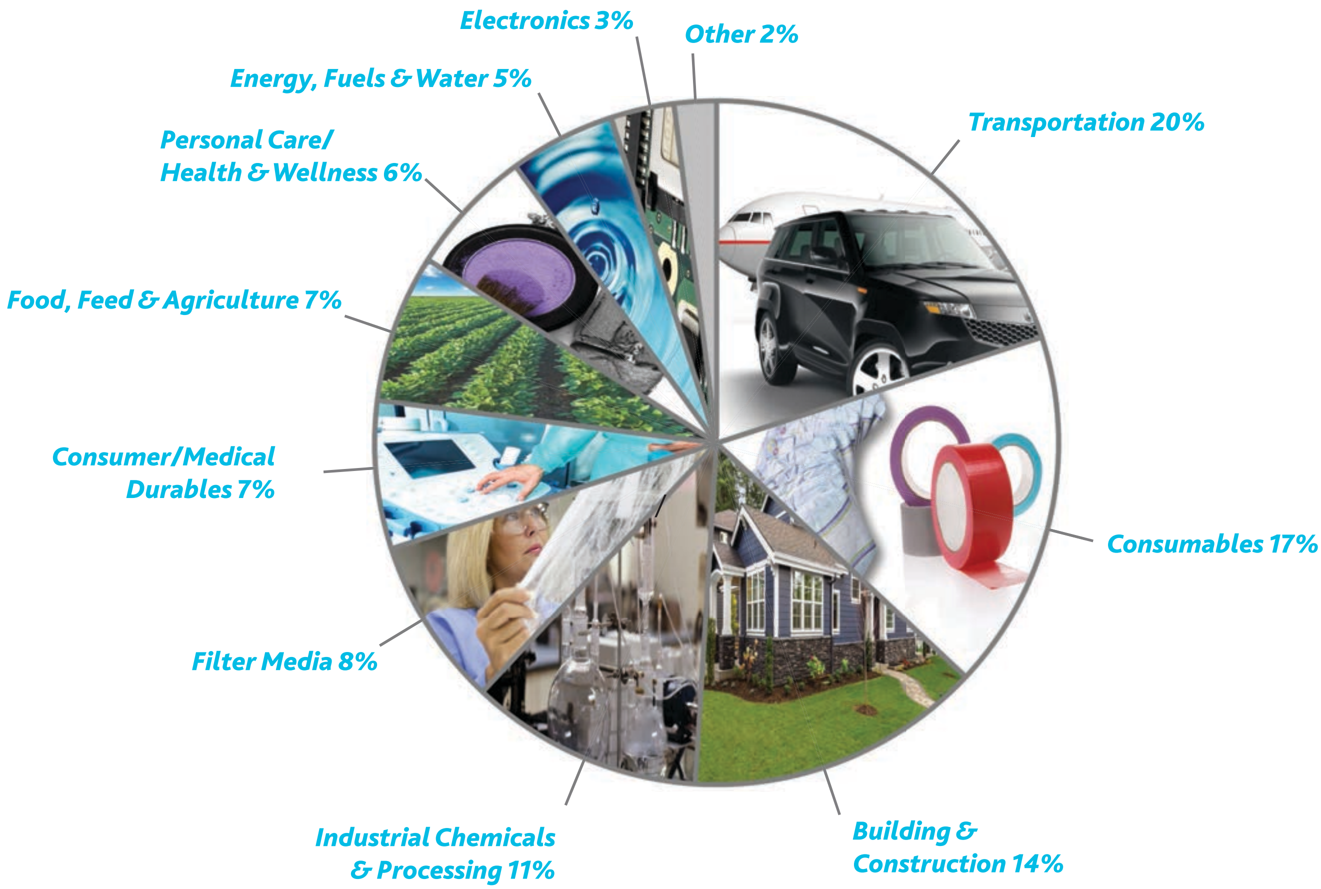

EMNAR17


Enhancing the quality of life


in a material way


EASTMAN

2017 sales revenue **by end-use market**



2017 sales revenue **by region**

Dear Fellow Stockholders,

The year 2017 will certainly stand out in the memory of anyone who has a connection to Eastman. For the Eastman team, it was a year of achievement, strength, and perseverance to overcome extraordinary challenges. And most certainly, 2017 was a year where we made remarkable progress on our growth journey.

