>Amount<br>December<br>31, 2015 | Total<br>Fair<br>Value | Quoted<br>Prices in<br>Active<br>Markets<br>for<br>Identical<br>Assets<br>(Level 1) | Significant<br>Other<br>Observable<br>Inputs<br>(Level 2) | Significant<br>Unobservable<br>Inputs (Level<br>3) |
|-----------------------|--|------------------------|---|---|--|
| Long-term borrowings  | \$ 6,577                                   | \$6,647                | \$ 6,094  | \$ 553  | \$ —   |

## 10. DERIVATIVE AND NON-DERIVATIVE FINANCIAL INSTRUMENTS

## Overview of Hedging Programs

The Company is exposed to market risks, such as changes in foreign currency exchange rates, commodity prices, and interest rates. To mitigate these market risks and their effects on the cash flows of the underlying transactions and investments in foreign subsidiaries, the Company uses various derivative and non-derivative financial instruments when appropriate in accordance with the Company's hedging strategy and policies. Designation is performed on a specific exposure basis to support hedge accounting. The Company does not enter into derivative transactions for speculative purposes.

## Cash Flow Hedges

Cash flow hedges are derivative instruments designated as and used to hedge the exposure to variability in expected future cash flows that are attributable to a particular risk. The derivative instruments that are designated and qualify as a cash flow hedge are recorded on the balance sheet at fair value and the changes in fair value of these hedging instruments are offset in part or in whole by corresponding changes in the anticipated cash flows of the underlying exposures being hedged. The effective portion of qualifying hedges are reported as a component of AOCI located in

the Consolidated Statements of Financial Position and reclassified into earnings in the same period or periods during which the hedged transaction affects earnings. Gains and losses on the derivatives representing either hedge ineffectiveness or hedge components excluded from the assessment of effectiveness are recognized in current earnings.

#### Foreign Currency Exchange Rate Hedging

The Company manufactures and sells its products in a number of countries throughout the world and, as a result, is exposed to changes in foreign currency exchange rates. To manage the volatility relating to these exposures, the Company nets the exposures on a consolidated basis to take advantage of natural offsets. To manage the remaining exposure, from time to time, the Company enters into currency option and forward cash flow hedges to hedge probable anticipated, but not yet committed, export sales and purchase transactions expected within a rolling three year period and denominated in foreign currencies (principally the euro and Japanese yen). Additionally, the Company enters into forward exchange contract cash flow hedges to hedge certain firm commitments denominated in foreign currencies.

## NOTES TO THE AUDITED CONSOLIDATED FINANCIAL STATEMENTS

### Commodity Hedging

Certain raw material and energy sources used by the Company, as well as sales of certain commodity products by the Company, are subject to price volatility caused by weather, supply and demand conditions, economic variables and other unpredictable factors. This volatility is primarily related to the market pricing of propane, ethane, natural gas, paraxylene, ethylene, and benzene. In order to mitigate expected fluctuations in market prices, from time to time the Company enters into option and forward contracts and designates these contracts as cash flow hedges. The Company currently hedges commodity price risks using derivative financial instrument transactions within a rolling three year period beyond its current fiscal year. The Company weights its hedge portfolio more heavily in the first year with declining coverage over the remaining periods.

### Interest Rate Hedging

The Company's policy is to manage interest expense using a mix of fixed and variable rate debt. To manage interest rate risk effectively, the Company, from time to time, enters into cash flow interest rate derivative instruments, primarily forward starting swaps and treasury locks, to hedge the Company's exposure to movements in interest rates prior to anticipated debt offerings. These instruments are designated as cash flow hedges and are typically 100 percent effective. As a result, there is normally no impact on earnings due to hedge ineffectiveness.

### Fair Value Hedges

Fair value hedges are defined as derivative or non-derivative instruments designated as and used to hedge the exposure to changes in the fair value of an asset or a liability or an identified portion thereof that is attributable to a particular risk. The derivative instruments that are designated and qualify as fair value hedges are recorded on the balance sheet at fair value and the changes in fair value of these hedging instruments are offset in part or in whole by corresponding changes in the anticipated cash flows of the underlying exposures being hedged. The effective portion of qualifying hedges are reclassified into earnings in the same period or periods during which the hedged transaction affects earnings. Gains and losses on the derivatives representing hedge ineffectiveness are recognized in current earnings.

### Interest Rate Hedging

The Company's policy is to manage interest expense using a mix of fixed and variable rate debt. To manage the Company's mix of fixed and variable rate debt effectively, the Company, from time to time, enters into interest rate swaps in which the Company agrees to exchange the difference between fixed and variable interest amounts calculated by reference to an agreed upon notional principal amount. These swaps are designated as hedges of the fair value of the underlying debt obligations and the interest rate differential is reflected as an adjustment to interest expense over the life of the swaps. As these instruments are 100 percent effective, there is normally no impact on earnings due to hedge ineffectiveness.

In second quarter 2016, the Company entered into a fixed-to-floating interest rate swap on a portion of the 3.8% notes due March 2025 in order to manage the Company's mix of fixed and variable rate debt.

### Net Investment Hedges

Net investment hedges are defined as derivative or non-derivative instruments designated as and used to hedge the foreign currency exposure of the net investment in certain foreign operations. The effective portion of the gain or loss on the net investment hedges are reported as a component of the CTA within OCI located in the Consolidated Statements of Earnings, Comprehensive Income and Retained Earnings. Gains and losses representing either hedge

ineffectiveness or hedge components excluded from the assessment of effectiveness are recognized in current earnings.

In fourth quarter 2016, contemporaneous with its November 2016 sale of additional euro-denominated 1.50% notes due May 2023 in the principal amount of €200 million (\$213 million) and euro-denominated 1.875% notes due November 2026 in the principal amount of €500 million (\$534 million), the Company designated these borrowings as non-derivative hedges of a portion of their net investment in one of their euro functional currency denominated subsidiaries to protect the designated net investment against foreign currency fluctuations.

In second quarter 2016, contemporaneous with its May 2016 sale of euro-denominated 1.50% notes due May 2023 in the principal amount of €550 million (\$614 million), the Company designated these borrowings as a non-derivative hedge of a portion of its net investment in one of its euro functional currency denominated subsidiaries to protect the designated net investment against foreign currency fluctuations.



## NOTES TO THE AUDITED CONSOLIDATED FINANCIAL STATEMENTS

## Summary of Financial Position and Financial Performance of Hedging Instruments

The following table shows the notional amounts outstanding at December 31, 2016 and 2015 associated with the Company's hedging programs.

| Notional Outstanding | December 31,<br>2016 | December 31,<br>2015 |
|----------------------|----------------------|----------------------|
|----------------------|----------------------|----------------------|

## Derivatives designated as cash flow hedges:

## Foreign Exchange Forward and Option Contracts

(in millions)

|   |        |        |
|---|--------|--------|
| EUR/USD (in EUR)                        | €378   | €618   |
| EUR/USD (in approximate USD equivalent) | \$398  | \$689  |
| JPY/USD (in JPY)                        | ¥1,800 | ¥2,400 |
| JPY/USD (in approximate USD equivalent) | \$15   | \$20   |

## Commodity Forward and Collar Contracts

|  |    |       |
|--|----|-------|
| Feedstock (in million barrels)                                       | 11 | 22    |
| Energy (in million million british thermal units)                    | 23 | 32    |
| Interest rate swaps for the future issuance of debt<br>(in millions) | —  | \$500 |

## Derivatives designated as fair value hedges:

|  |      |   |
|--|------|---|
| Fixed-for-floating interest rate swaps (in millions) | \$75 | — |
|--|------|---|

## Non-derivatives designated as net investment hedges:

## Foreign Currency Net Investment Hedges (in millions)

|                  |        |   |
|------------------|--------|---|
| EUR/USD (in EUR) | €1,238 | — |
|------------------|--------|---|

## NOTES TO THE AUDITED CONSOLIDATED FINANCIAL STATEMENTS

The following table shows the financial assets and liabilities valued on a recurring and gross basis as of December 31, 2016 and 2015. Additionally, the table below represents where the derivatives are included within the Consolidated Statements of Financial Position. During the periods presented, there were no transfers between fair value hierarchy levels.

The Financial Position and Gross Fair Value Measurements of Hedging Instruments  
(Dollars in millions)

| Derivative Type                                 | Statements of Financial<br>Position Location | December<br>31, 2016<br>Level 2 | December<br>31, 2015<br>Level 2 |
|---|--|---------------------------------|---------------------------------|
| Derivatives designated as cash flow hedges:     |  |                                 |                                 |
| Commodity contracts                             | Other current assets                         | \$ 5                            | \$ —                            |
| Commodity contracts                             | Other noncurrent assets                      | 2                               | —                               |
| Foreign exchange contracts                      | Other current assets                         | 49                              | 65                              |
| Foreign exchange contracts                      | Other noncurrent assets                      | 47                              | 79                              |
| Derivatives designated as fair value hedges:    |  |                                 |                                 |
| Fixed-for-floating interest rate swap           | Other current assets                         | 1                               | —                               |
| Total Derivative Assets on Gross Basis          |  | \$ 104                          | \$ 144                          |
| Derivatives designated as cash flow hedges:     |  |                                 |                                 |
| Commodity contracts                             | Payables and other current liabilities       | \$ 62                           | \$ 194                          |
| Commodity contracts                             | Other long-term liabilities                  | 69                              | 242                             |
| Forward starting interest rate swaps            | Other long-term liabilities                  | —                               | 30                              |
| Derivatives designated as fair value hedges:    |  |                                 |                                 |
| Fixed-for-floating interest rate swap           | Long-term borrowings                         | 4                               | —                               |
| Total Derivative Liabilities on Gross Basis     |  | \$ 135                          | \$ 466                          |
| Total Net Derivative Liabilities on Gross Basis |  | \$ 31                           | \$ 322                          |

In addition to the fair value associated with derivative instruments designated as cash flow hedges and fair value hedges noted in the table above, the Company had a carrying value of \$1,305 million associated with non-derivative instruments designated as foreign currency net investment hedges as of December 31, 2016. There were no non-derivative instruments designated as foreign currency net investment hedges outstanding as of December 31, 2015. The designated foreign currency-denominated borrowings are included as part of "Long-term borrowings" within the Consolidated Statements of Financial Position.

All of the Company's derivative contracts are subject to master netting arrangements, or similar agreements, which provide for the option to settle contracts on a net basis when they settle on the same day and in the same currency. In addition, these arrangements provide for a net settlement of all contracts with a given counterparty in the event that the arrangement is terminated due to the occurrence of default or a termination event. The Company has elected to present the derivative contracts on a gross basis in the Consolidated Statements of Financial Position. Had it chosen to present the derivatives contracts on a net basis, it would have a derivative in a net asset position of \$103 million and a derivative in a net liability position of \$134 million as of December 31, 2016. The Company does not have any cash collateral due under such agreements.

## Fair Value Measurements

For additional information on fair value measurement, see Note 1, "Significant Accounting Policies".

The fair value principles prioritize valuation inputs across three broad levels. Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities. Level 2 inputs are quoted prices for similar assets and liabilities in active markets or inputs that are observable for the asset or liability, either directly or indirectly through market corroborations, for substantially the full term of the financial instrument. Level 3 inputs are unobservable inputs based on the Company's assumptions used to measure assets and liabilities at fair value.

## NOTES TO THE AUDITED CONSOLIDATED FINANCIAL STATEMENTS

All of the Company's derivative assets and liabilities are currently classified as Level 2. Level 2 fair value is based on estimates using standard pricing models. These standard pricing models use inputs that are derived from or corroborated by observable market data such as interest rate yield curves and currency spot and forward rates. The fair value of commodity contracts is derived using forward curves supplied by an industry recognized and unrelated third party. In addition, on an ongoing basis, the Company tests a subset of its valuations against valuations received from the transaction's counterparty to validate the accuracy of its standard pricing models. Counterparties to these derivative contracts are highly rated financial institutions which the Company believes carry minimal risk of nonperformance and the Company diversifies its positions among such counterparties in order to reduce its exposure to counterparty risk and credit losses. The Company monitors the creditworthiness of its counterparties on an on-going basis. The Company did not realize a credit loss during the year ended December 31, 2016 and 2015.

From time to time, the Company holds Level 3 assets for commodity hedges. The fair values of Level 3 instruments are determined using pricing data similar to that used in Level 2 financial instruments described above, and reflect adjustments for less liquid markets or longer contractual terms. Level 3 hedges typically will mature within one year or less. The Company determines the fair value of Level 3 ethylene derivative forward contracts using an average of unadjusted forward ethylene prices provided by industry recognized experts to value its ethylene positions.

The table below presents a rollforward of activity for the level 3 inputs for the period ended December 31, 2016 and 2015:

## Fair Value Measurements Using Level 3 Inputs

| Commodity Contracts                                     | December 31, 2016 |
|---|-------------------|
| (Dollars in millions)                                   | 2015              |
| Beginning balance at January 1                          | \$ — \$ 2         |
| Realized gain in sales revenue                          | — 4               |
| Change in unrealized loss in Other Comprehensive Income | — (2 )            |
| Purchases, sales and settlements                        | — (4 )            |
| Ending balance at December 31                           | \$ — \$ —         |

## NOTES TO THE AUDITED CONSOLIDATED FINANCIAL STATEMENTS

The table below presents the effect of hedging instruments on OCI and the financial performance for the twelve months ended December 31, 2016 and 2015:

| (Dollars in millions)   | Change in amount of after tax gain/(loss) recognized in OCI on Derivatives (effective portion) |      | Pre-tax amount of gain/(loss) reclassified from Accumulated OCI into income (effective portion) |       | Additional gain/(loss) recognized in earnings (effective portion) |      | Income Statement Classification |
|---|--|------|---|-------|---|------|---------------------------------|
|   | December 31  | 2015 | December 31   | 2015  | December 31   | 2015 |                                 |
| Hedging Relationships   | 2016   | 2015 | 2016  | 2015  | 2016  | 2015 |                                 |
| Derivatives in cash flow hedging relationships:                 |  |      |   |       |   |      |                                 |
| Commodity contracts   | \$ —   | \$ — | \$ —  | \$ 4  | \$ —  | \$ — | Sales                           |
| Commodity contracts   | 193  | 26   | (168)   | (217) | —   | —    | Cost of sales                   |
| Foreign exchange contracts                                      | (29)   | 13   | 63  | 86    | —   | —    | Sales                           |
| Forward starting interest rate and treasury lock swap contracts | (2)  | (4)  | (7)   | (7)   | —   | —    | Net interest expense            |
| Derivatives in fair value hedging relationships:                |  |      |   |       |   |      |                                 |
| Fixed-for-floating interest rate swaps                          | —  | —    | —   | —     | 11  | 13   | Net interest expense            |
| Non-derivatives in net investment hedging relationships:        |  |      |   |       |   |      |                                 |
| Net investment hedges (pre-tax)                                 | 43   | —    | —   | —     | —   | —    | N/A                             |
| Nonqualifying derivatives <sup>(1)</sup> :                      |  |      |   |       |   |      |                                 |
| Foreign Exchange Contracts                                      | —  | —    | —   | —     | (34)  | (28) | Other (income) charges, net     |

The gains or losses on nonqualifying derivatives or derivatives that are not designated as hedges are marked to

<sup>(1)</sup> market and represent foreign exchange derivatives denominated in multiple currencies and are transacted and settled in the same quarter.

Pre-tax monetized positions and MTM gains and losses from raw materials and energy, currency, and certain interest rate hedges that were included in AOCI included losses of \$57 million at December 31, 2016 and losses of \$376 million at December 31, 2015. Losses in AOCI decreased in 2016 compared to 2015 as a result of an increase in commodity prices, particularly propane, and a decrease in foreign currency exchange rates, particularly the euro. If realized, approximately \$12 million in pre-tax losses will be reclassified into earnings during the next 12 months.

Any ineffective portions associated with the hedging programs are immediately recognized in earnings. The Company recognized pre-tax losses for ineffectiveness of the commodity hedging portfolio of \$3 million during the twelve months ended 2016.

In fourth quarter 2016 as a result of the early repayments of borrowings, the Company settled the notional amount of \$500 million associated with the 2017 forward starting interest rate swap, which had a MTM loss on the settlement date of \$44 million and was included as part of investing activities in the Consolidated Statements of Cash Flows. The early repayment of borrowings resulted in a charge of \$18 million for cash flow hedges and a gain of \$4 million for fair value hedges, which is included within the \$76 million of debt extinguishment costs and related derivatives and

hedging items on the Consolidated Statements of Earnings, Comprehensive Income and Retained Earnings. For further information, see Note 9, "Borrowings".

With the exception of the ineffectiveness items previously noted, there was no material ineffectiveness associated with the remaining hedging programs during the twelve months ended 2016 or 2015.

## NOTES TO THE AUDITED CONSOLIDATED FINANCIAL STATEMENTS

### 11. RETIREMENT PLANS

As described in more detail below, Eastman offers various postretirement benefits to its employees.

#### Defined Contribution Plans

The Company sponsors a defined contribution employee stock ownership plan (the "ESOP"), which is a component of the Eastman Investment Plan and Employee Stock Ownership Plan ("EIP/ESOP"), a plan under Section 401(a) of the Internal Revenue Code. Eastman made a contribution in February 2017 to the EIP/ESOP for substantially all U.S. employees equal to 5 percent of their eligible compensation for the 2016 plan year. Employees may allocate contributions to other investment funds within the EIP from the ESOP at any time without restrictions. Allocated shares in the ESOP totaled 2,183,950; 2,199,000; and 2,197,740 shares as of December 31, 2016, 2015, and 2014, respectively. Dividends on shares held by the EIP/ESOP are charged to retained earnings. All shares held by the EIP/ESOP are treated as outstanding in computing earnings per share.

In 2006, the Company amended its EIP/ESOP to provide a Company match of 50 percent of the first 7 percent of an employee's compensation contributed to the plan for employees who are hired on or after January 1, 2007. Employees who are hired on or after January 1, 2007, are also eligible for the contribution to the ESOP as described above.