Our commitment to an innovation-driven growth model—based on our world-class technologies, relentless market engagement, and differentiated application development—is resulting in substantial organic growth. By capitalizing on the product portfolios in our unique specialty businesses and leveraging the advantages of our significant scale and deep integration, we are well positioned to deliver strong, sustainable growth by creating our own growth in both core and new markets. At the heart of our success is a consistent commitment to building key capabilities in an already world-class team, which will deliver growth that makes Eastman a thriving company now and for future generations.

We will be driving hard to deliver a strong 2018, and I am confident that the capability of the Eastman team in executing our winning strategy—an innovation-led, customer-focused strategy—will get us there.

2017: Growth. Success. Perseverance.

In 2017, the Eastman team faced operational challenges presented by extraordinary events, including two hurricanes and a serious incident in the coal gasification operations at our Kingsport site. Under extreme circumstances, the team came together and delivered solid returns. In a year of accomplishments, here are just a few of the highlights:

- We grew adjusted earnings per share 13 percent and generated $1 billion of free cash flow, enabling us to make smart capital investments to increase manufacturing capacity for specialty products and build capabilities in growth areas.

- Our two specialty segments, Advanced Materials and Additives & Functional Products, together delivered greater than 7 percent volume growth. That's more than double their underlying markets.

- We made great progress stabilizing Fibers, with multiyear supply arrangements with two-thirds of acetate tow customers and second-half 2017 operating earnings more than 9 percent higher than the first half of 2017.

- We generated over $300 million of new business revenue and achieved the highest rate of new product commercialization from our innovation growth portfolio in the nearly 100-year history of the company.

- We returned almost $650 million to stockholders through share repurchases and dividends. Demonstrating its confidence in our present and future earnings, our Board increased the quarterly cash dividend 10 percent. This marks the eighth straight year of increases, during which time we have more than doubled the dividend rate.

Throughout our company, the Eastman team recognizes that we have a responsibility and an obligation beyond bottom-line financial performance—a mindset that is throughout Eastman and contributes to our overall performance excellence. Some of the 2017 highlights are:

- For the second year in a row, Eastman was named among the JUST 100 Most Just Companies in America according to Forbes and JUST Capital. This distinction recognizes us as one of America's top corporate citizens on issues such as worker pay and treatment, job creation, healthy products and communities, and environmental impact.

- Attesting to our culture of integrity is the 2017 World's Most Ethical Company® award, which we received from the Ethisphere Institute for the fourth year in a row.

- We received the Environmental Protection Agency's ENERGY STAR® Partner of the Year–Sustained Excellence Award. This is the sixth consecutive year Eastman has received this honor for continued leadership and superior energy efficiency, and we remain the only company in the chemical industry to receive the Sustained Excellence Award or be named Partner of the Year more than once.

- Eastman earned the 2017 Military Friendly® Employer designation by Victory Media, a recognition for our exceptionally strong hiring programs and meaningful jobs for transitioning military service members, veterans, and their spouses. Building on this, Eastman launched EVETS in 2017, a new Eastman Resource Group (ERG) that was created to help ensure that military veterans are fully engaged and their unique skills are highly integrated and valued. This is the fourth ERG Eastman has created to support inclusion and diversity at Eastman. The other three are Catalysts (women), Connect (African-American and Black), and Equality (LGBT).

Those are just some of the highlights that illustrate our most significant advantage: people and culture. The strength of our culture was tested in many ways last year, most significantly by the explosions in our Kingsport coal gasification operations. In those initial moments, our men and women followed established safety procedures, relied on their training, and exercised good judgment. We are extraordinarily grateful that, in doing so, no one was seriously injured and there was no harm to the environment. It was a very sobering reminder of why we train and invest in safety. In the aftermath of this incident, we have learned a great deal and are rededicating our efforts to pursue excellence in process safety and a zero-incident culture.

Due to the dedication and ingenuity of our teams, the world-class expertise that enabled us to navigate through complex repairs and choices, and the unique advantages of our scale and integration, we safely and efficiently repaired the facility in a time frame that seemed ambitious to everyone but us. Amazingly, our coal gasification facility was mechanically complete in December, and we resumed normal operations in mid-January.

Eastman has operated coal gasification safely and expertly for three decades. We are confident that we identified the issues that led to the incident and have made the necessary changes so this never happens again. In the end, there was no disruption in supply to our specialty derivatives customers—many of which have expressed appreciation for our reliability in even the most extreme circumstances.

2018 Focus

As our innovation strategy kicks into a higher gear and runs smoother than ever, we are in an advantaged position to succeed as the global economy heats up and consumer demand rises. We plan to protect our existing business, win new business, and continue to build our impressive record of earnings and cash flow. In 2018, we will:

- Continue to accelerate growth through new commercialization that improves our product mix and shifts our overall portfolio closer to specialty. We expect revenue growth from specialty products to be two times underlying markets.