Charges for domestic contributions to the EIP/ESOP were \$63 million, \$62 million, and \$56 million for 2016, 2015, and 2014, respectively.

#### Defined Benefit Pension Plans and Other Postretirement Benefit Plans

##### Pension Plans

Eastman maintains defined benefit pension plans that provide eligible employees with retirement benefits.

Effective January 1, 2000, the Company's Eastman Retirement Assistance Plan, a U.S. defined benefit pension plan, was amended. Employees' accrued pension benefits earned prior to January 1, 2000 are calculated based on previous plan provisions using the employee's age, years of service, and final average compensation as defined in the plans. The amended plan uses a pension equity formula to calculate an employee's retirement benefits from January 1, 2000 forward. Benefits payable will be the combined pre-2000 and post-1999 benefits. Employees hired on or after January 1, 2007 are not eligible to participate in Eastman's U.S. defined benefit pension plans.

In December 2014, as part of its acquisition of Taminco, the Company assumed Taminco's non-U.S. defined benefit pension plans in Belgium and Finland. For more information on this acquisition, see Note 2, "Acquisitions".

Benefits are paid to employees from trust funds. Contributions to the trust funds are made as permitted by laws and regulations. The pension trust funds do not directly own any of the Company's common stock.

Pension coverage for employees of Eastman's non-U.S. operations is provided, to the extent deemed appropriate, through separate plans. The Company systematically provides for obligations under such plans by depositing funds with trustees, under insurance policies, or by book reserves.

##### Other Postretirement Benefit Plans

Under its other postretirement benefit plans, Eastman provides a subsidy for life insurance, health care, and dental benefits to eligible retirees hired prior to January 1, 2007, and a subsidy for health care and dental benefits to retirees'

eligible survivors. In general, Eastman provides those benefits to retirees eligible under the Company's U.S. plans. Similar benefits are also made available to retirees of Holston Defense Corporation, a wholly-owned subsidiary of the Company that, prior to January 1, 1999, operated a government-owned ammunition plant.

Employees in the U.S. hired on or after January 1, 2007 do not have access to postretirement health care benefits. A few of the Company's non-U.S. operations have supplemental health benefit plans for certain retirees, the cost of which is not significant to the Company.

In December 2014, as part of its acquisition of Taminco, the Company assumed Taminco's U.S. postretirement benefit plan. For more information on this acquisition, see Note 2, "Acquisitions".



## NOTES TO THE AUDITED CONSOLIDATED FINANCIAL STATEMENTS

Below is a summary balance sheet of the change in plan assets during 2016 and 2015, the funded status of the plans, amounts recognized in the Consolidated Statements of Financial Position, and a summary of amounts recognized in accumulated other comprehensive income.

## Summary of Changes

| (Dollars in millions)   | Pension Plans |           |              |           | Postretirement Benefit Plans |           |
|---|---------------|-----------|--------------|-----------|------------------------------|-----------|
|   | 2016<br>U.S.  | Non-U.S.  | 2015<br>U.S. | Non-U.S.  | 2016                         | 2015      |
| Change in projected benefit obligation:   |               |           |              |           |                              |           |
| Benefit obligation, beginning of year   | \$2,262       | \$ 763    | \$2,356      | \$ 867    | \$853                        | \$1,014   |
| Service cost  | 39            | 12        | 39           | 15        | 5                            | 8         |
| Interest cost   | 74            | 23        | 87           | 26        | 27                           | 39        |
| Actuarial (gain) loss   | 38            | 123       | (31)         | (50)      | 12                           | (13)      |
| Curtailment gain  | —             | —         | —            | (4)       | —                            | (2)       |
| Settlement  | (54)          | ) —       | —            | —         | —                            | —         |
| Acquisitions  | —             | —         | —            | (10)      | —                            | —         |
| Plan amendments and other   | 2             | —         | —            | —         | (106)                        | (140)     |
| Plan participants' contributions  | —             | 1         | —            | 2         | 14                           | 15        |
| Effect of currency exchange   | —             | (100)     | ) —          | (61)      | —                            | (2)       |
| Federal subsidy on benefits paid  | —             | —         | —            | —         | 1                            | 1         |
| Benefits paid   | (220)         | ) (21)    | ) (189)      | ) (22)    | ) (69)                       | ) (67)    |
| Benefit obligation, end of year   | \$2,141       | \$ 801    | \$2,262      | \$ 763    | \$737                        | \$853     |
| Change in plan assets:  |               |           |              |           |                              |           |
| Fair value of plan assets, beginning of year  | \$1,887       | \$ 650    | \$1,968      | \$ 699    | \$157                        | \$176     |
| Actual return on plan assets  | 142           | 103       | (23)         | 7         | 12                           | (1)       |
| Effect of currency exchange   | —             | (84)      | ) —          | (48)      | —                            | —         |
| Company contributions   | 204           | 18        | 131          | 21        | 39                           | 34        |
| Reserve for third party contributions   | —             | —         | —            | —         | (5)                          | (1)       |
| Plan participants' contributions  | —             | 1         | —            | 2         | 14                           | 15        |
| Benefits paid   | (220)         | ) (21)    | ) (189)      | ) (22)    | ) (69)                       | ) (67)    |
| Federal subsidy on benefits paid  | —             | —         | —            | —         | 1                            | 1         |
| Settlements   | (54)          | ) —       | —            | —         | —                            | —         |
| Acquisitions  | —             | —         | —            | (9)       | —                            | —         |
| Fair value of plan assets, end of year  | \$1,959       | \$ 667    | \$1,887      | \$ 650    | \$149                        | \$157     |
| Funded status at end of year  | \$(182)       | ) \$(134) | ) \$(375)    | ) \$(113) | ) \$(588)                    | ) \$(696) |
| Amounts recognized in the Consolidated Statements of Financial Position consist of: |               |           |              |           |                              |           |
| Other noncurrent assets   | \$3           | \$ —      | \$ —         | \$ 7      | \$30                         | \$19      |
| Current liabilities   | (7)           | ) (1)     | ) (3)        | —         | (42)                         | (43)      |
| Post-employment obligations   | (178)         | ) (133)   | ) (372)      | (120)     | (576)                        | (672)     |
| Net amount recognized, end of year  | \$(182)       | ) \$(134) | ) \$(375)    | ) \$(113) | ) \$(588)                    | ) \$(696) |
| Accumulated benefit obligation  | \$2,030       | \$ 753    | \$2,146      | \$ 721    |                              |           |
| Amounts recognized in accumulated other comprehensive income consist of:            |               |           |              |           |                              |           |
| Prior service (credit) cost   | \$(3)         | ) \$ 2    | \$(10)       | ) \$ 2    | \$(262)                      | \$(200)   |



## NOTES TO THE AUDITED CONSOLIDATED FINANCIAL STATEMENTS

Information for pension plans with projected benefit obligations in excess of plan assets:

| (Dollars in millions)        | 2016     |          | 2015     |          |
|------------------------------|----------|----------|----------|----------|
|                              | U.S.     | Non-U.S. | U.S.     | Non-U.S. |
| Projected benefit obligation | \$ 1,865 | \$ 801   | \$ 2,262 | \$ 622   |
| Fair value of plan assets    | 1,680    | 667      | 1,887    | 501      |

Information for pension plans with accumulated benefit obligations in excess of plan assets:

| (Dollars in millions)          | 2016     |          | 2015     |          |
|--------------------------------|----------|----------|----------|----------|
|                                | U.S.     | Non-U.S. | U.S.     | Non-U.S. |
| Projected benefit obligation   | \$ 1,865 | \$ 557   | \$ 2,262 | \$ 622   |
| Accumulated benefit obligation | 1,754    | 535      | 2,146    | 584      |
| Fair value of plan assets      | 1,680    | 434      | 1,887    | 501      |

Components of net periodic benefit (credit) cost were as follows:

## Summary of Benefit Costs and Other Amounts Recognized in Other Comprehensive Income

| (Dollars in millions)  | Pension Plans |          |        |          |        |          | Postretirement Benefit Plans |       |        |
|--|---------------|----------|--------|----------|--------|----------|------------------------------|-------|--------|
|  | 2016          |          | 2015   |          | 2014   |          | 2016                         | 2015  | 2014   |
|  | U.S.          | Non-U.S. | U.S.   | Non-U.S. | U.S.   | Non-U.S. |                              |       |        |
| Components of net periodic benefit (credit) cost:  |               |          |        |          |        |          |                              |       |        |
| Service cost   | \$39          | \$ 12    | \$39   | \$ 15    | \$40   | \$ 14    | \$5                          | \$8   | \$8    |
| Interest cost  | 74            | 23       | 87     | 26       | 100    | 31       | 27                           | 39    | 45     |
| Expected return on plan assets   | (138)         | (32 )    | (148 ) | (37 )    | (143 ) | (38 )    | (6 )                         | (6 )  | (7 )   |
| Curtailment gain <sup>(1)</sup>  | —             | —        | —      | (7 )     | —      | —        | —                            | (2 )  | —      |
| Amortization of:   |               |          |        |          |        |          |                              |       |        |
| Prior service cost (credit)  | (4 )          | —        | (4 )   | 1        | (4 )   | —        | (44 )                        | (24 ) | (24 )  |
| Mark-to-market pension and other postretirement benefits (gain) loss, net                      | 34            | 52       | 140    | (20 )    | 166    | 95       | 11                           | (5 )  | 43     |
| Net periodic benefit (credit) cost   | \$5           | \$ 55    | \$114  | \$ (22 ) | \$159  | \$ 102   | \$ (7 )                      | \$10  | \$65   |
| Other changes in plan assets and benefit obligations recognized in other comprehensive income: |               |          |        |          |        |          |                              |       |        |
| Curtailment gain   | \$—           | \$ —     | \$—    | \$ (3 )  | \$—    | \$ —     | \$—                          | \$—   | \$—    |
| Current year prior service credit (cost)   | (3 )          | —        | —      | —        | —      | —        | 106                          | 140   | —      |
| Amortization of:   |               |          |        |          |        |          |                              |       |        |
| Prior service cost (credit)  | (4 )          | —        | (4 )   | 1        | (4 )   | —        | (44 )                        | (24 ) | (24 )  |
| Total  | \$(7 )        | \$ —     | \$(4 ) | \$ (2 )  | \$(4 ) | \$ —     | \$62                         | \$116 | \$(24) |

<sup>(1)</sup> Gain of \$7 million in 2015 in the Fibers segment related to the remeasurement of the Workington, UK pension plan, triggered by the closure of the Workington, UK acetate tow manufacturing facility.

## NOTES TO THE AUDITED CONSOLIDATED FINANCIAL STATEMENTS

In fourth quarter 2016, the Company changed benefits provided to retirees by an Eastman other postretirement benefit plan which triggered a remeasurement of the plan's obligation. The remeasurement resulted in a pre-tax reduction in the accumulated postretirement benefit obligation of approximately \$106 million which will be amortized as a prior service credit from accumulated other comprehensive income over approximately eight years. The remeasurement was included in the 2016 year end remeasurement process.

In third quarter 2016, the Company announced a change to a UK defined benefit pension plan which triggered an interim remeasurement of the plan obligation resulting in a MTM loss of \$30 million. The MTM loss was primarily due to a lower discount rate at the third quarter 2016 remeasurement date compared to December 31, 2015. The lower discount rate was reflective of changes in global market conditions and interest rates on high-grade corporate bonds. The plan was remeasured in fourth quarter 2016 as part of the annual MTM remeasurement process.

In first quarter 2016, the Company changed the approach used to calculate service and interest cost components of net periodic benefit costs for its significant defined benefit pension and other postretirement benefit plans. The Company elected to calculate service and interest costs by applying the specific spot rates along the yield curve to the plans' projected cash flows. The change does not affect the measurement of the total benefit obligation or the annual net periodic benefit cost or credit of the plans because the change in the service and interest costs will be offset in the MTM actuarial gain or loss which typically is recognized in the fourth quarter of each year or in any other quarters in which an interim remeasurement is triggered. The change in the approach for full-year 2016 pre-tax expense was an increase to service cost of approximately \$2 million and a reduction in interest cost of approximately \$22 million compared to the previous method. The net reduction of approximately \$20 million was offset by a MTM loss as part of the annual remeasurement of the plans in fourth quarter 2016.

In fourth quarter 2015, the Company changed benefits provided to retirees by the Eastman other postretirement benefit plan which triggered a remeasurement of the plan's obligation. The remeasurement resulted in a reduction in the accumulated postretirement benefit obligation of approximately \$140 million which will be amortized as a prior service credit from accumulated other comprehensive income over approximately eight years. The remeasurement was included in the 2015 year end remeasurement process.

The estimated prior service credit for the U.S. pension and other postretirement benefit plans that will be amortized from accumulated other comprehensive income into net periodic cost in 2017 is \$4 million and \$40 million, respectively.

## NOTES TO THE AUDITED CONSOLIDATED FINANCIAL STATEMENTS

The assumptions used to develop the projected benefit obligation for the Company's significant U.S. and non-U.S. defined benefit pension plans and U.S. postretirement benefit plans are provided in the following tables.

|   | Pension Plans |          |        |          |        |          | Postretirement Benefit Plans |        |        |
|---|---------------|----------|--------|----------|--------|----------|------------------------------|--------|--------|
| Weighted-average assumptions used to determine benefit obligations for years ended December 31: | 2016          | 2015     | 2014   |          |        |          | 2016                         | 2015   | 2014   |
|   | U.S.          | Non-U.S. | U.S.   | Non-U.S. | U.S.   | Non-U.S. |                              |        |        |
| Discount rate   | 3.89 %        | 2.33 %   | 4.13 % | 3.26 %   | 3.80 % | 3.10 %   | 3.91 %                       | 4.17 % | 3.91 % |
| Rate of compensation increase   | 3.25 %        | 2.94 %   | 3.50 % | 3.00 %   | 3.50 % | 3.24 %   | 3.25 %                       | 3.50 % | 3.50 % |
| Health care cost trend  |               |          |        |          |        |          |                              |        |        |
| Initial   |               |          |        |          |        |          | 7.00 %                       | 7.50 % | 7.50 % |
| Decreasing to ultimate trend of in year   |               |          |        |          |        |          | 5.00 %                       | 5.00 % | 5.00 % |
|   |               |          |        |          |        |          | 2021                         | 2021   | 2020   |
| Weighted-average assumptions used to determine net periodic cost for years ended December 31:   | 2016          | 2015     | 2014   |          |        |          | 2016                         | 2015   | 2014   |
|   | U.S.          | Non-U.S. | U.S.   | Non-U.S. | U.S.   | Non-U.S. |                              |        |        |
| Discount rate   | 4.13 %        | 3.26 %   | 3.80 % | 3.10 %   | 4.59 % | 4.18 %   | 4.17 %                       | 3.91 % | 4.75 % |
| Discount rate for service cost  | 4.13 %        | 3.26 %   | 3.80 % | 3.10 %   | 4.59 % | 4.18 %   | 4.57 %                       | 3.91 % | 4.75 % |
| Discount rate for interest cost   | 3.33 %        | 3.26 %   | 3.80 % | 3.10 %   | 4.59 % | 4.18 %   | 3.42 %                       | 3.91 % | 4.75 % |
| Expected return on assets   | 7.60 %        | 5.11 %   | 7.78 % | 5.50 %   | 7.83 % | 5.78 %   | 3.75 %                       | 3.75 % | 3.75 % |
| Rate of compensation increase   | 3.50 %        | 3.00 %   | 3.50 % | 3.24 %   | 3.50 % | 3.49 %   | 3.50 %                       | 3.50 % | 3.50 % |
| Health care cost trend  |               |          |        |          |        |          |                              |        |        |
| Initial   |               |          |        |          |        |          | 7.50 %                       | 7.50 % | 8.00 % |
| Decreasing to ultimate trend of in year   |               |          |        |          |        |          | 5.00 %                       | 5.00 % | 5.00 % |
|   |               |          |        |          |        |          | 2021                         | 2020   | 2020   |

A seven percent rate of increase in per capita cost of covered health care benefits is assumed for 2017. The rate is assumed to decrease gradually to five percent in 2021 and remain at that level thereafter. A one percent increase or decrease in health care cost trend would have had no material impact on the 2016 service and interest costs or the 2016 benefit obligation, because the Company's contributions for benefits are fixed.

The Company performed a five year experience study on assumptions for the U.S. plans in 2014 which included a review of the mortality tables. As a result of the study, the Company continues to use the RP-2000 table with scale AA static improvement scale and no collar adjustment as it most closely aligns with the Company's experience.

The fair value of plan assets for the U.S. pension plans at December 31, 2016 and 2015 was \$2.0 billion and \$1.9 billion, respectively, while the fair value of plan assets at December 31, 2016 and 2015 for non-U.S. pension plans was \$667 million and \$650 million, respectively. At December 31, 2016 and 2015, the expected weighted-average long-term rate of return on U.S. pension plan assets was 7.49 percent and 7.60 percent, respectively. The expected weighted-average long-term rate of return on non-U.S. pension plans assets was 5.02 percent and 5.11 percent at December 31, 2016 and 2015, respectively.

## NOTES TO THE AUDITED CONSOLIDATED FINANCIAL STATEMENTS

The following charts reflect the fair value of the defined benefit pension plans assets as of December 31, 2016 and 2015.

(Dollars in millions)

## Fair Value Measurements at December 31, 2016

| Description  | December 31, 2016 |          | Fair Value Measurements at December 31, 2016                   |          |   |          |   |          |
|--|-------------------|----------|--|----------|---|----------|---|----------|
|  |                   |          | Quoted Prices in Active Markets for Identical Assets (Level 1) |          | Significant Other Observable Inputs (Level 2) |          | Significant Unobservable Inputs (Level 3) |          |
|  | U.S.              | Non-U.S. | U.S.   | Non-U.S. | U.S.  | Non-U.S. | U.S.                                      | Non-U.S. |
| Pension Assets:  |                   |          |  |          |   |          |   |          |
| Cash & Cash Equivalents <sup>(1)</sup>                 | \$41              | \$ 25    | \$41   | \$ 25    | \$ —  | \$ —     | \$ —                                      | \$ —     |
| Public Equity - United States <sup>(2)</sup>           | 4                 | —        | 4  | —        | —   | —        | —   | —        |
| Other Investments <sup>(3)</sup>                       | —                 | 44       | —  | —        | —   | —        | —   | 44       |
| Total Assets at Fair Value                             | \$45              | \$ 69    | \$45   | \$ 25    | \$ —  | \$ —     | \$ —                                      | \$ 44    |
| Investments Measured at Net Asset Value <sup>(4)</sup> | 1,914             | 598      |  |          |   |          |   |          |
| Total Assets   | \$1,959           | \$ 667   |  |          |   |          |   |          |

(Dollars in millions)

## Fair Value Measurements at December 31, 2015

| Description  | December 31, 2015 |          | Fair Value Measurements at December 31, 2015                   |          |   |          |   |          |
|--|-------------------|----------|--|----------|---|----------|---|----------|
|  |                   |          | Quoted Prices in Active Markets for Identical Assets (Level 1) |          | Significant Other Observable Inputs (Level 2) |          | Significant Unobservable Inputs (Level 3) |          |
|  | U.S.              | Non-U.S. | U.S.   | Non-U.S. | U.S.  | Non-U.S. | U.S.                                      | Non-U.S. |
| Pension Assets:  |                   |          |  |          |   |          |   |          |
| Cash & Cash Equivalents <sup>(1)</sup>                 | \$66              | \$ 7     | \$66   | \$ 7     | \$ —  | \$ —     | \$ —                                      | \$ —     |
| Other Investments <sup>(3)</sup>                       | —                 | 42       | —  | —        | —   | —        | —   | 42       |
| Total Assets at Fair Value                             | \$66              | \$ 49    | \$66   | \$ 7     | \$ —  | \$ —     | \$ —                                      | \$ 42    |
| Investments Measured at Net Asset Value <sup>(4)</sup> | 1,821             | 601      |  |          |   |          |   |          |
| Total Assets   | \$1,887           | \$ 650   |  |          |   |          |   |          |

(1) Cash & Cash Equivalents: Amounts are generally invested in actively managed collective trust funds or interest bearing accounts.

(2) Public Equity - United States: Amount for common stock equity securities which are primarily valued using a market approach based on the quoted market prices.

Other Investments: Primarily consist of insurance contract which are generally valued using a crediting rate that approximates market returns and invest in underlying securities whose market values are unobservable and determined using pricing models, discounted cash flow methodologies, or similar techniques.

(3) Investments Measured at Net Asset Value: The underlying debt and public equity investments in this category are generally held in common trust funds, which are either actively or passively managed investment vehicles, that are valued at the net asset value per unit/share multiplied by the number of units/shares held as of the measurement date. The other alternative investments in this category are valued under the practical expedient method which is based on the most recently reported net asset value provided by the management of each private investment fund, adjusted as appropriate, for any lag between the date of the financial reports and the measurement date. The disclosure of investments measured at net asset value, as a practical expedient for fair value, have been conformed to the disclosure provisions under updates to fair value measurement issued in 2015.

## NOTES TO THE AUDITED CONSOLIDATED FINANCIAL STATEMENTS

The following charts reflect the fair value of the postretirement benefit plan assets as of December 31, 2016 and 2015. The postretirement benefit plan is for the voluntary employees' beneficiary association ("VEBA") trust the Company assumed as part of the Solutia acquisition.

| (Dollars in millions)                  |                   | Fair Value Measurements at<br>December 31, 2016  |        |   |   |
|--|-------------------|--|--------|---|---|
| Description                            | December 31, 2016 | Quoted<br>Prices<br>in<br>Active<br>Markets<br>for<br>Identical<br>Assets<br>(Level 1) |        | Significant<br>Other<br>Observable<br>Inputs<br>(Level 2) |   |
|  |                   |  |        | Significant<br>Unobservable<br>Inputs<br>(Level 3)        |   |
| Postretirement Benefit Plan Assets:    |                   |  |        |   |   |
| Cash & Cash Equivalents <sup>(1)</sup> | \$ 3              | \$ 3   | \$ —   | \$ —  | — |
| Debt <sup>(2)</sup> :                  |                   |  |        |   |   |
| Fixed Income (U.S.)                    | 82                | —  | 82     | —   | — |
| Fixed Income (Non-U.S.)                | 30                | —  | 30     | —   | — |
| Total                                  | \$ 115            | \$ 3   | \$ 112 | \$ —  | — |

| (Dollars in millions)               |                   | Fair Value Measurements at<br>December 31, 2015  |        |   |   |
|-------------------------------------|-------------------|--|--------|---|---|
| Description                         | December 31, 2015 | Quoted<br>Prices<br>in<br>Active<br>Markets<br>for<br>Identical<br>Assets<br>(Level 1) |        | Significant<br>Other<br>Observable<br>Inputs<br>(Level 2) |   |
|                                     |                   | Significant<br>Unobservable<br>Inputs<br>(Level 3)                                     |        |   |   |
| Postretirement Benefit Plan Assets: |                   |  |        |   |   |
| Debt <sup>(2)</sup> :               |                   |  |        |   |   |
| Fixed Income (U.S.)                 | \$ 86             | \$ —   | \$ 86  | \$ —  | — |
| Fixed Income (Non-U.S.)             | 34                | —  | 34     | —   | — |
| Total                               | \$ 120            | \$ —   | \$ 120 | \$ —  | — |

(1) Cash & Cash Equivalents: Amounts are generally invested in actively managed collective trust funds or interest bearing accounts.

Debt: The fixed income securities are primarily valued upon a market approach, using matrix pricing and considering a security's relationship to other securities for which quoted prices in an active market may be available, or an income approach, converting future cash flows to a single present value amount. Inputs used in developing fair value estimates include reported trades, broker quotes, benchmark yields, and base spreads

## NOTES TO THE AUDITED CONSOLIDATED FINANCIAL STATEMENTS

The Company valued assets with unobservable inputs (Level 3), primarily insurance contracts, using a crediting rate that approximates market returns and invest in underlying securities whose market values are unobservable and determined using pricing models, discounted cash flow methodologies, or similar techniques.

| (Dollars in millions)               | Fair Value Measurements Using Significant Unobservable Inputs (Level 3) Other Investments <sup>(1)</sup> |                        |
|-------------------------------------|--|------------------------|
|                                     | U.S. Pension Plans   | Non-U.S. Pension Plans |
| Balance at December 31, 2014        | \$ 4   | \$ 55                  |
| Distributions                       | (4 )   | —                      |
| Unrealized gains                    | —  | (5 )                   |
| Purchases, contributions, and other | —  | (8 )                   |
| Balance at December 31, 2015        | —  | 42                     |
| Distributions                       | —  | —                      |
| Unrealized gains                    | —  | 2                      |
| Purchases, contributions, and other | —  | —                      |
| Balance at December 31, 2016        | \$ —   | \$ 44                  |

<sup>(1)</sup> Primarily consists of insurance contracts.

The following chart reflects the target allocation for the Company's U.S. and non-U.S. pension and postretirement benefit plans assets for 2017 and the asset allocation at December 31, 2016 and 2015, by asset category. The postretirement benefit plan is for the VEBA trust the Company assumed as part of the Solutia acquisition.

| Asset category    | U.S. Pension Plans |                                  |                                  | Non-U.S. Pension Plans |                                  |                                  | Postretirement Benefit Plan |                                  |                                  |
|-------------------|--------------------|----------------------------------|----------------------------------|------------------------|----------------------------------|----------------------------------|-----------------------------|----------------------------------|----------------------------------|
|                   | Target Allocation  | Plan Assets at December 31, 2016 | Plan Assets at December 31, 2015 | Target Allocation      | Plan Assets at December 31, 2016 | Plan Assets at December 31, 2015 | Target Allocation           | Plan Assets at December 31, 2016 | Plan Assets at December 31, 2015 |
| Equity securities | 45%                | 47%                              | 44%                              | 33%                    | 30%                              | 36%                              | —%                          | —%                               | —%                               |
| Debt securities   | 39%                | 41%                              | 41%                              | 47%                    | 52%                              | 46%                              | 100%                        | 100%                             | 100%                             |
| Real estate       | 3%                 | 2%                               | 4%                               | 2%                     | 2%                               | 2%                               | —%                          | —%                               | —%                               |
| Other investments | 13%                | 10%                              | 11%                              | 18%                    | 16%                              | 16%                              | —%                          | —%                               | —%                               |
| (1)               |                    |                                  |                                  |                        |                                  |                                  |                             |                                  |                                  |
| Total             | 100%               | 100%                             | 100%                             | 100%                   | 100%                             | 100%                             | 100%                        | 100%                             | 100%                             |

<sup>(1)</sup> U.S. primarily consists of private equity and natural resource and energy related limited partnership investments.

Non-U.S. primarily consists of annuity contracts and alternative investments.

The Company's investment strategy for its defined benefit pension plans is to maximize the long-term rate of return on plan assets within an acceptable level of risk in order to meet or exceed the plan's actuarially assumed long-term rate



of return and to minimize the cost of providing pension benefits. A periodic asset/liability study is conducted in order to assist in the determination and, if necessary, modification of the appropriate long-term investment policy for the plan. The investment policy establishes a target allocation range for each asset class and the fund is managed within those ranges. The plans use a number of investment approaches including investments in equity, real estate, and fixed income funds in which the underlying securities are marketable in order to achieve this target allocation. The plans also invest in private equity and other funds. Diversification is created through investment across various asset classes, geographies, fund managers, and individual securities. This investment process is designed to provide for a well-diversified portfolio with no significant concentration of risk. The investment process is monitored by an investment committee comprised of various senior executives from within Eastman.

## NOTES TO THE AUDITED CONSOLIDATED FINANCIAL STATEMENTS

In December 2014, as part of its acquisition of Taminco, the Company assumed Taminco's non-U.S. defined benefit pension plans in Belgium and Finland. The pension plans' assets consist of guaranteed investment contracts with an insurance company. The Company also assumed Taminco's U.S. postretirement benefit plan which has no plan assets.

In July 2012, as part of its acquisition of Solutia, the Company assumed Solutia's defined benefit pension and other postretirement benefit plans. The Solutia defined benefit pension plans adhere to the Company's defined benefit plan investment strategy. The Solutia defined benefit pension plans also utilize a dynamic de-risking strategy to shift from growth assets to liability matching assets as the plan's funded status improves. The investment strategy with respect to Solutia's other postretirement benefits plan is to invest in an intermediate-term, well diversified, high quality investment instruments, with a primary objective of capital preservation.

The expected rate of return for all plans was determined primarily by modeling the expected long-term rates of return for the categories of investments held by the plans and the targeted allocation percentage against various potential economic scenarios.

The Company funded its U.S. defined benefit pension plans in the amount of \$200 million in 2016 and \$125 million in 2015. For 2017, there are no minimum required cash contributions for the U.S. defined benefit pension plans under the Employee Retirement Income Security Act of 1974, as amended, and the Internal Revenue Code of 1986, as amended.

The estimated future benefit payments, reflecting expected future service, as appropriate, are as follows:

|                       | Pension Plans |          | Postretirement<br>Benefit Plans |
|-----------------------|---------------|----------|---------------------------------|
| (Dollars in millions) | U.S.          | Non-U.S. |                                 |
| 2017                  | \$236         | \$ 21    | \$ 57                           |
| 2018                  | 191           | 21       | 56                              |
| 2019                  | 188           | 21       | 57                              |
| 2020                  | 186           | 22       | 57                              |
| 2021                  | 179           | 24       | 56                              |
| 2022-2026             | 803           | 139      | 232                             |

## 12. COMMITMENTS AND OFF BALANCE SHEET ARRANGEMENTS

## Purchase Obligations and Lease Commitments

The Company had various purchase obligations at December 31, 2016 totaling \$3 billion over a period of approximately 30 years for materials, supplies, and energy incident to the ordinary conduct of business. Commitments for purchases increased in 2016 as compared to 2015 primarily as a result of new purchase commitments for raw materials of \$1.5 billion spanning over approximately 25 years. The Company also had various lease commitments for property and equipment under cancelable, noncancelable, and month-to-month operating leases totaling approximately \$265 million over a period of approximately 40 years. Of the total lease commitments, approximately 50 percent relate to real property, including office space, storage facilities, and land; approximately 40 percent relate to railcars; and approximately 10 percent relate to machinery and equipment, including computer and communications equipment and production equipment. Rental expense, net of sublease income, was \$90 million, \$79 million, and \$69 million in 2016, 2015, and 2014, respectively (prior years rental expense has been revised from Note 12, "Commitments", to the Company's 2015 Annual Report on Form 10-K, which incorrectly reported rental expense of \$91 million and \$80 million for 2015 and 2014, respectively).



## NOTES TO THE AUDITED CONSOLIDATED FINANCIAL STATEMENTS

The obligations described above, debt repayment obligations, and credit facilities and commercial paper borrowings, are summarized in the following table:

(Dollars in millions) Payments Due for

| Period          | Debt Securities | Credit Facilities and Other | Interest Payable | Purchase Obligations | Operating Leases | Other Liabilities <sup>(1)</sup> | Total    |
|-----------------|-----------------|-----------------------------|------------------|----------------------|------------------|----------------------------------|----------|
| 2017            | \$—             | \$ 283                      | \$ 229           | \$ 211               | \$ 62            | \$ 239                           | \$1,024  |
| 2018            | —               | 37                          | 231              | 208                  | 49               | 82                               | 607      |
| 2019            | 249             | 250                         | 227              | 186                  | 36               | 74                               | 1,022    |
| 2020            | 796             | 30                          | 199              | 186                  | 29               | 88                               | 1,328    |
| 2021            | 184             | 232                         | 185              | 160                  | 24               | 84                               | 869      |
| 2022 and beyond | 4,533           | —                           | 1,788            | 2,052                | 65               | 1,074                            | 9,512    |
| Total           | \$5,762         | \$ 832                      | \$ 2,859         | \$ 3,003             | \$ 265           | \$ 1,641                         | \$14,362 |

Amounts represent the current estimated cash payments required to be made by the Company primarily for pension and other postretirement benefits, environmental loss contingency reserves, accrued compensation benefits,

- (1) uncertain tax liabilities, and commodity and foreign exchange hedging in the periods indicated. Due to uncertainties in the timing of the effective settlement of tax positions with respect to taxing authorities, management is unable to determine the timing of payments related to uncertain tax liabilities and these amounts are included in the "2022 and beyond" line item.

#### Guarantees

The Company has operating leases with terms that require the Company to guarantee a portion of the residual value of the leased assets upon termination of the lease as well as other guarantees. Disclosures about each group of similar guarantees are provided below.

#### Residual Value Guarantees

The Company has operating leases with terms that require the Company to guarantee a portion of the residual value of the leased assets upon termination of the lease. These residual value guarantees totaled \$94 million at December 31, 2016 and consist primarily of leases for railcars and the Company aircraft mostly expiring in 2017. Residual guarantee payments that become probable and estimable are accrued to rent expense over the remaining life of the applicable lease. Management's current expectation is that the likelihood of material residual guarantee payments is remote.

#### Other Guarantees

Guarantees and claims also arise during the ordinary course of business from relationships with customers, suppliers, joint venture partners, and other parties when the Company undertakes an obligation to guarantee the performance of others, if specified triggering events occur. Non-performance under a contract could trigger an obligation of the Company. The Company's current other guarantees include guarantees relating primarily to intellectual property, environmental matters, and other indemnifications and have arisen through the normal course of business. The ultimate effect on future financial results is not subject to reasonable estimation because considerable uncertainty exists as to the final outcome of these claims, if they were to occur. These other guarantees have terms up to 30 years with maximum potential future payments of approximately \$35 million in the aggregate, with none of these guarantees being individually significant to the Company's operating results, financial position, or liquidity. The Company's current expectation is that future payment or performance related to non-performance under other guarantees is remote.



## NOTES TO THE AUDITED CONSOLIDATED FINANCIAL STATEMENTS

## Other Off Balance Sheet Arrangements

The Company has rights and obligations under non-recourse factoring facilities, assumed as part of the acquisition of Taminco, that have a combined limit of €150 million (\$158 million) as of December 31, 2016 and are committed until December 2017. These arrangements include receivables in the United States, Belgium, and Finland, and are subject to various eligibility requirements. The Company sells the receivables at face value but receives funding (approximately 85 percent) net of a deposit amount until collections are received from customers for the receivables sold. The total amounts of cumulative receivables sold in 2016 and 2015 were approximately \$890 million and \$995 million, respectively. As part of the program, the Company continues to service the receivables at market rates with no servicing assets or liabilities recognized. The amounts of sold receivables outstanding under the non-recourse factoring facilities were \$99 million and \$106 million at December 31, 2016 and December 31, 2015, respectively. The fair value of the receivables sold equals the carrying value at the time of the sale, and no gain or loss is recognized. The Company is exposed to a credit loss of up to 10 percent on sold receivables.

## 13. ENVIRONMENTAL MATTERS AND ASSET RETIREMENT OBLIGATIONS

Certain Eastman manufacturing sites generate hazardous and nonhazardous wastes, the treatment, storage, transportation, and disposal of which are regulated by various governmental agencies. In connection with the cleanup of various hazardous waste sites, the Company, along with many other entities, has been designated a potentially responsible party ("PRP") by the U.S. Environmental Protection Agency under the Comprehensive Environmental Response, Compensation and Liability Act, which potentially subjects PRPs to joint and several liability for such cleanup costs. In addition, the Company will be required to incur costs for environmental remediation and closure and post-closure under the federal Resource Conservation and Recovery Act. Reserves for environmental contingencies have been established in accordance with Eastman's policies described in Note 1, "Significant Accounting Policies". Although the resolution of uncertainties related to these environmental matters may have a material adverse effect on the Company's consolidated results of operations in the period recognized, because of expected sharing of costs, the availability of legal defenses, and the Company's preliminary assessment of actions that may be required, management does not believe that the Company's liability for these environmental matters, individually or in the aggregate, will be material to the Company's consolidated financial position or cash flows. The Company's total reserve for environmental loss contingencies was \$321 million and \$336 million at December 31, 2016 and December 31, 2015, respectively. At both December 31, 2016 and December 31, 2015, this reserve included \$8 million related to sites previously closed and impaired by Eastman and sites that have been divested by Eastman but for which the Company retains the environmental liability related to these sites.