- Continue to invest our capital selectively with targeted return-on-invested capital of 10 to 15 percent.

- Continue to manage and reduce our costs with diligence so that our variable margin growth goes to the bottom line.

- Continue to generate cash that rewards investors. We expect to generate approximately $3.5 billion in free cash flow from 2018 to 2020. In a demonstration of its confidence in our ability to do this, our Board recently approved the repurchase of another $2 billion of Eastman common stock.

Earlier this year, members of the Executive Team and I had the honor of representing the global Eastman team to investors at our 2018 Innovation Day. We have historically called these events Investor Day, but this year, we wanted to put innovation front and center—just as it is in our strategy.

During the event, we laid out the Eastman innovation journey, drilling down into some of the success stories that illustrate a strategy that is winning now and, I believe with utmost confidence, will win even bigger in the future.

This is a compelling story because we have a unique growth model. It starts with our world-class technologies that are absolutely second to none. But frankly, world-class technologies on their own are not enough anymore. The materials industry is intensely competitive, and we must stay ahead by producing differentiated, premium products and services. And we are doing just that.

We have also increased our focus on relentlessly engaging the market. We have made significant investments in our sales and marketing capabilities to better understand the markets in which we compete and anticipate the unmet needs requiring a material solution. Our goal is to be the first choice when customers need an innovative solution to help them win in the market.

The other part of our growth triad is application development—where our experts understand not only our own materials and technologies but also the customer's materials and technologies—so we can tune our materials in a way that delivers a unique end-use product.

This model has proven successful for Eastman in the past, such as with Eastman Tritan™ copolyester, and it continues to, as demonstrated by these exciting innovations:

Saflex® VIEW ST

Head-up displays (HUD) are no longer only in luxury vehicles, but the technology has been plagued by a phenomenon called "ghosting." That is the word used for a distorted image some drivers see when using HUD because not all drivers are the same height and not all windshields are shaped the same, creating different sight lines and angles. In September 2017, Eastman introduced the new Saflex View ST innovation that helps correct ghosting. Drivers see a clearer projection of data on their windshield, an invaluable safety advantage in a market that is growing rapidly.

Eastman Impera™ performance resins

For the last decade, the global automotive industry has been setting new standards for fuel efficiency in their fleets and public concerns have continued to increase. Original equipment manufacturers find themselves caught between those two drivers, and they have faced a long-standing conundrum of trading off between tire rolling resistance, wet grip, and wear. They adopted a new solution—hydrocarbon resins—where they do not have to surrender any of those attributes for the sake of another. Our strong technology position, combined with application development, enabled Additives & Functional Products to launch Impera tire additive performance resins, which deliver the desired performance attributes and help manufacturers create brand advantage.

Eastman Naia™ cellulosic yarn and Avra™ performance fibers

For the Fibers business, we achieved a strategic imperative—the stabilization of acetate tow. And just as importantly, we brought innovation to industries where innovation lagged. Naia cellulosic yarn and Avra performance fibers are prime examples of where we are leveraging one of the unique elements of our growth strategy: application development. We engaged downstream markets to understand and create specification demand in addition to how we already work very closely with our direct customers.

Naia leverages one of our oldest product platforms, cellulose esters. We had sold in the textile market for years, but our addressable market had been limited because of performance issues. Our application development investment in this market segment enabled us to tune our molecules in ways to co-innovate with customers and deliver new fibers in garments that perform like a synthetic, keep the comfort of a natural fiber, and are easy to care for. Naia is very sustainable, coming from chemistry where the basic raw material is derived from sustainably managed forests. We commercialized 50 new fibers in 2017 and gained more than 40 new customers.

Through the integration of our polyester technology platform with acetyls and olefins, we introduced Avra. Avra is a polyester microfiber that brings radically improved moisture management and feel to performance wear, an industry where there hasn't been a significant new material introduced in more than 20 years. Spyder Active Sports Inc., a leading skiwear and mountain-based apparel brand, chose Avra to be their next to skin fabric across multiple garment lines. In fact, Spyder base layers, powered by Avra performance fibers, are a part of the official uniform of the U.S. Ski Team. The feedback from skiers has been fantastic.