The Company's total environmental reserve that management believes to be probable and estimable for environmental contingencies, including remediation costs and asset retirement obligations, is included as part of "Payables and other current liabilities" and "Other long-term liabilities" in the Consolidated Statements of Financial Position as follows:

|   | December<br>31, |       |
|---|-----------------|-------|
| (Dollars in millions)                           | 2016            | 2015  |
| Environmental contingent liabilities, current   | \$30            | \$35  |
| Environmental contingent liabilities, long-term | 291             | 301   |
| Total   | \$321           | \$336 |

## Remediation

Estimated future environmental expenditures for undiscounted remediation costs ranged from the best estimate or minimum of \$295 million to the maximum of \$503 million and from the best estimate or minimum of \$308 million to the maximum of \$516 million at December 31, 2016 and December 31, 2015, respectively. The estimated future costs

are considered to be reasonably possible and include the amounts accrued at both December 31, 2016 and December 31, 2015.

## NOTES TO THE AUDITED CONSOLIDATED FINANCIAL STATEMENTS

Costs of certain remediation projects included in the environmental reserve are subject to a cost-sharing arrangement with Monsanto Company ("Monsanto") under the provisions of the Amended and Restated Settlement Agreement effective February 28, 2008 (the "Effective Date"), into which Solutia entered with Monsanto upon its emergence from bankruptcy (the "Monsanto Settlement Agreement"). Under the provisions of the Monsanto Settlement Agreement, Solutia, which became a wholly-owned subsidiary of Eastman on July 2, 2012, shares responsibility with Monsanto for remediation at certain locations outside of the boundaries of plant sites in Anniston, Alabama and Sauget, Illinois (the "Shared Sites"). Solutia is responsible for the funding of environmental liabilities at the Shared Sites up to a total of \$325 million from the Effective Date. If remediation costs for the Shared Sites exceed this amount, such costs will thereafter be shared equally between Solutia and Monsanto. Including payments by Solutia prior to its acquisition by Eastman, \$77 million had been paid for costs at the Shared Sites as of December 31, 2016. As of December 31, 2016, an additional \$208 million has been accrued for estimated future remediation costs at the Shared Sites, over a period of approximately 30 years.

Reserves for environmental remediation include liabilities expected to be paid within approximately 30 years. The amounts charged to pre-tax earnings for environmental remediation and related charges are included within "Cost of sales" in the Consolidated Statements of Earnings, Comprehensive Income and Retained Earnings. Changes in the reserves for environmental remediation liabilities during twelve months ended 2016 are summarized below:

| (Dollars in millions)                               | Environmental<br>Remediation<br>Liabilities |
|---|---|
| Balance at December 31, 2015                        | \$ 308                                      |
| Changes in estimates recorded to earnings and other | 11  |
| Cash reductions                                     | (24 )                                       |
| Balance at December 31, 2016                        | \$ 295                                      |

## Closure/Post-Closure

An asset retirement obligation is an obligation for the retirement of a tangible long-lived asset that is incurred upon the acquisition, construction, development, or normal operation of that long-lived asset. The Company recognizes asset retirement obligations in the period in which they are incurred if a reasonable estimate of fair value can be made. The asset retirement obligations are discounted to expected present value and subsequently adjusted for changes in fair value. The associated estimated asset retirement costs are capitalized as part of the carrying value of the long-lived assets and depreciated over their useful life. Environmental asset retirement obligations consist of primarily closure and post-closure costs. For sites that have environmental asset retirement obligations, the best estimate accrued to date over the sites' estimated useful lives for these asset retirement obligation costs was \$26 million and \$28 million at December 31, 2016 and December 31, 2015, respectively.

## Other

Environmental costs are capitalized if they extend the life of the related property, increase its capacity, and/or mitigate or prevent future contamination. The cost of operating and maintaining environmental control facilities is charged to expense as incurred. The Company's cash expenditures related to environmental protection and improvement were \$267 million, \$290 million, and \$319 million in 2016, 2015, and 2014, respectively, and include operating costs associated with environmental protection equipment and facilities, engineering costs, and construction costs. The cash expenditures above include environmental capital expenditures of approximately \$45 million and \$52 million in 2016 and 2015, respectively.

The Company also has contractual asset retirement obligations not associated with environmental liabilities. Eastman's non-environmental asset retirement obligations are primarily associated with the future closure of leased



manufacturing assets at Pace, Florida and Oulu, Finland. These accrued non-environmental asset retirement obligations were \$46 million at both December 31, 2016 and December 31, 2015.

## NOTES TO THE AUDITED CONSOLIDATED FINANCIAL STATEMENTS

## 14. LEGAL MATTERS

## General

From time to time, the Company and its operations are parties to, or targets of, lawsuits, claims, investigations and proceedings, including product liability, personal injury, asbestos, patent and intellectual property, commercial, contract, environmental, antitrust, health and safety, and employment matters, which are handled and defended in the ordinary course of business. While the Company is unable to predict the outcome of these matters, it does not believe, based upon currently available facts, that the ultimate resolution of any such pending matters will have a material adverse effect on its overall financial condition, results of operations, or cash flows.

## 15. STOCKHOLDERS' EQUITY

A reconciliation of the changes in stockholders' equity for 2016, 2015, and 2014 is provided below:

| (Dollars in millions)                           | Common<br>Stock at Par<br>Value | Paid-in<br>Capital | Retained<br>Earnings | Accumulated<br>Other<br>Comprehensive<br>Income<br>(Loss) | Treasury<br>Stock at<br>Cost | Total<br>Stockholders'<br>Equity<br>Attributed<br>to Eastman | Noncontrolling<br>Interest | Total<br>Stockholders'<br>Equity |
|---|---------------------------------|--------------------|----------------------|---|------------------------------|--|----------------------------|----------------------------------|
| Balance at December 31, 2013                    | \$ 2                            | \$ 1,778           | \$ 4,012             | \$ 171  | \$(2,167)                    | \$ 3,796   | \$ 79                      | \$ 3,875                         |
| Net Earnings                                    | —                               | —                  | 751                  | —   | —                            | 751  | 6                          | 757                              |
| Cash Dividends <sup>(1)</sup>                   | —                               | —                  | (218 )               | —   | —                            | (218 )   | —                          | (218 )                           |
| Other Comprehensive Loss                        | —                               | —                  | —                    | (448 )  | —                            | (448 )   | —                          | (448 )                           |
| Share-Based Compensation Expense <sup>(2)</sup> | —                               | 28                 | —                    | —   | —                            | 28   | —                          | 28                               |
| Stock Option Exercises                          | —                               | 13                 | —                    | —   | —                            | 13   | —                          | 13                               |
| Other   | —                               | (2 )               | —                    | —   | —                            | (2 )   | (1 )                       | (3 )                             |
| Share Repurchase                                | —                               | —                  | —                    | —   | (410 )                       | (410 )   | —                          | (410 )                           |
| Distributions to noncontrolling interest        | —                               | —                  | —                    | —   | —                            | —  | (4 )                       | (4 )                             |
| Balance at December 31, 2014                    | \$ 2                            | \$ 1,817           | \$ 4,545             | \$ (277 )   | \$(2,577)                    | \$ 3,510   | \$ 80                      | \$ 3,590                         |
| Net Earnings                                    | —                               | —                  | 848                  | —   | —                            | 848  | 6                          | 854                              |
| Cash Dividends <sup>(1)</sup>                   | —                               | —                  | (247 )               | —   | —                            | (247 )   | —                          | (247 )                           |
| Other Comprehensive Loss                        | —                               | —                  | —                    | (113 )  | —                            | (113 )   | —                          | (113 )                           |
| Share-Based Compensation Expense <sup>(2)</sup> | —                               | 37                 | —                    | —   | —                            | 37   | —                          | 37                               |
| Stock Option Exercises                          | —                               | 8                  | —                    | —   | —                            | 8  | —                          | 8                                |
| Other   | —                               | 1                  | —                    | —   | —                            | 1  | —                          | 1                                |
| Share Repurchase                                | —                               | —                  | —                    | —   | (103 )                       | (103 )   | —                          | (103 )                           |
| Distributions to noncontrolling interest        | —                               | —                  | —                    | —   | —                            | —  | (6 )                       | (6 )                             |
| Balance at December 31, 2015                    | \$ 2                            | \$ 1,863           | \$ 5,146             | \$ (390 )   | \$(2,680)                    | \$ 3,941   | \$ 80                      | \$ 4,021                         |
| Net Earnings                                    | —                               | —                  | 854                  | —   | —                            | 854  | 5                          | 859                              |
| Cash Dividends <sup>(1)</sup>                   | —                               | —                  | (279 )               | —   | —                            | (279 )   | —                          | (279 )                           |
| Other Comprehensive Loss <sup>(3)</sup>         | —                               | —                  | —                    | 109   | —                            | 109  | —                          | 109                              |
| Share-Based Compensation Expense <sup>(2)</sup> | —                               | 35                 | —                    | —   | —                            | 35   | —                          | 35                               |

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|  |      |         |         |         |      |           |          |       |          |   |
|--|------|---------|---------|---------|------|-----------|----------|-------|----------|---|
| Stock Option Exercises                   | —    | 21      | —       | —       | —    | 21        | —        | 21    |          |   |
| Other                                    | —    | (4      | )       | —       | —    | (4        | )        | (5    | )        |   |
| Share Repurchase                         | —    | —       | —       | —       | (145 | )         | (145     | )     | —        |   |
| Distributions to noncontrolling interest | —    | —       | —       | —       | —    | —         | (8       | )     | (8       | ) |
| Balance at December 31, 2016             | \$ 2 | \$1,915 | \$5,721 | \$ (281 | )    | \$(2,825) | \$ 4,532 | \$ 76 | \$ 4,608 |   |

(1) Cash dividends includes cash dividends paid and dividends declared, but unpaid.

(2) Share-based compensation expense is the fair value of share-based awards.

(3) See Note 1, "Significant Accounting Policies", regarding correction of prior period foreign currency translation.

## NOTES TO THE AUDITED CONSOLIDATED FINANCIAL STATEMENTS

The Company is authorized to issue 400 million shares of all classes of stock, of which 50 million may be preferred stock, par value \$0.01 per share, and 350 million may be common stock, par value \$0.01 per share. The Company declared dividends per share of \$1.89 in 2016, \$1.66 in 2015, and \$1.45 in 2014.

The Company established a benefit security trust in 1997 to provide a degree of financial security for unfunded obligations under certain unfunded plans and contributed to the trust a warrant to purchase up to 6 million shares of common stock of the Company for par value. The warrant, which remains outstanding, is exercisable by the trustee if the Company does not meet certain funding obligations, which obligations would be triggered by certain occurrences, including a change in control or potential change in control, as defined, or failure by the Company to meet its payment obligations under certain covered unfunded plans. Such warrant is excluded from the computation of diluted earnings per share because the conditions upon which the warrant becomes exercisable have not been met.

The additions to paid-in capital in 2016, 2015, and 2014 are primarily for compensation expense of equity awards and employee stock option exercises.

In May 2013, the Company's Board of Directors authorized repurchase of up to \$300 million of the Company's outstanding common stock. The Company completed the \$300 million repurchase authorization in March 2014, acquiring a total of 3,840,949 shares. In February 2014, the Company's Board of Directors authorized repurchase of up to an additional \$1 billion of the Company's outstanding common stock at such times, in such amounts, and on such terms, as determined to be in the best interests of the Company. As of December 31, 2016, a total of 6,542,190 shares have been repurchased under this authorization for a total of \$498 million. During 2016, the Company repurchased 2,131,501 shares of common stock for a cost of approximately \$145 million. During 2015, the Company repurchased 1,477,660 shares of common stock for a cost of approximately \$103 million. During 2014, the Company repurchased 4,945,452 shares of common stock for a cost of approximately \$410 million.

The Company's charitable foundation held 50,798 shares of the Company's common stock at December 31, 2016, 2015, and 2014 which are included in treasury stock.

The following table sets forth the computation of basic and diluted earnings per share ("EPS") from continuing operations:

|  | For years ended<br>December 31, |        |        |
|--|---------------------------------|--------|--------|
| (In millions, except per share amounts)                | 2016                            | 2015   | 2014   |
| Numerator  |                                 |        |        |
| Earnings attributable to Eastman stockholders:         |                                 |        |        |
| Earnings from continuing operations, net of tax        | \$854                           | \$848  | \$749  |
| Denominator  |                                 |        |        |
| Weighted average shares used for basic EPS             | 147.3                           | 148.6  | 149.5  |
| Dilutive effect of stock options and other award plans | 1.1                             | 1.2    | 1.6    |
| Weighted average shares used for diluted EPS           | 148.4                           | 149.8  | 151.1  |
| EPS from continuing operations <sup>(1)</sup>          |                                 |        |        |
| Basic  | \$5.80                          | \$5.71 | \$5.01 |
| Diluted  | \$5.75                          | \$5.66 | \$4.95 |

<sup>(1)</sup> Earnings per share are calculated using whole dollars and shares.

Stock options excluded from the 2016 calculation of diluted earnings per share were 1,072,468 because the market value of option exercises for these awards was less than the cash proceeds that would be received from these

exercises. Stock options excluded from the 2015 and 2014 calculations of diluted earnings per share were 768,134 and 272,143, respectively, because the market value of option exercises for these awards was less than the cash proceeds that would be received from these exercises.

## NOTES TO THE AUDITED CONSOLIDATED FINANCIAL STATEMENTS

| Shares of common stock issued <sup>(1)</sup>       | For years ended December 31, |             |             |
|--|------------------------------|-------------|-------------|
|  | 2016                         | 2015        | 2014        |
| Balance at beginning of year                       | 216,899,964                  | 216,256,971 | 215,131,237 |
| Issued for employee compensation and benefit plans | 807,636                      | 642,993     | 1,125,734   |
| Balance at end of year                             | 217,707,600                  | 216,899,964 | 216,256,971 |

<sup>(1)</sup> Includes shares held in treasury.

## Accumulated Other Comprehensive Income (Loss), Net of Tax

| (Dollars in millions)        | Cumulative Translation Adjustment | Benefit Plans Unrecognized Prior Service Credits | Unrealized                         |                                  | Accumulated Other Comprehensive Income (Loss) |
|------------------------------|-----------------------------------|--|------------------------------------|----------------------------------|---|
|                              |                                   |  | Gains (Losses) on Cash Flow Hedges | Unrealized Losses on Investments |   |
| Balance at December 31, 2014 | \$ (68 )                          | \$ 61  | \$ (269 )                          | \$ (1 )                          | \$ (277 )                                     |
| Period change                | (216 )                            | 68   | 35                                 | —                                | (113 )  |
| Balance at December 31, 2015 | (284 )                            | 129  | (234 )                             | (1 )                             | (390 )  |
| Period change <sup>(1)</sup> | (97 )                             | 34   | 172                                | —                                | 109   |
| Balance at December 31, 2016 | \$ (381 )                         | \$ 163   | \$ (62 )                           | \$ (1 )                          | \$ (281 )                                     |

<sup>(1)</sup> See Note 1, "Significant Accounting Policies", regarding correction of prior period foreign currency translation.

Amounts of other comprehensive income (loss) are presented net of applicable taxes. The Company records deferred income taxes on the cumulative translation adjustment related to branch operations and other entities included in the Company's consolidated U.S. tax return. No deferred income taxes are provided on the cumulative translation adjustment of subsidiaries outside the United States, as such cumulative translation adjustment is considered to be a component of indefinitely invested, unremitted earnings of these foreign subsidiaries.

Components of other comprehensive income recorded in the Consolidated Statements of Earnings, Comprehensive Income and Retained Earnings are presented below, before tax and net of tax effects:

| (Dollars in millions)   | For years ended December 31, |            |            |            |            |            |
|---|------------------------------|------------|------------|------------|------------|------------|
|   | 2016                         | 2015       | 2014       | 2016       | 2015       | 2014       |
|   | Before Tax                   | Net of Tax | Before Tax | Net of Tax | Before Tax | Net of Tax |
| Other comprehensive income (loss)   |                              |            |            |            |            |            |
| Change in cumulative translation adjustment                                       | \$(97 )                      | \$(97 )    | \$(216 )   | \$(216 )   | \$(201 )   | \$(201 )   |
| Defined benefit pension and other postretirement benefit plans:                   |                              |            |            |            |            |            |
| Prior service credit arising during the period                                    | 103                          | 64         | 140        | 87         | —          | —          |
| Amortization of unrecognized prior service credits included in net periodic costs | (48 )                        | (30 )      | (30 )      | (19 )      | (28 )      | (17 )      |
| Change in defined benefit pension and other postretirement benefit plans          | 55                           | 34         | 110        | 68         | (28 )      | (17 )      |
| Derivatives and hedging:  |                              |            |            |            |            |            |
| Unrealized gain (loss)  | 150                          | 93         | (78 )      | (48 )      | (371 )     | (230 )     |
| Reclassification adjustment for loss included in net income                       | 127                          | 79         | 134        | 83         | —          | —          |
| Change in derivatives and hedging   | 277                          | 172        | 56         | 35         | (371 )     | (230 )     |
| Total other comprehensive income (loss)   | \$235                        | \$109      | \$(50 )    | \$(113 )   | \$(600 )   | \$(448 )   |



## NOTES TO THE AUDITED CONSOLIDATED FINANCIAL STATEMENTS

For additional information regarding the impact of reclassifications into earnings, refer to Note 10, "Derivative and Non-Derivative Financial Instruments" and Note 11, "Retirement Plans".

## 16. ASSET IMPAIRMENTS AND RESTRUCTURING

Components of asset impairments and restructuring charges, net, are presented below:

|   | For years ended<br>December 31, |       |      |
|---|---------------------------------|-------|------|
| (Dollars in millions)                     | 2016                            | 2015  | 2014 |
| Asset impairments                         | \$12                            | \$85  | \$28 |
| Gain on sale of assets, net               | (2 )                            | (1 )  | (7 ) |
| Intangible asset and goodwill impairments | —                               | 22    | 24   |
| Severance charges                         | 32                              | 68    | 13   |
| Site closure and restructuring charges    | 3                               | 9     | 19   |
| Total                                     | \$45                            | \$183 | \$77 |

## 2016

In fourth quarter 2016 the Company impaired a capital project in the AFP segment that resulted in a charge of \$12 million.

As part of the Company's previously announced plan to reduce costs primarily in 2017, the Company recognized restructuring charges of \$34 million primarily for severance in 2016.

In 2016, there was a gain of \$2 million in the AFP segment for the sale of previously impaired assets at the Crystex<sup>®</sup> insoluble sulfur R&D site in France.

## 2015

The Company took actions during 2015 to reduce non-operations workforce resulting in restructuring charges of \$51 million for severance. These actions were taken to offset the impacts of low oil prices, a strengthened U.S. dollar, and the continued weak worldwide economic and business conditions.

As a result of the annual impairment testing of indefinite-lived intangible assets in 2015, the Company recognized intangible asset impairments of \$18 million in the AM segment primarily to reduce the carrying value of the V-KOOL<sup>®</sup> window films products tradename to the estimated fair value. The estimated fair value was determined using an income approach, specifically, the relief from royalty method. The impairment resulted from a decrease in projected revenues since the tradename was acquired from Solutia in 2012. The decrease in projected revenues was primarily due to the Asian economic downturn impacting car sales growth in those geographic markets.

In 2015, net asset impairments and restructuring charges included \$81 million of asset impairments and \$17 million of restructuring charges, including severance, in the Fibers segment due to the closure of the Workington, UK acetate tow manufacturing site which was substantially completed in 2015. Additionally, in 2015, management decided not to continue a growth initiative that was reported in "Other". This resulted in the Company recognizing asset impairments of \$8 million and restructuring charges of \$3 million.

Additionally, during 2015, net asset impairments and restructuring charges included \$4 million of restructuring charges primarily for severance associated with the integration of Taminco.



2014

In 2014, asset impairments of \$18 million and restructuring charges, including severance, of \$24 million were recognized in the AFP segment for costs of the closure of a Crystex<sup>®</sup> insoluble sulfur R&D facility in France.

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## NOTES TO THE AUDITED CONSOLIDATED FINANCIAL STATEMENTS

As a result of the annual impairment testing of indefinite-lived intangible assets, in 2014 the Company recognized an intangible asset impairment of \$22 million in the AFP segment to adjust the carrying value of the Crystex® tradename to the estimated fair value. This impairment resulted from a decrease in projected revenue since the tradename was acquired from Solutia in 2012. The estimated fair value was determined using an income approach, specifically the relief from royalty method.

In 2014, a change in estimate of certain costs for the 2012 termination of the operating agreement for the São Jose dos Campos, Brazil site resulted in a restructuring charge of \$5 million to previously recognized asset impairments and restructuring charges.

In 2014, the Company recognized gains from the sales of previously impaired assets at the former Photovoltaics production facility in Germany and a former polymers production facility in China of \$5 million and \$2 million, respectively.

Additionally, during 2014, charges in the AM segment included \$10 million of asset impairments, including intangible assets, and \$2 million of restructuring charges primarily due to the closure of a production facility in Taiwan for the Flexvue® product line. 2014 also included \$5 million of restructuring charges for severance associated with the integration of Solutia.

|                                    | Balance<br>at<br>January<br>1,<br>2016 | Provision/<br>Adjustments | Non-cash<br>Reductions/<br>Additions | Cash<br>Reductions | Balance<br>at<br>December<br>31,<br>2016 |
|------------------------------------|--|---------------------------|--------------------------------------|--------------------|--|
| Noncash charges                    | \$ —                                   | \$ 12                     | \$ (12 )                             | \$ —               | \$ —                                     |
| Severance costs                    | 55                                     | 32                        | —                                    | (45 )              | 42                                       |
| Site closure & restructuring costs | 11                                     | 1                         | 4                                    | (3 )               | 13                                       |
| Total                              | \$ 66                                  | \$ 45                     | \$ (8 )                              | \$ (48 )           | \$ 55                                    |
|                                    | Balance<br>at<br>January<br>1,<br>2015 | Provision/<br>Adjustments | Non-cash<br>Reductions/<br>Additions | Cash<br>Reductions | Balance<br>at<br>December<br>31,<br>2015 |
| Noncash charges                    | \$ —                                   | \$ 107                    | \$ (107 )                            | \$ —               | \$ —                                     |
| Severance costs                    | 13                                     | 67                        | 1                                    | (26 )              | 55                                       |
| Site closure & restructuring costs | 15                                     | 9                         | 3                                    | (16 )              | 11                                       |
| Total                              | \$ 28                                  | \$ 183                    | \$ (103 )                            | \$ (42 )           | \$ 66                                    |
|                                    | Balance<br>at<br>January<br>1,<br>2014 | Provision/<br>Adjustments | Non-cash<br>Reductions/<br>Additions | Cash<br>Reductions | Balance<br>at<br>December<br>31,<br>2014 |
| Noncash charges                    | \$ —                                   | \$ 52                     | \$ (52 )                             | \$ —               | \$ —                                     |
| Severance costs                    | 22                                     | 13                        | —                                    | (22 )              | 13                                       |
| Site closure & restructuring costs | 14                                     | 12                        | (4 )                                 | (7 )               | 15                                       |
| Total                              | \$ 36                                  | \$ 77                     | \$ (56 )                             | \$ (29 )           | \$ 28                                    |

Substantially all costs remaining for severance are expected to be applied to the reserves within one year.

17. OTHER (INCOME) CHARGES, NET

| (Dollars in millions)  | For years ended |        |        |
|--|-----------------|--------|--------|
|  | December 31,    |        |        |
|  | 2016            | 2015   | 2014   |
| Foreign exchange transaction losses (gains), net                               | \$27            | \$6    | \$(7 ) |
| Financing costs related to the acquisition of Taminco                          | —               | —      | 10     |
| (Income) loss from equity investments and other investment (gains) losses, net | (15 )           | (15 )  | (13 )  |
| Gain from sale of equity investment in Primester joint venture                 | (17 )           | —      | —      |
| Other, net   | (1 )            | 1      | (5 )   |
| Other (income) charges, net  | \$(6 )          | \$(8 ) | \$(15) |

## NOTES TO THE AUDITED CONSOLIDATED FINANCIAL STATEMENTS

Included in other (income) charges, net are losses or gains on foreign exchange transactions, equity investments, business venture investments, non-operating assets, and certain litigation costs and earnings. Net losses from foreign exchange non-qualifying derivatives were partially offset by foreign exchange transaction gains, net, which include the revaluation of foreign entity assets and liabilities, both items impacted primarily by the euro in 2016. See Note 10, "Derivative and Non-Derivative Financial Instruments".

Included in 2016 other (income) charges, net is a gain of \$17 million from the sale of the Company's interest in the Primester joint venture equity investment. For additional information, see Note 6, "Equity Investments". Additionally, 2016 other (income) charges, net includes cost of disposition of claims against operations that were discontinued by Solutia prior to the Company's acquisition of Solutia in 2012.

### 18.SHARE-BASED COMPENSATION PLANS AND AWARDS

#### 2012 Omnibus Stock Compensation Plan

Eastman's 2012 Omnibus Stock Compensation Plan ("2012 Omnibus Plan") was approved by stockholders at the May 3, 2012 Annual Meeting of Stockholders and shall remain in effect until its fifth anniversary. The 2012 Omnibus Plan authorizes the Compensation and Management Development Committee of the Board of Directors to grant awards, designate participants, determine the types and numbers of awards, determine the terms and conditions of awards and determine the form of award settlement. Under the 2012 Omnibus Plan, the aggregate number of shares reserved and available for issuance is 10 million, which consist of shares not previously authorized for issuance under any other plan. The number of shares covered by an award is counted against this share reserve as of the grant date of the award. Shares covered by full value awards (e.g. performance shares and restricted stock awards) are counted against the total number of shares available for issuance or delivery under the plan as 2.5 shares for every one share covered by the award. Any stock distributed pursuant to an award may consist of, in whole or in part, authorized and unissued stock, treasury stock, or stock purchased on the open market. Under the 2012 Omnibus Plan and previous plans, the forms of awards have included restricted stock and restricted stock units, stock options, stock appreciation rights ("SARs"), and performance shares. The 2012 Omnibus Plan is flexible as to the number of specific forms of awards, but provides that stock options and SARs are to be granted at an exercise price not less than 100 percent of the per share fair market value on the date of the grant.

#### Director Stock Compensation Subplan

Eastman's 2016 Director Stock Compensation Subplan ("Directors' Subplan"), a component of the 2012 Omnibus Plan, remains in effect until terminated by the Board of Directors or the earlier termination of the 2012 Omnibus Plan. The Directors' Subplan provides for structured awards of restricted shares to non-employee members of the Board of Directors. Restricted shares awarded under the Directors' Subplan are subject to the same terms and conditions of the 2012 Omnibus Plan. The Directors' Subplan does not constitute a separate source of shares for grant of equity awards and all shares awarded are part of the 10 million shares authorized under the 2012 Omnibus Plan. Shares of restricted stock are granted on the first day of a non-employee director's initial term of service and shares of restricted stock are granted each year to each non-employee director on the date of the annual meeting of stockholders.

#### General

The Company is authorized by the Board of Directors under the 2012 Omnibus Plan to provide awards to employees and non-employee members of the Board of Directors. It has been the Company's practice to issue new shares rather than treasury shares for equity awards that require settlement by the issuance of common stock and to withhold or accept back shares awarded to cover the related income tax obligations of employee participants. Shares of unrestricted common stock owned by non-employee directors are not eligible to be withheld or acquired to satisfy the

withholding obligation related to their income taxes. Shares of unrestricted common stock owned by specified senior management level employees are accepted by the Company to pay the exercise price of stock options in accordance with the terms and conditions of their awards.

## NOTES TO THE AUDITED CONSOLIDATED FINANCIAL STATEMENTS

For 2016, 2015, and 2014, total share-based compensation expense (before tax) of approximately \$36 million, \$36 million, and \$28 million, respectively, was recognized in selling, general and administrative expense in the Consolidated Statements of Earnings, Comprehensive Income and Retained Earnings for all share-based awards of which approximately \$7 million, \$7 million, and \$4 million, respectively, related to stock options. The compensation expense is recognized over the substantive vesting period, which may be a shorter time period than the stated vesting period for qualifying termination eligible employees as defined in the forms of award notice. For 2016, 2015, and 2014, approximately \$2 million, \$2 million, and \$1 million, respectively, of stock option compensation expense was recognized due to qualifying termination eligibility preceding the requisite vesting period.

## Stock Option Awards

Options have been granted on an annual basis to non-employee directors under the Directors' Subplan and predecessor plans and by the Compensation and Management Development Committee of the Board of Directors under the 2012 Omnibus Plan and predecessor plans to employees. Option awards have an exercise price equal to the closing price of the Company's stock on the date of grant. The term of options is 10 years with vesting periods that vary up to three years. Vesting usually occurs ratably over the vesting period or at the end of the vesting period. The Company utilizes the Black Scholes Merton option valuation model which relies on certain assumptions to estimate an option's fair value.

The weighted average assumptions used in the determination of fair value for stock options awarded in 2016, 2015, and 2014 are provided in the table below:

| Assumptions                     | 2016   | 2015   | 2014   |
|---------------------------------|--------|--------|--------|
| Expected volatility rate        | 23.71% | 24.11% | 25.82% |
| Expected dividend yield         | 2.31%  | 1.75%  | 1.70%  |
| Average risk-free interest rate | 1.23%  | 1.45%  | 1.44%  |
| Expected term years             | 5.0    | 4.8    | 4.7    |

The volatility rate of grants is derived from historical Company common stock price volatility over the same time period as the expected term of each stock option award. The volatility rate is derived by mathematical formula utilizing the weekly high closing stock price data over the expected term.

The expected dividend yield is calculated using the Company's average of the last four quarterly dividend yields.

The average risk-free interest rate is derived from United States Department of Treasury published interest rates of daily yield curves for the same time period as the expected term.

The weighted average expected term reflects the analysis of historical share-based award transactions and includes option swap and reload grants which may have much shorter remaining expected terms than new option grants.

A summary of the activity of the Company's stock option awards for 2016, 2015, and 2014 is presented below:

|                                  | 2016      |                                 | 2015      |                                 | 2014      |                                 |
|----------------------------------|-----------|---------------------------------|-----------|---------------------------------|-----------|---------------------------------|
|                                  | Options   | Weighted-Average Exercise Price | Options   | Weighted-Average Exercise Price | Options   | Weighted-Average Exercise Price |
| Outstanding at beginning of year | 2,434,600 | \$ 53                           | 2,209,800 | \$ 46                           | 2,359,100 | \$ 39                           |
| Granted                          | 554,000   | 65                              | 512,700   | 74                              | 272,100   | 86                              |
| Exercised                        | (618,500) | 33                              | (271,200) | 30                              | (419,300) | 31                              |
| Cancelled, forfeited, or expired | (6,400)   | 77                              | (16,700)  | 77                              | (2,100)   | 55                              |

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|                                    |           |    |    |           |    |    |           |    |    |
|------------------------------------|-----------|----|----|-----------|----|----|-----------|----|----|
| Outstanding at end of year         | 2,363,700 | \$ | 61 | 2,434,600 | \$ | 53 | 2,209,800 | \$ | 46 |
| Options exercisable at year-end    | 1,378,000 |    |    | 1,643,100 |    |    | 1,726,800 |    |    |
| Available for grant at end of year | 3,807,724 |    |    | 5,413,250 |    |    | 7,271,093 |    |    |

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## NOTES TO THE AUDITED CONSOLIDATED FINANCIAL STATEMENTS

The following table provides the remaining contractual term and weighted average exercise prices of stock options outstanding and exercisable at December 31, 2016:

| Range of Exercise Prices | Options Outstanding                     |   | Weighted-Average Exercise Price | Options Exercisable                     |                                 |
|--------------------------|---|---|---------------------------------|---|---------------------------------|
|                          | Number Outstanding at December 31, 2016 | Weighted-Average Remaining Contractual Life (Years) |                                 | Number Exercisable at December 31, 2016 | Weighted-Average Exercise Price |
| \$18-\$35                | 119,600                                 | 2.2   | \$ 28                           | 119,600                                 | \$ 28                           |
| \$36-\$50                | 617,600                                 | 4.2   | 39                              | 617,600                                 | 39                              |
| \$51-\$73                | 867,300                                 | 8.1   | 67                              | 313,300                                 | 70                              |
| \$74-\$87                | 759,200                                 | 7.9   | 78                              | 327,500                                 | 80                              |
|                          | 2,363,700                               | 6.7   | \$ 61                           | 1,378,000                               | \$ 55                           |

The range of exercise prices of options outstanding at December 31, 2016 is approximately \$18 to \$87 per share. The aggregate intrinsic value of total options outstanding and total options exercisable at December 31, 2016 is \$36 million and \$30 million, respectively. Intrinsic value is the amount by which the closing market price of the stock at December 31, 2016 exceeds the exercise price of the option grants.

The weighted average remaining contractual life of all exercisable options at December 31, 2016 is 5.3 years.

The weighted average fair value of options granted during 2016, 2015, and 2014 was \$10.97, \$13.89, and \$17.12, respectively. The total intrinsic value of options exercised during the years ended December 31, 2016, 2015, and 2014, was \$23 million, \$13 million, and \$22 million, respectively. Cash proceeds received by the Company from option exercises and the related tax benefit totaled \$21 million and \$7 million, respectively, for 2016, \$8 million and \$4 million, respectively, for 2015, and \$13 million and \$7 million, respectively, for 2014. The total fair value of shares vested during the years ended December 31, 2016, 2015, and 2014 was \$6 million, \$3 million, and \$4 million, respectively.

A summary of the status of the Company's nonvested options as of December 31, 2016 and changes during the year then ended is presented below:

| Nonvested Options                      | Number of Options | Weighted-Average Grant Date Fair Value |
|--|-------------------|--|
| Nonvested at January 1, 2016           | 791,500           | \$15.17                                |
| Granted                                | 554,000           | \$10.97                                |
| Vested                                 | (353,400)         | \$15.88                                |
| Forfeited or expired                   | (6,400)           | \$14.57                                |
| Nonvested options at December 31, 2016 | 985,700           | \$12.56                                |

For nonvested options at December 31, 2016, approximately \$2 million in compensation expense will be recognized over the next two years.



## NOTES TO THE AUDITED CONSOLIDATED FINANCIAL STATEMENTS

## Other Share-Based Compensation Awards

In addition to stock option awards, the Company has awarded long-term performance share awards, restricted stock awards, and SARs. The long-term performance share awards are based upon actual return on capital compared to a target return on capital and total stockholder return compared to a peer group ranking by total stockholder return over a three year performance period. The awards are valued using a Monte Carlo Simulation based model and vest pro-rata over the three year performance period. The number of long-term performance award target shares granted for the 2016-2018, 2015-2017, and 2014-2016 periods were 427 thousand, 347 thousand, and 285 thousand, respectively. The target shares granted are assumed to be 100 percent. At the end of the three-year performance period, the actual number of shares awarded can range from zero percent to 250 percent of the target shares granted based on the award notice. The number of restricted stock awards granted during 2016, 2015, and 2014 were 190 thousand, 233 thousand, and 144 thousand, respectively. The fair value of a restricted stock award is equal to the closing stock price of the Company's stock on the date of grant and normally vests over a period of three years. The recognized compensation expense before tax for these other share-based awards in the years ended December 31, 2016, 2015, and 2014 was approximately \$29 million, \$29 million, and \$24 million, respectively. The unrecognized compensation expense before tax for these same type awards at December 31, 2016 was approximately \$40 million and will be recognized primarily over a period of two years.