Innovation: The core of Eastman's purpose

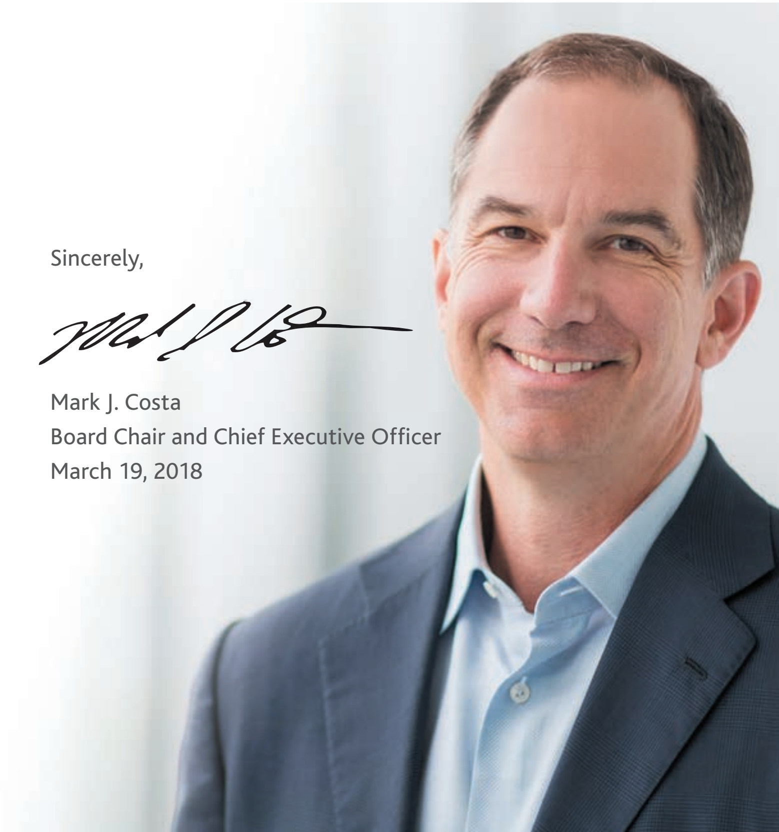
The Eastman innovation wave is strong and building. Through the innovations I cited and so many others, I am confident we are poised to achieve the target that is well within our grasp: To be a leading specialty materials company that is regarded as the materials innovation company.

It is that aspiration that drives me and our Eastman team every day as we work to honor your faith and investment in us. We are committed to making a difference for the owners of our company and to making a difference for the world at large.

The world is growing at a rapid pace. The rising middle class needs solutions. They need safe products. They need better products. They desire products that are good for the planet. With a growing population comes problems that must be solved and can be solved—but they are problems so complex that the solutions must come at a molecular level.

And that is where Eastman comes in. We are uniquely suited to make a material difference. We can enhance the quality of life in a material way, and we see it as our company's purpose—our moral purpose—to do just that.

We are more determined than ever to fulfill that purpose—to make a material difference in the quality of life for billions of people around the world. And we are completely committed to rewarding your confidence and your investment in us by delivering the value you deserve—today, tomorrow, and years into the future.



Sincerely,

Mark J. Costa
Board Chair and Chief Executive Officer
March 19, 2018

Contents

Non-GAAP financial measures—earnings, free cash flow and variable margin: The historical and projected earnings in the Chairman and CEO's letter are non-GAAP earnings that exclude certain non-core and unusual, and any future unusual or nonrecurring, costs, charges, and gains. Reconciliations to the most directly comparable historical GAAP financial measures and other associated disclosures, including descriptions of the excluded non-core and unusual items, for the periods referenced in the Chairman and CEO's letter are included in the "Management's discussion and analysis of financial condition and results of operations" section of this Annual Report and the corresponding Annual Reports for the prior periods referenced and in the Current Reports on Form 8-K on which financial results news releases for the periods referenced were furnished.

The Chairman and CEO's letter also includes the terms "free cash flow," which means cash provided by operating activities less cash used for additions to properties and equipment, and "variable margin," which Eastman defines as revenue minus total cost of raw materials, purchased energy, freight, duty, and warehousing.

Forward-looking statements: This Annual Report includes forward-looking statements concerning plans and expectations for Eastman Chemical Company. Actual results could differ materially from our expectations. See the "Forward-looking statements" and "Risk factors" sections in "Management's discussion and analysis of financial condition and results of operations" of this Annual Report.

ABOUT OUR BUSINESS

Eastman Chemical Company ("Eastman" or the "Company") is a global advanced materials and specialty additives company that produces a broad range of products 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 48 manufacturing sites and equity interests in three 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. With a robust portfolio of specialty businesses, Eastman works with customers to deliver innovative products and solutions while maintaining a commitment to safety and sustainability.