## 19. SUPPLEMENTAL CASH FLOW INFORMATION

Included in the line item "Other items, net" of the "Operating activities" section of the Consolidated Statements of Cash Flows are specific changes to certain balance sheet accounts as follows:

|                       | For years ended<br>December 31, |       |        |
|-----------------------|---------------------------------|-------|--------|
| (Dollars in millions) | 2016                            | 2015  | 2014   |
| Current assets        | \$(35 )                         | \$5   | \$(12) |
| Other assets          | 37                              | 75    | 45     |
| Current liabilities   | (98 )                           | 22    | (88 )  |
| Long-term liabilities | (29 )                           | (72 ) | 52     |
| Total                 | \$(125)                         | \$30  | \$(3 ) |

The above changes included transactions such as accrued taxes, deferred taxes, environmental liabilities, monetized positions from raw material and energy, currency, and certain interest rate hedges, prepaid insurance, miscellaneous deferrals, value-added taxes, and other miscellaneous accruals.

Cash flows from derivative financial instruments accounted for as hedges are classified in the same category as the item being hedged.

|  | For years ended<br>December 31, |       |       |
|--|---------------------------------|-------|-------|
| (Dollars in millions)                                      | 2016                            | 2015  | 2014  |
| Cash paid for interest and income taxes is as follows:     |                                 |       |       |
| Interest, net of amounts capitalized                       | \$280                           | \$265 | \$184 |
| Income taxes   | 120                             | 124   | 152   |
| Non-cash investing and financing activities:               |                                 |       |       |
| Outstanding trade payables related to capital expenditures | 34                              | 10    | 19    |
| (Gain) loss from equity investments                        | (15 )                           | (15 ) | (13 ) |



## NOTES TO THE AUDITED CONSOLIDATED FINANCIAL STATEMENTS

## 20. SEGMENT INFORMATION

The Company's products and operations are managed and reported in four operating segments: Additives & Functional Products ("AFP"), Advanced Materials ("AM"), Chemical Intermediates ("CI"), and Fibers.

## Additives &amp; Functional Products Segment

In the AFP segment, the Company manufactures chemicals for products in the coatings, tires, consumables, building and construction, industrial applications including solar energy markets, animal nutrition, care chemicals, crop protection, and energy markets.

|                             | Percentage of<br>Total Segment<br>Sales |      |      |
|-----------------------------|---|------|------|
| Product Lines               | 2016                                    | 2015 | 2014 |
| Coatings and Inks Additives | 24%                                     | 24%  | 31%  |
| Adhesives Resins            | 21%                                     | 21%  | 27%  |
| Tire Additives              | 17%                                     | 17%  | 22%  |
| Other                       | 38%                                     | 38%  | 20%  |
| Total                       | 100%                                    | 100% | 100% |

The products Eastman manufactures in the coatings and inks additives product line can be broadly classified as polymers, which include cellulose, Eastman Tetrashield<sup>TM</sup> performance polyester resins, and other polyester-based specialty polymers and paint additives; and solvents, which include specialty coalescents, ketones, esters, glycol ethers, and alcohol solvents. The adhesives resins product line consists of hydrocarbon resins such as Regalite<sup>®</sup> and Eastotac<sup>®</sup>; non-hydrogenated hydrocarbons resins such as Piccotac<sup>®</sup>; and polymers such as Eastoflex<sup>®</sup>. The tire additives product line include insoluble sulfur products, which are vulcanizing agents principally marketed under the Crystex<sup>®</sup> brand; antidegradants, principally marketed under the Santoflex<sup>®</sup> brand; and performance resins marketed under the Impera<sup>TM</sup> brand. The care chemicals additives business consists of amine-derivative based building blocks for the production of flocculants and intermediates for surfactants. In the specialty fluids product line, the Company produces Therminol<sup>®</sup> heat transfer fluids, Eastman Turbo Oils, Eastman Skydrol<sup>®</sup> aviation hydraulic fluids, and Eastman SkyKleen<sup>®</sup> aviation solvents. The animal nutrition business consists of formic acid based solutions product lines. The crop protection business consists of alkylamine derivatives product lines.

## Advanced Materials Segment

In the AM segment, the Company produces and markets its polymers, films, and plastics with differentiated performance properties for value-added end uses in transportation, consumables, building and construction, durable goods, and health and wellness markets.

|                      | Percentage of<br>Total Segment<br>Sales |      |      |
|----------------------|---|------|------|
| Product Lines        | 2016                                    | 2015 | 2014 |
| Specialty Plastics   | 50%                                     | 51%  | 54%  |
| Advanced Interlayers | 34%                                     | 33%  | 34%  |
| Performance Films    | 16%                                     | 16%  | 12%  |
| Total                | 100%                                    | 100% | 100% |

The specialty plastics product line consists of two primary products: copolyesters and cellulose esters. The advanced interlayers product line includes specialty intermediate polyvinyl butyral ("PVB") sheet and resins. PVB is a specialty

resin used in the production of laminated safety glass sheet used in automotive and architectural applications. The performance films product line primarily consists of window film products, which are aftermarket applied films to enhance the characteristics and functional performance of automotive and architectural glass.

## NOTES TO THE AUDITED CONSOLIDATED FINANCIAL STATEMENTS

## Chemical Intermediates Segment

The CI segment leverages large scale and vertical integration from the cellulose and acetyl, olefins, and alkylamines streams to support our specialty operating segments with advantaged cost positions. The CI segment sells excess intermediates beyond our specialty needs for use in markets such as industrial chemicals and processing, building and construction, health and wellness, and agrochemicals. Certain products are also used internally by other operating segments of the Company.

|                   | Percentage of<br>Total Segment<br>Sales |      |      |
|-------------------|---|------|------|
| Product Lines     | 2016                                    | 2015 | 2014 |
| Intermediates     | 65%                                     | 65%  | 78%  |
| Plasticizers      | 20%                                     | 20%  | 21%  |
| Functional Amines | 15%                                     | 15%  | 1%   |
| Total             | 100%                                    | 100% | 100% |

In the intermediates product line, the Company produces oxo alcohols and derivatives, acetic acid and derivatives, acetic anhydride, ethylene, glycol ethers, and esters. The plasticizers product line consists of a unique set of primary non-phthalate plasticizers such as Eastman 168<sup>®</sup>, and a range of niche non-phthalate plasticizers such as Benzoflex<sup>®</sup>, Eastman TXIB<sup>®</sup>, and Eastman Effusion<sup>™</sup>. The functional amines product lines include methylamines and salts, and higher amines and solvents.

## Fibers Segment

In the Fibers segment, Eastman manufactures and sells Estron<sup>®</sup> acetate tow and Estrobond<sup>®</sup> triacetin plasticizers for use primarily in the manufacture of cigarette filters; Estron<sup>®</sup> natural (undyed) and Chromspun<sup>®</sup> solution-dyed acetate yarns for use in apparel, home furnishings, and industrial fabrics; and cellulose acetate flake and acetyl raw materials for other acetate fiber producers.

|   | Percentage of<br>Total Segment<br>Sales |      |      |
|---|---|------|------|
| Product Lines                             | 2016                                    | 2015 | 2014 |
| Acetate Tow                               | 80%                                     | 78%  | 79%  |
| Acetate Yarn and Acetyl Chemical Products | 20%                                     | 22%  | 21%  |
| Total                                     | 100%                                    | 100% | 100% |

## Other

The Company continues to explore and invest in R&D initiatives that are aligned with macro trends in sustainability, consumerism, and energy efficiency such as high performance materials and advanced cellulose. An example of such an initiative is the Eastman microfiber technology platform which leverages the Company's core competency in polyesters, spinning capability, and in-house application expertise, for use in a wide range of applications including liquid and air filtration, high strength packaging in nonwovens, and performance apparel in textiles.

Sales revenue and expense for the Eastman microfiber technology platform growth initiative are shown in the tables below as "Other" sales revenue and operating loss. R&D, pension and other postretirement benefits, and other expenses and income not identifiable to an operating segment are shown in the tables below as "Other" operating earnings (loss).



## NOTES TO THE AUDITED CONSOLIDATED FINANCIAL STATEMENTS

|                                  | For years ended<br>December 31, |         |         |
|----------------------------------|---------------------------------|---------|---------|
| (Dollars in millions)            | 2016                            | 2015    | 2014    |
| Sales by Segment                 |                                 |         |         |
| Additives & Functional Products  | \$2,979                         | \$3,159 | \$2,640 |
| Advanced Materials               | 2,457                           | 2,414   | 2,378   |
| Chemical Intermediates           | 2,534                           | 2,811   | 3,034   |
| Fibers                           | 992                             | 1,219   | 1,457   |
| Total Sales by Operating Segment | \$8,962                         | \$9,603 | \$9,509 |
| Other                            | 46                              | 45      | 18      |
| Total Sales                      | \$9,008                         | \$9,648 | \$9,527 |

|   | For years ended December<br>31, |         |         |
|---|---------------------------------|---------|---------|
| (Dollars in millions)   | 2016                            | 2015    | 2014    |
| Operating Earnings (Loss)   |                                 |         |         |
| Additives & Functional Products   | \$601                           | \$660   | \$462   |
| Advanced Materials  | 471                             | 384     | 276     |
| Chemical Intermediates  | 171                             | 294     | 352     |
| Fibers  | 310                             | 292     | 474     |
| Total Operating Earnings by Operating Segment   | 1,553                           | 1,630   | 1,564   |
| Other   |                                 |         |         |
| Growth initiatives and businesses not allocated to operating segments                       | (82)                            | (87)    | (58)    |
| Pension and other postretirement benefits expenses, net not allocated to operating segments | (44)                            | (76)    | (293)   |
| Restructuring and acquisition integration and transaction costs                             | (44)                            | (83)    | (51)    |
| Total Operating Earnings  | \$1,383                         | \$1,384 | \$1,162 |

|                                   | December 31, |          |
|-----------------------------------|--------------|----------|
| (Dollars in millions)             | 2016         | 2015     |
| Assets by Segment <sup>(1)</sup>  |              |          |
| Additives & Functional Products   | \$6,255      | \$6,370  |
| Advanced Materials                | 4,247        | 4,227    |
| Chemical Intermediates            | 3,084        | 2,930    |
| Fibers                            | 763          | 969      |
| Total Assets by Operating Segment | 14,349       | 14,496   |
| Corporate Assets                  | 1,108        | 1,084    |
| Total Assets                      | \$15,457     | \$15,580 |

(1) The chief operating decision maker holds operating segment management accountable for accounts receivable, inventory, fixed assets, goodwill, and intangible assets.

## NOTES TO THE AUDITED CONSOLIDATED FINANCIAL STATEMENTS

|  | For years ended<br>December 31, |       |       |
|--|---------------------------------|-------|-------|
| (Dollars in millions)  | 2016                            | 2015  | 2014  |
| Depreciation and Amortization Expense by Segment                 |                                 |       |       |
| Additives & Functional Products                                  | \$208                           | \$203 | \$140 |
| Advanced Materials   | 160                             | 161   | 143   |
| Chemical Intermediates   | 157                             | 149   | 99    |
| Fibers   | 51                              | 55    | 66    |
| Total Depreciation and Amortization Expense by Operating Segment | 576                             | 568   | 448   |
| Other  | 4                               | 3     | 2     |
| Total Depreciation and Amortization Expense                      | \$580                           | \$571 | \$450 |

|   | For years ended<br>December 31, |       |       |
|---|---------------------------------|-------|-------|
| (Dollars in millions)                           | 2016                            | 2015  | 2014  |
| Capital Expenditures by Segment                 |                                 |       |       |
| Additives & Functional Products                 | \$212                           | \$227 | \$225 |
| Advanced Materials                              | 244                             | 225   | 176   |
| Chemical Intermediates                          | 128                             | 139   | 131   |
| Fibers  | 38                              | 57    | 53    |
| Total Capital Expenditures by Operating Segment | 622                             | 648   | 585   |
| Other   | 4                               | 4     | 8     |
| Total Capital Expenditures                      | \$626                           | \$652 | \$593 |

Sales are attributed to geographic areas based on customer location; long-lived assets are attributed to geographic areas based on asset location.

| (Dollars in millions)  | For years ended<br>December 31, |         |         |
|------------------------|---------------------------------|---------|---------|
| Geographic Information | 2016                            | 2015    | 2014    |
| Sales                  |                                 |         |         |
| United States          | \$3,803                         | \$4,096 | \$4,162 |
| All foreign countries  | 5,205                           | 5,552   | 5,365   |
| Total                  | \$9,008                         | \$9,648 | \$9,527 |

|                       | December 31, |         |         |
|-----------------------|--------------|---------|---------|
|                       | 2016         | 2015    | 2014    |
| Net properties        |              |         |         |
| United States         | \$4,066      | \$3,939 | \$3,753 |
| All foreign countries | 1,210        | 1,191   | 1,334   |
| Total                 | \$5,276      | \$5,130 | \$5,087 |



## NOTES TO THE AUDITED CONSOLIDATED FINANCIAL STATEMENTS

## 21. QUARTERLY SALES AND EARNINGS DATA – UNAUDITED

| (Dollars in millions, except per share amounts)               | First<br>Quarter | Second<br>Quarter | Third<br>Quarter | Fourth<br>Quarter |
|---|------------------|-------------------|------------------|-------------------|
| 2016  |                  |                   |                  |                   |
| Sales   | \$2,236          | \$2,297           | \$2,287          | \$2,188           |
| Gross profit  | 634              | 605               | 621              | 490               |
| Asset impairments and restructuring (gains) charges, net      | (2 )             | —                 | 30               | 17                |
| Net earnings attributable to Eastman                          | 251              | 255               | 232              | 116               |
| Net earnings per share attributable to Eastman <sup>(1)</sup> |                  |                   |                  |                   |
| Basic   | \$1.70           | \$1.73            | \$1.57           | \$0.79            |
| Diluted   | 1.69             | 1.71              | 1.56             | 0.79              |

(1) Each quarter is calculated as a discrete period; the sum of the four quarters may not equal the calculated full year amount.

| (Dollars in millions, except per share amounts)               | First<br>Quarter | Second<br>Quarter | Third<br>Quarter | Fourth<br>Quarter |
|---|------------------|-------------------|------------------|-------------------|
| 2015  |                  |                   |                  |                   |
| Sales   | \$2,443          | \$2,533           | \$2,447          | \$2,225           |
| Gross profit  | 656              | 720               | 695              | 509               |
| Asset impairments and restructuring charges, net              | 109              | —                 | 21               | 53                |
| Net earnings attributable to Eastman                          | 171              | 297               | 256              | 124               |
| Net earnings per share attributable to Eastman <sup>(1)</sup> |                  |                   |                  |                   |
| Basic   | \$1.15           | \$2.00            | \$1.73           | \$0.83            |
| Diluted   | 1.14             | 1.98              | 1.71             | 0.83              |

(1) Each quarter is calculated as a discrete period; the sum of the four quarters may not equal the calculated full year amount.

## 22. RESERVE ROLLFORWARDS

## Valuation and Qualifying Accounts

(Dollars in millions)

|  | Balance<br>at<br>January<br>1,<br>2016 | Additions<br>Charges<br>(Credits)<br>to Other<br>Cost Accounts<br>and<br>Expense |      |       | Balance at<br>December<br>31, 2016 |
|--|--|--|------|-------|------------------------------------|
| Reserve for:                                   |  |  |      |       |                                    |
| Doubtful accounts and returns                  | \$ 13                                  | \$ (2 )  | \$ — | \$ 1  | \$ 10                              |
| LIFO inventory                                 | 296                                    | (32 )  | —    | —     | 264                                |
| Non-environmental asset retirement obligations | 46                                     | —  | —    | —     | 46                                 |
| Environmental contingencies                    | 336                                    | 10   | 1    | 26    | 321                                |
| Deferred tax valuation allowance               | 254                                    | 20   | 4    | —     | 278                                |
|  | \$ 945                                 | \$ (4 )  | \$ 5 | \$ 27 | \$ 919                             |

## NOTES TO THE AUDITED CONSOLIDATED FINANCIAL STATEMENTS

|  | Balance<br>at<br>January<br>1,<br>2015 | Additions<br>Charges<br>(Credits)<br>to Other<br>Cost Accounts<br>and Expense |        |   | Deductions | Balance at<br>December<br>31, 2015 |
|--|--|---|--------|---|------------|------------------------------------|
| Reserve for:                                   |  |   |        |   |            |                                    |
| Doubtful accounts and returns                  | \$ 10                                  | \$ 1  | \$ 2   |   | \$ —       | \$ 13                              |
| LIFO inventory                                 | 462                                    | (166)   | —      |   | —          | 296                                |
| Non-environmental asset retirement obligations | 44                                     | 4   | —      |   | 2          | 46                                 |
| Environmental contingencies                    | 345                                    | 9   | 11     |   | 29         | 336                                |
| Deferred tax valuation allowance               | 264                                    | 58  | (18)   | ) | 50         | 254                                |
|  | \$ 1,125                               | \$(94)  | \$ (5) | ) | \$ 81      | \$ 945                             |
|  | Balance<br>at<br>January<br>1,<br>2014 | Additions<br>Charges<br>(Credits)<br>to Other<br>Cost Accounts<br>and Expense |        |   | Deductions | Balance at<br>December<br>31, 2014 |
| Reserve for:                                   |  |   |        |   |            |                                    |
| Doubtful accounts and returns                  | \$ 12                                  | \$ 1  | \$ —   |   | \$ 3       | \$ 10                              |
| LIFO inventory                                 | 506                                    | (44)  | )      | — | —          | 462                                |
| Non-environmental asset retirement obligations | —                                      | —   | 44     |   | —          | 44                                 |
| Environmental contingencies                    | 368                                    | 2   | 2      |   | 27         | 345                                |
| Deferred tax valuation allowance               | 204                                    | 58  | 2      |   | —          | 264                                |
|  | \$ 1,090                               | \$ 17   | \$ 48  |   | \$ 30      | \$ 1,125                           |

## 23. RECENTLY ISSUED ACCOUNTING STANDARDS

In May 2014, the FASB and International Accounting Standards Board jointly issued new principles-based accounting guidance for revenue recognition that will supersede virtually all existing revenue guidance. The core principle of this guidance is that an entity should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods and services. To achieve the core principle, the guidance establishes the following five steps: 1) identify the contract(s) with a customer, 2) identify the performance obligation in the contract, 3) determine the transaction price, 4) allocate the transaction price to the performance obligations in the contract, and 5) recognize revenue when (or as) the entity satisfies a performance obligation. The guidance also details the accounting treatment for costs to obtain or fulfill a contract. Lastly, disclosure requirements have been enhanced to provide sufficient information to enable users of financial statements to understand the nature, amount, timing, and uncertainty of revenue and cash flows arising from contracts with customers. In August 2015, the FASB issued new guidance to delay the effective date of the new revenue standard by one year. The deferral results in the new revenue standard being effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2017. Early application is permitted under the original effective date of fiscal years, and interim periods within those fiscal years, beginning after December 15, 2016. In April 2016, the FASB issued clarifying guidance to the 2014 revenue standard in regards to the identification of performance obligations and licensing. In May 2016, the FASB issued narrow-scope improvements and practical expedients to the new revenue standard that include clarification of the collectability criterion, specification for the measurement of noncash considerations, clarifies a completed contract for transition purposes and clarification in

regards to the retrospective application, as well as, policy elections, and practical expedients. In December 2016, the FASB issued additional corrections and improvements that affect various narrow aspects of the guidance. The effective date for all amendments is the same as that of the revenue standard stated above. Management does not expect that changes in its accounting required by this new guidance will materially impact the Company's financial position or results of operations and related disclosures. Management plans to adopt the new guidance when effective and anticipates adopting retrospectively to each prior reporting period presented with the election of applicable practical expedients.

## NOTES TO THE AUDITED CONSOLIDATED FINANCIAL STATEMENTS

In January 2016, the FASB issued targeted improvements in regards to the recognition and measurement of financial assets and financial liabilities. The changes are as follows: requires equity investments (except equity method and consolidated investments) to be measured at fair value with changes in fair value recognized in net income; simplifies the impairment assessment of equity investments without readily determinable fair values by requiring a qualitative assessment to identify impairment, when a qualitative assessment indicates that impairment exists, an entity is required to measure the investment at fair value; eliminates the requirement for public business entities to disclose the method(s) and significant assumptions used to estimate the fair value that is required to be disclosed for financial instruments measured at amortized cost on the balance sheet; requires public business entities to use the exit price notion when measuring the fair value of financial instruments for disclosure purposes; requires an entity to present separately in other comprehensive income the portion of the total change in the fair value of a liability resulting from a change in the instrument-specific credit risk when the entity has elected to measure the liability at fair value in accordance with the fair value option for financial instruments; and requires separate presentation of financial assets and financial liabilities by measurement category and form of financial asset (that is, securities or loans and receivables) on the balance sheet or the accompanying notes to the financial statements. This guidance is effective for annual reporting periods beginning after December 15, 2017, including interim periods within that reporting period and early adoption is permitted but limited. The new guidance is to be applied by means of a cumulative-effect adjustment to the balance sheet as of the beginning of the fiscal year of adoption and for equity securities without readily determinable fair values, applied prospectively to equity investments that exist as of the date of adoption. Management has concluded that changes in its accounting required by this new guidance will not materially impact the Company's financial position or results of operations and related disclosures.

In February 2016, the FASB issued guidance on lease accounting. The new guidance establishes two types of leases for lessees: finance or operating. The guidance for lessors is largely unchanged. Under the guidance, a lessee is to recognize a right-of-use asset and lease liability that arises from a lease. A lessee can make a policy election, by asset class, to not recognize lease assets or liabilities for leases with a term of 12 months or less. Both finance and operating leases will have associated right-of-use assets and liabilities initially measured at the present value of the lease payments. Current and noncurrent balance sheet classification will apply. Finance leases will have another reported element for interest associated with the principal lease liability. The component concept from the 2014 revenue recognition standard has been included in the new lease standard which will guide identification of individual assets and non-lease components. As with current GAAP, the guidance does not apply to the following leases: intangible assets to explore for or use minerals, oil, natural gas, and similar nonregenerative resources, biological assets (includes timber), inventory, or assets under construction. This guidance is effective for annual reporting periods beginning after December 15, 2018, including interim periods within that reporting period and early adoption is permitted. The new guidance is to be applied under a modified retrospective approach wherein practical expedients have been allowed that will not require reassessment of current leases at the effective date. Management is currently evaluating the impact on the Company's financial position and results of operations and related disclosures.

In March 2016, the FASB issued guidance for derivatives and hedging given lack of specific guidance and diversity in practice. The guidance clarifies that a change in the counterparty to a derivative instrument does not, in and of itself, require dedesignation of that hedge accounting relationship provided all other hedge accounting criteria continue to be met (specifically points to counterparty credit worthiness). This guidance is effective for annual reporting periods beginning after December 15, 2016, including interim periods within that reporting period and early adoption is permitted, including adoption in an interim period. The new guidance is to be applied under the prospective method or modified retrospective approach. Management has concluded that changes in its accounting required by this new guidance will not materially impact the Company's financial position or results of operations and related disclosures.

## NOTES TO THE AUDITED CONSOLIDATED FINANCIAL STATEMENTS

In March 2016, the FASB issued guidance for stock compensation as a part of the simplification initiative that covers related tax accounting, cash flow presentation, and forfeitures. The two tax accounting related amendments are as follows: all excess tax benefits and tax deficiencies (including tax benefits of dividends on share-based payment awards) should be recognized within income tax expense or benefit in the income statement, the tax effects of exercised or vested awards should be treated as discrete items in the reporting period in which they occur, an entity also should recognize excess tax benefits regardless of whether the benefit reduces taxes payable in the current period; and the threshold to qualify for equity classification permits withholding up to the maximum statutory tax rates in the applicable jurisdictions. The cash flow presentation items sets forth that excess tax benefits should be classified along with other income tax cash flows as an operating activity and cash paid by an employer when directly withholding shares for tax withholding purposes should be classified as a financing activity. For forfeitures, an entity can make an entity-wide accounting policy election to either estimate the number of awards that are expected to vest (current GAAP) or account for forfeitures when they occur. This guidance is effective for annual reporting periods beginning after December 15, 2016, including interim periods within that reporting period and early adoption is permitted, including adoption in an interim period. The new guidance application is mixed among the various elements that include retrospective, prospective, and modified retrospective transition methods. Management elected to early adopt this standard for annual reporting periods beginning after December 15, 2015 and adopted using the modified retrospective transition method for the tax accounting and forfeiture related aspects of the guidance which did not materially impact the Company's financial position or results of operations and related disclosures. Management adopted the cash flow classification related provisions of the guidance on a retrospective basis, which resulted in the reclassification of cash flows from financing activities to operating activities of \$12 million and \$25 million in 2015 and 2014, respectively, as reported in the Consolidated Statements of Cash Flows.

In June 2016, the FASB issued guidance relating to credit losses. The amendments require a financial asset (or group of financial assets) measured at amortized cost basis to be presented at the net amount expected to be collected through the use of allowances for credit losses valuation account. The income statement will reflect the measurement of credit losses for newly recognized financial assets, as well as the expected increases or decreases of expected credit losses that have taken place during the period. This guidance is effective for annual reporting periods beginning after December 15, 2019, including interim periods within that reporting period and early adoption is permitted, including adoption in an interim period, beginning after December 15, 2018. The new guidance application is mixed among the various elements that include modified retrospective and prospective transition methods. Management is currently evaluating the impact on the Company's financial position and results of operations and related disclosures.

In August 2016, the FASB issued guidance to reduce existing diversity in practice in regards to how cash receipts and cash payments are presented and classified in the statement of cash flows. The guidance specifically addresses the following items: debt prepayment or debt extinguishment costs; settlement of zero-coupon debt instruments or other debt instruments with coupon interest rates that are insignificant in relation to the effective interest rate of the borrowing; contingent consideration payments made after a business combination; proceeds from the settlement of insurance claims; proceeds from the settlement of corporate-owned life insurance policies; distributions received from equity method investees; beneficial interest in securitization transactions; and separately identifiable cash flows and application of the predominance principle. This guidance is effective for annual reporting periods beginning after December 15, 2017, including interim periods within that reporting period and early adoption is permitted, including adoption in an interim period. The new guidance is to be applied retrospectively to each period presented at the date of adoption. Management elected to early adopt this standard for annual reporting periods beginning after December 15, 2015 and adopted retrospectively which did not result in changes to related disclosures or classifications.

In October 2016, the FASB issued guidance as a part of the Simplification Initiative in regards to income tax of intra-entity asset transfers. The release requires an entity to recognize the income tax consequences of an intra-entity transfer of an asset other than inventory when the transfer occurs. Consequently, the amendments eliminate the exception for an intra-entity transfer of an asset other than inventory that prohibited recognizing current and deferred

income tax consequences for an intra-entity asset transfer until the asset or assets have been sold to an outside party. This guidance is effective for annual reporting periods beginning after December 15, 2017, including interim periods within those annual reporting periods and early adoption is permitted as of the beginning of an annual reporting period for which financial statements (interim or annual) have not been issued or made available for issuance. The new guidance is to be applied on a modified retrospective basis through a cumulative-effect adjustment directly to retained earnings as of the beginning of the period of adoption. Management is currently evaluating the impact on the Company's related disclosures.

NOTES TO THE AUDITED CONSOLIDATED FINANCIAL STATEMENTS

In December 2016, the FASB issued guidance as a result of diversity in practice for the classification and presentation of changes in restricted cash on the statement of cash flows. This Update requires that a statement of cash flows explain the change during the period in the total of cash, cash equivalents, and amounts generally described as restricted cash or restricted cash equivalents. This guidance is effective for annual reporting periods beginning after December 15, 2017, including interim periods within those fiscal years and early adoption is permitted, including adoption in an interim period. The new guidance is to be applied using a retrospective transition method to each period presented. Management has concluded that changes in its accounting required by this new guidance will not materially impact the Company's financial position or results of operations and related disclosures.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES

Disclosure Controls and Procedures

Eastman Chemical Company ("Eastman" or the "Company") maintains a set of disclosure controls and procedures designed to ensure that information required to be disclosed by the Company in reports that it files or submits under the Securities Exchange Act of 1934 is recorded, processed, summarized, and reported within the time periods specified in Securities and Exchange Commission rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to provide reasonable assurance that information required to be disclosed by the Company in the reports that it files or submits under the Securities Exchange Act of 1934 is accumulated and communicated to the Company's management, including its principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure. An evaluation was carried out under the supervision and with the participation of the Company's management, including the Chief Executive Officer ("CEO") and Chief Financial Officer ("CFO"), of the effectiveness of the Company's disclosure controls and procedures. Based on that evaluation, the CEO and CFO have concluded that as of December 31, 2016, the Company's disclosure controls and procedures were effective to provide reasonable assurance that information required to be disclosed was accumulated and communicated to management as appropriate to allow timely decisions regarding required disclosure.

Management necessarily applies its judgment in assessing the costs and benefits of such controls and procedures, which, by their nature, can provide only reasonable assurance regarding management's control objectives. Management, including the CEO and CFO, does not expect that the Company's disclosure controls and procedures can prevent all possible errors or fraud. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance; judgments in decision-making can be faulty; and breakdowns can occur because of simple errors or mistakes. Additionally, controls can be circumvented by the individual acts of one or more persons. The design of any system of controls is based in part upon certain assumptions about the likelihood of future events, and while the Company's disclosure controls and procedures are designed to be effective under circumstances where they should reasonably be expected to operate effectively, there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Because of the inherent limitations in any control system, misstatements due to possible errors or fraud may occur and not be detected.

Management's Report on Internal Control Over Financial Reporting

Management of the Company is responsible for establishing and maintaining adequate internal control over financial reporting. The Company's internal control over financial reporting is a process designed under the supervision of the Company's CEO and CFO to provide reasonable assurance regarding the reliability of financial reporting and the preparation of the Company's financial statements for external purposes in accordance with U.S. generally accepted accounting principles.

The Company's internal control over financial reporting includes policies and procedures that:

- Pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect transactions and acquisitions and dispositions of assets of the Company;



Provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with U.S. generally accepted accounting principles, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and the directors of the Company; and

• 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 Company's 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.

Management has assessed the effectiveness of its internal control over financial reporting as of December 31, 2016 based on the framework 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 determined that the Company's internal control over financial reporting was effective as of December 31, 2016.

The effectiveness of the Company's internal control over financial reporting as of December 31, 2016 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report which appears herein.

#### Changes in Internal Control Over Financial Reporting

There has been no change in the Company's internal control over financial reporting that occurred during the quarter ended December 31, 2016 that has materially affected, or is reasonably likely to materially effect, the Company's internal control over financial reporting.

#### ITEM 9B. OTHER INFORMATION

None.

## PART III

### ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The material under the heading "Proposals to be Voted On at the Annual Meeting--Item 1--Election of Directors" to (but not including) the subheading "The Board of Directors and Corporate Governance" and under the subheading "Board Committees--Audit Committee" (except for the material under the subheading "Board Committees--Audit Committee--Audit Committee Report", which is not incorporated by reference herein), each as included and to be filed in the definitive Proxy Statement for the 2017 Annual Meeting of Stockholders (the "2017 Proxy Statement"), is incorporated by reference herein in response to this Item. Certain information concerning executive officers of Eastman Chemical Company ("Eastman" or the "Company") is set forth under the heading "Executive Officers of the Company" in Part I of this Annual Report on Form 10-K.

The Company has adopted a Code of Ethics and Business Conduct applicable to the Chief Executive Officer, the Chief Financial Officer, and the Controller of the Company. The Company has posted such Code of Ethics and Business Conduct on its website ([www.eastman.com](http://www.eastman.com)) in the "Investors -- Corporate Governance" section.

### ITEM 11. EXECUTIVE COMPENSATION

The material under the heading "Proposals to be Voted On at the Annual Meeting--Item 1--Election of Directors—Board Committees – Compensation and Management Development Committee – Compensation Committee Report", under the subheading "Director Compensation", and under the heading "Executive Compensation", each as included and to be filed in the 2017 Proxy Statement, is incorporated by reference herein in response to this Item.

### ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The material under the headings "Stock Ownership of Directors and Executive Officers--Common Stock" and "Principal Stockholders" as included and to be filed in the 2017 Proxy Statement is incorporated by reference herein in response to this Item.

### SECURITIES AUTHORIZED FOR ISSUANCE UNDER EQUITY COMPENSATION PLANS

#### Equity Compensation Plans Approved by Stockholders

Stockholders approved the Company's 2007 Omnibus Long-Term Compensation Plan, the 2012 Omnibus Stock Compensation Plan, and the 2002 Director Long-Term Compensation Plan. Although stock and stock-based awards are still outstanding under the 2007 Omnibus Long-Term Compensation Plan, the 2002 Director Long-Term Compensation Plan, the 2007 Director Long-Term Compensation Subplan, a component of the 2007 Omnibus Long-Term Compensation Plan, and the 2012, 2013, and 2015 Director Long-Term Compensation Subplans, components of the 2012 Omnibus Stock Compensation Plan, no shares are available under these plans for future awards. All future share-based awards will be made from the 2012 Omnibus Stock Compensation Plan and, if approved by stockholders at the 2017 Annual Meeting of Stockholders, the 2017 Omnibus Stock Compensation Plan.

#### Equity Compensation Plans Not Approved by Stockholders

Stockholders have approved all compensation plans under which shares of Eastman common stock are authorized for issuance.

## Summary Equity Compensation Plan Information Table

The following table sets forth certain information as of December 31, 2016 with respect to compensation plans under which shares of Eastman common stock may be issued.

| Plan Category  | Number of Securities to be Issued upon Exercise of Outstanding Options (a) | Weighted-Average Exercise Price of Outstanding Options (b) | Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities reflected in Column (a)) (c) |
|--|--|--|---|
| Equity compensation plans approved by stockholders     | 2,363,700  | (1)\$ 61   | 3,807,724 (2)   |
| Equity compensation plans not approved by stockholders | —  | —  | —   |
| TOTAL  | 2,363,700  | \$ 61  | 3,807,724   |

Represents shares of common stock issuable upon exercise of outstanding options granted under Eastman Chemical Company's 2007 Omnibus Long-Term Compensation Plan; the 2002 Director Long-Term Compensation Plan; the (1) 2007 Director Long-Term Compensation Subplan, a component of the 2007 Omnibus Long-Term Compensation Plan; and the 2012 Omnibus Stock Compensation Plan.

Shares of common stock available for future awards under the Company's 2012 Omnibus Stock Compensation Plan, (2)including the 2016 Director Stock Compensation Subplan, a component of the 2012 Omnibus Stock Compensation Plan.

## ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The material under the heading "Proposals to be Voted On at the Annual Meeting--Item 1--Election of Directors", subheadings "Director Independence" and "Transactions with Directors, Executive Officers, and Related Persons", each as included and to be filed in the 2017 Proxy Statement, is incorporated by reference herein in response to this Item.

## ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The information concerning amounts billed for professional services rendered by the principal accountant and pre-approval of such services by the Audit Committee of the Company's Board of Directors under the heading "Item 5 - Ratification of Appointment of Independent Auditors" as included and to be filed in the 2017 Proxy Statement is incorporated by reference herein in response to this Item.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

|     |    | Page   |
|-----|----|--|
| (a) | 1. | Consolidated Financial Statements:   |
|     |    | <u>Management's Responsibility for Financial Statements</u> 65                                     |
|     |    | <u>Report of Independent Registered Public Accounting Firm</u> 66                                  |
|     |    | <u>Consolidated Statements of Earnings, Comprehensive Income, and Retained Earnings</u> 67         |
|     |    | <u>Consolidated Statements of Financial Position</u> 69  |
|     |    | <u>Consolidated Statements of Cash Flows</u> 70  |
|     |    | <u>Notes to Company's Consolidated Financial Statements</u> 71                                     |
|     | 2. | <u>Exhibits filed as part of this report are listed in the Exhibit Index beginning at page</u> 134 |
| (b) |    | <u>The Exhibit Index and required Exhibits to this report are included beginning at page</u> 134   |

ITEM 16. FORM 10-K SUMMARY

None.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Eastman Chemical Company

By: /s/ Mark J. Costa  
Mark J. Costa  
Chief Executive Officer

Date: February 27, 2017

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

| SIGNATURE                                 | TITLE                                   | DATE              |
|---|---|-------------------|
| PRINCIPAL EXECUTIVE OFFICER AND DIRECTOR: |   |                   |
| /s/ Mark J. Costa<br>Mark J. Costa        | Chief Executive Officer and<br>Director | February 27, 2017 |

PRINCIPAL FINANCIAL OFFICER:

|  |   |                   |
|--|---|-------------------|
| /s/ Curtis E. Espeland<br>Curtis E. Espeland | Executive Vice President and<br>Chief Financial Officer | February 27, 2017 |
|--|---|-------------------|

PRINCIPAL ACCOUNTING OFFICER:

|                                    |  |                   |
|------------------------------------|--|-------------------|
| /s/ Scott V. King<br>Scott V. King | Vice President, Corporate Controller<br>and Chief Accounting Officer | February 27, 2017 |
|------------------------------------|--|-------------------|

SIGNATURE

TITLE DATE

DIRECTORS (other than Mark J. Costa, who also signed as Principal Executive Officer):

|  |          |                   |
|--|----------|-------------------|
| /s/ Humberto P. Alfonso<br>Humberto P. Alfonso | Director | February 27, 2017 |
| /s/ Gary E. Anderson<br>Gary E. Anderson       | Director | February 27, 2017 |
| /s/ Brett D. Begemann<br>Brett D. Begemann     | Director | February 27, 2017 |
| /s/ Michael P. Connors<br>Michael P. Connors   | Director | February 27, 2017 |
| /s/ Stephen R. Demeritt<br>Stephen R. Demeritt | Director | February 27, 2017 |
| /s/ Robert M. Hernandez<br>Robert M. Hernandez | Director | February 27, 2017 |
| /s/ Julie F. Holder<br>Julie F. Holder         | Director | February 27, 2017 |
| /s/ Renée J. Hornbaker<br>Renée J. Hornbaker   | Director | February 27, 2017 |
| /s/ Lewis M. Kling<br>Lewis M. Kling           | Director | February 27, 2017 |
| /s/ James J. O'Brien<br>James J. O'Brien       | Director | February 27, 2017 |
| /s/ David W. Raisbeck<br>David W. Raisbeck     | Director | February 27, 2017 |



Exhibit  
Number

EXHIBIT INDEX  
Description

- 3.01 Amended and Restated Certificate of Incorporation of Eastman Chemical Company (incorporated herein by reference to Exhibit 3.01 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2012)
- 3.02 Amended and Restated Bylaws of Eastman Chemical Company (incorporated herein by reference to Exhibit 3.02 to the Company's Annual Report on Form 10-K for the year ended December 31, 2015)
- 4.01 Form of Eastman Chemical Company common stock certificate as amended February 1, 2001 (incorporated herein by reference to Exhibit 4.01 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2001)
- 4.02 Indenture, dated as of January 10, 1994, between Eastman Chemical Company and The Bank of New York, as Trustee (the "Indenture") (incorporated herein by reference to Exhibit 4(a) to the Company's Current Report on Form 8-K dated January 10, 1994)
- 4.03 Indenture, dated as of June 5, 2012, between Eastman Chemical Company and Wells Fargo Bank, as Trustee (incorporated herein by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K dated June 5, 2012)
- 4.04 Form of 7 1/4% Debentures due January 15, 2024 (incorporated herein by reference to Exhibit 4(d) to the Company's Current Report on Form 8-K dated January 10, 1994)
- 4.05 Officers' Certificate pursuant to Sections 201 and 301 of the Indenture related to 7 5/8% Debentures due 2024 (incorporated herein by reference to Exhibit 4(a) to the Company's Current Report on Form 8-K dated June 8, 1994)
- 4.06 Form of 7 5/8% Debentures due June 15, 2024 (incorporated herein by reference to Exhibit 4(b) to the Company's Current Report on Form 8-K dated June 8, 1994)
- 4.07 Form of 7.60% Debentures due February 1, 2027 (incorporated herein by reference to Exhibit 4.08 to the Company's Annual Report on Form 10-K for the year ended December 31, 1996)
- 4.08 Officer's Certificate pursuant to Sections 201 and 301 of the Indenture related to 7.60% Debentures due February 1, 2027 (incorporated herein by reference to Exhibit 4.09 to the Company's Annual Report on Form 10-K for the year ended December 31, 1996)
- 4.09 Form of 5.500% Note due 2019 (incorporated herein by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K dated November 2, 2009)
- 4.10 Form of 4.5% Note due 2021 (incorporated herein by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K dated December 10, 2010)
- 4.11 Form of 3.6% Note due 2022 (incorporated herein by reference to Exhibit 4.3 to the Company's Current Report on Form 8-K dated June 5, 2012)

- 4.12 Form of 4.8% Note due 2042 (incorporated herein by reference to Exhibit 4.4 to the Company's Current Report on Form 8-K dated June 5, 2012)
- 4.13 Form of 4.65% Note due 2044 (incorporated herein by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K dated May 15, 2014)
- 4.14 Form of 2.70% Note due 2020 (incorporated herein by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K dated November 20, 2014)
- 4.15 Form of 3.80% Note due 2025 (incorporated herein by reference to Exhibit 4.18 to the Company's Annual Report on Form 10-K for the year ended December 31, 2014)
- 4.16 Form of 1.50% Note due 2023 (incorporated herein by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K dated May 26, 2016 and Exhibit 1.1 to the Company's Current Report on Form 8-K dated November 21, 2016)
- 4.17 Form of 1.875% Note due 2026 (incorporated herein by reference to Exhibit 4.3 to the Company's Current Report on Form 8-K dated November 21, 2016)
- 10.01 Amended and Restated \$250,000,000 Accounts Receivable Securitization Agreement dated July 9, 2008 (amended August 31, 2016) between the Company and The Bank of Tokyo-Mitsubishi UFJ, Ltd., as agent (incorporated herein by reference Exhibit 10.01 to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2015 and Exhibit 10.01 to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2016)

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Exhibit EXHIBIT INDEX  
Number Description

- 10.02 Second Amended and Restated Five-Year Credit Agreement, dated as of October 9, 2014 (amended October 9, 2015 and August 31, 2016), among Eastman Chemical Company, the initial lenders named therein, and Citibank N.A., as administrative agent, Citigroup Global Markets Inc. and J.P. Morgan Securities LLC, as joint lead arrangers (incorporated herein by reference to Exhibit 10.03 to the Company's Current Report on Form 8-K dated October 9, 2014, Exhibit 10.01 to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2015, and Exhibit 10.02 to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2016)
- 10.03 Five-Year Senior Term Loan Credit Agreement (incorporated herein by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K dated October 9, 2014)
- 10.04 Five-Year Senior Term Loan Credit Agreement (incorporated herein by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K dated December 15, 2016)
- 10.05 Amended and Restated Non-Recourse Account Receivable Purchase Agreement dated December 21, 2012 (amended March 28, 2013, July 30, 2013, and March 22, 2016) between BNP Paribas Fortis Factor N.V. and Taminco US LLC (incorporated herein by reference to Exhibit 10.01 to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2016)
- 10.06 Amended and Restated Non-Recourse Accounts Receivable Purchase Agreement dated October 31, 2012 (amended March 28, 2013, May 23, 2013, July 30, 2013, December 10, 2013, January 7, 2014, and March 22, 2016) between BNP Paribas Fortis Factor N.V. and Taminco B.V.B.A. (initial agreement incorporated herein by reference to Exhibit 10.8 to Taminco Corporation Amendment No. 1 to Registration Statement on Form S-1, File No. 333-185244, filed with the SEC January 18, 2013 and Exhibit 10.02 to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2016)
- 10.07 Non-Recourse Accounts Receivable Purchase agreement dated April 25, 2014 (amended May 13, 2014, November 21, 2014, and March 22, 2016) between BNP Parisbas Fortis Factor N.V. and Taminco Finland Oy (incorporated herein by reference to Exhibit 10.03 to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2016)
- 10.08 Eastman Excess Retirement Income Plan (incorporated herein by reference to Exhibit 10.02 to the Company's Annual Report on Form 10-K for the year ended December 31, 2008) \*\*
- 10.09 Form of Executive Change in Control Severance Agreements (incorporated herein by reference to Exhibit 10.02 to the Company's Annual Report on Form 10-K for the year ended December 31, 2010) \*\*
- 10.10 Eastman Unfunded Retirement Income Plan (incorporated herein by reference to Exhibit 10.04 to the Company's Annual Report on Form 10-K for the year ended December 31, 2008) \*\*
- 10.11 Eastman Chemical Company Benefit Security Trust dated December 24, 1997, as amended May 1, 1998 and February 1, 2001 and Amendment Number Three to the Eastman Chemical Company Benefit Security Trust dated January 2, 2002 (incorporated herein by reference to Exhibit 10.01 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2001 and Exhibit 10.04 to the Company's Quarterly

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Report on Form 10-Q for the quarter ended September 30, 2002) \*\*

- 10.12 Amended and Restated Warrant to Purchase Shares of Common Stock of Eastman Chemical Company, dated January 2, 2002 (incorporated herein by reference to Exhibit 10.02 to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2002) \*\*
- 10.13 Amended and Restated Registration Rights Agreement, dated January 2, 2002 (incorporated herein by reference to Exhibit 10.03 to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2002) \*\*
- 10.14 Amended and Restated Eastman Executive Deferred Compensation Plan (incorporated herein by reference to Exhibit 10.13 to the Company's Annual Report on Form 10-K for the year ended December 31, 2014) \*\*
- 10.15 Amended and Restated Eastman Directors' Deferred Compensation Plan (incorporated herein by reference to 10.04 to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2016) \*\*
- 10.16 Eastman Unit Performance Plan as amended and restated effective December 5, 2012 (incorporated herein by reference to Exhibit 10.12 to the Company's Annual Report on Form 10-K for the year ended December 31, 2012) \*\*

| Exhibit Number | EXHIBIT INDEX<br>Description  |
|----------------|---|
| 10.17          | Form of Indemnification Agreements with Directors and Executive Officers (incorporated herein by reference to Exhibit 10.25 to the Company's Annual Report on Form 10-K for the year ended December 31, 2003) **  |
| 10.18          | Forms of Award Notices for Stock Options Granted to Executive Officers under the 2007 Omnibus Long-Term Compensation Plan (incorporated herein by reference to Exhibit 10.08 to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2007, Exhibits 10.01 and 10.02 to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2008, and Exhibits 10.01 and 10.02 to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2010)** |
| 10.19          | 2007 Omnibus Long-Term Compensation Plan (incorporated herein by reference to Exhibit 10.01 to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2007) **   |
| 10.20          | Forms of Performance Share Awards to Executive Officers (2014 – 2016 Performance Period) (incorporated herein by reference to Exhibit 10.32 to the Company's Annual Report on Form 10-K for the year ended December 31, 2013) **  |
| 10.21          | Forms of Performance Share Awards to Executive Officers (2015 – 2017 Performance Period) (incorporated herein by reference to Exhibit 10.01 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2015) **   |
| 10.22          | Forms of Performance Share Awards to Executive Officers (2016 – 2018 Performance Period) (incorporated herein by reference to Exhibit 10.23 to the Company's Annual Report on Form 10-K for the year ended December 31, 2015) **  |
| 10.23*         | Forms of Performance Share Awards to Executive Officers (2017 – 2019 Performance Period) **   |
| 10.24          | 2007 Director Long-Term Compensation Subplan of the 2007 Omnibus Long-Term Compensation Plan (incorporated herein by reference to Exhibit 10.10 to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2007) **   |
| 10.25          | UPP performance measures and goals, specific target objectives with respect to such performance goals, the method for computing the amount of the UPP award allocated to the award pool if the performance goals are attained, and the eligibility criteria for employee participation in the UPP, for the 2016 performance year (incorporated herein by reference to the Company's Current Report on Form 8-K dated December 2, 2015) **   |
| 10.26          | UPP performance measures and goals, specific target objectives with respect to such performance goals, the method for computing the amount of the UPP award allocated to the award pool if the performance goals are attained, and the eligibility criteria for employee participation in the UPP, for the 2017 performance year (incorporated herein by reference to the Company's Current Report on Form 8-K dated November 30, 2016) **  |
| 10.27          | 2012 Omnibus Stock Compensation Plan (incorporated herein by reference to Appendix A to the Company's 2012 Annual Meeting Proxy Statement) **   |

- 10.28 2012 Director Stock Compensation Subplan of the 2012 Omnibus Stock Compensation Plan and Form of Restricted Stock Award Notice (incorporated herein by reference to Exhibit 10.06 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2012) \*\*
- 10.29 2013 Director Stock Compensation Subplan of the 2012 Omnibus Stock Compensation Plan and Form of Restricted Stock Award Notice (incorporated herein by reference to Exhibit 10.32 to the Company's Annual Report on Form 10-K for the year ended December 31, 2012) \*\*
- 10.30 2015 Director Stock Compensation Subplan of the 2012 Omnibus Stock Compensation Plan and Form of Restricted Stock Award Notice (incorporated herein by reference to Exhibit 10.02 to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2015) \*\*
- 10.31 2016 Director Stock Compensation Subplan of the 2012 Omnibus Stock Compensation Plan and Form of Restricted Stock Award Notice (incorporated herein by reference to Exhibit 10.03 to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2016) \*\*
- 10.32 Forms of Award Notices for Stock Options and Stock Appreciation Rights Granted to Executive Officers under the 2012 Omnibus Stock Compensation Plan (incorporated herein by reference to Exhibit 10.01 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2013, Exhibit 10.29 to the Company's Annual Report on Form 10-K for the year ended December 31, 2013, and Exhibit 10.01 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2016) \*\*

| Exhibit Number | EXHIBIT INDEX<br>Description  |
|----------------|---|
| 10.33          | Eastman Chemical Company Executive Incentive Pay Clawback Policy (incorporated herein by reference to Exhibit 10.01 to the Company's Current Report on Form 8-K dated February 3, 2015) **  |
| 10.34          | Form of Restricted Stock Unit Award to Curtis E. Espeland on January 1, 2015 (incorporated herein by reference to Exhibit 10.33 to the Company's Annual Report on Form 10-K for the year ended December 31, 2014) **                                |
| 10.35          | Form of Restricted Stock Unit Award to David A. Golden and one other Executive Officer on February 18, 2015 (incorporated herein by reference to Exhibit 10.34 to the Company's Annual Report on Form 10-K for the year ended December 31, 2014) ** |
| 10.36*         | Amendment dated December 16, 2016 to the Amended and Restated Non-Recourse Accounts Receivable Purchase Agreement Dated December 21, 2012 between BNP Paribas Fortis Factor N.V. and Taminco US LLC   |
| 10.37*         | Amendment dated December 16, 2016 to the Amended and Restated Non-Recourse Accounts Receivable Purchase Agreement Dated October 31, 2012 between BNP Paribas Fortis Factor N.V. and Taminco B.V.B.A.  |
| 10.38*         | Amendment dated December 16, 2016 to the Non-Recourse Accounts Receivable Purchase Agreement Dated April 25, 2014 between BNP Paribas Fortis Factor N.V and Taminco Finland Oy  |
| 10.39          | 2002 Omnibus Long-Term Compensation Plan, as amended (incorporated herein by reference to Exhibit 10.02 to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2007) **   |
| 10.40          | 2002 Director Long-Term Compensation Plan, as amended (incorporated herein by reference to Appendix B to Eastman Chemical Company's 2002 Annual Meeting Proxy Statement) **   |
| 12.01*         | Statement re: Computation of Ratios of Earnings to Fixed Charges  |
| 21.01*         | Subsidiaries of the Company   |
| 23.01*         | Consent of Independent Registered Public Accounting Firm  |
| 31.01*         | Rule 13a – 14(a) Certification by Mark J. Costa, Chief Executive Officer, for the year ended December 31, 2016  |
| 31.02*         | Rule 13a – 14(a) Certification by Curtis E. Espeland, Executive Vice President and Chief Financial Officer, for the year ended December 31, 2016  |
| 32.01*         | Section 1350 Certification by Mark J. Costa, Chief Executive Officer, for the year ended December 31, 2016  |
| 32.02*         | Section 1350 Certification by Curtis E. Espeland, Executive Vice President and Chief Financial Officer, for the year ended December 31, 2016  |

99.01\* 2016 Company and Segment Revenue by End-Use Market

99.02\* Product and Raw Material Information

101.INS\* XBRL Instance Document

101.SCH\* XBRL Taxonomy Extension Schema

101.CAL\* XBRL Taxonomy Calculation Linkbase

101.LAB\* XBRL Taxonomy Label Linkbase

101.PRE\* XBRL Definition Linkbase Document

101.DEF\* XBRL Definition Linkbase Document

\* Denotes exhibit filed or furnished herewith.

\*\* Management contract or compensatory plan or arrangement filed pursuant to Item 601(b) (10) (iii) of Regulation S-K.