Acquisitions have supported Eastman's strategy to increase emphasis on specialty businesses and have provided opportunities for the integration of technology platforms enabling differentiated product development targeting new niche markets. In July 2012, the Company acquired Solutia Inc. ("Solutia"), a global leader in performance materials and specialty chemicals. In June 2014, the Company acquired BP plc's global aviation turbine engine oil business. In August 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. In December 2014, Eastman acquired Taminco Corporation, a global specialty chemical company and Commonwealth Laminating & Coating, Inc., a specialty films business. Results of the acquired businesses are included in Eastman's financial results for the periods presented.

Eastman's objective is to be an outperforming specialty chemical company with consistent earnings growth and strong cash flow. Integral to the Company's strategy for growth is leveraging its heritage of expertise and innovation within its cellulose and acetyl, olefins, polyester, and alkylamine chemistries. For each of these "streams", the Company has developed and acquired a combination of assets and technologies that combine scale and integration across multiple manufacturing units and sites as a competitive advantage. Management uses an innovation-driven growth model which consists of leveraging world class scalable technology platforms, delivering differentiated application development, and relentlessly engaging the market. The Company sells differentiated products into diverse markets and geographic regions and engages the market by working directly with customers and downstream users to meet their needs in existing and new niche markets. Management believes that this innovation-driven growth model will result in consistent financial results by leveraging the Company's proven technology capabilities to improve product mix, increasing emphasis on specialty businesses, and sustaining and expanding leadership in attractive niche markets. A consistent increase in earnings is expected to result from both organic growth initiatives and strategic inorganic initiatives such as external growth through acquisitions that are complementary or additive to existing products and joint ventures.

Management is pursuing specific opportunities to leverage Eastman's innovation-driven growth model for continued near-term and long-term greater than end-market growth by both sustaining the Company's leadership in existing markets and expanding into new markets.

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 of continued transformation towards a specialty portfolio of products.

ADDITIVES & FUNCTIONAL PRODUCTS SEGMENT

In the AFP segment, the Company manufactures chemicals for products in the transportation, consumables, building and construction, animal nutrition, crop protection, energy, personal and home care, and other markets. In 2017, the AFP segment had sales revenue of $3.3 billion, 35 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.

The AFP segment's sales growth is typically above annual industrial production growth due to innovation and enhanced commercial execution with sales to a robust set of 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. A critical element of the AFP segment's success is its close formulation collaboration with customers through advantaged application development capability.

ADVANCED MATERIALS SEGMENT

In the AM segment, the Company produces and markets 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 2017, the AM segment had sales revenue of $2.6 billion, 27 percent of Eastman's total sales. Key technology platforms for this segment include cellulose esters, copolyesters, and PVB and polyester films.

Eastman's technical, application development, and market development capabilities enable the AM 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, Tritan® copolyesters are a leading solution for food contact applications due to their performance and processing attributes and Bisphenol A ("BPA") free properties. The Saflex® Q Series product line is a leading solution for architectural and automotive applications. 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.

CHEMICAL INTERMEDIATES SEGMENT

The CI segment leverages large scale and vertical integration from the cellulose and acetyl, olefins, and alkylamines streams to support the Company's specialty operating segments with advantaged cost positions. The CI segment sells excess intermediates beyond the Company's internal specialty needs into markets such as industrial chemicals and processing, building and construction, health and wellness, and agrochemicals. In 2017, the CI segment had sales revenue of $2.7 billion, 29 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, and 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. The CI segment also provides superior reliability to customers through its backward integration into readily available raw materials, such as ethane, propane, and coal. In addition to a competitive cost position, the plasticizers business expects to 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 cyclicality, most notably olefin and acetyl-based products. This cyclicality 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 to both general economic conditions and industry supply and demand.

FIBERS SEGMENT

In the Fibers segment, Eastman manufactures and sells Estron® acetate tow and Estrobond® triacetin plasticizers for use in filtration media, primarily 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 85 years. In 2017, the Fibers segment had sales revenue of $852 million, 9 percent of Eastman's total sales.

The largest 10 Fibers segment customers accounted for approximately 70 percent of the segment's 2017 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 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 developing mutually beneficial, long-term customer relationships.

The Company's fully integrated fibers 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 internally produced acetate flake supply for Fibers products, a reputation for customer service excellence, and a customer base characterized by strategic long-term customer and end user relationships. The Company continues to capitalize and build on these strengths to further improve the strategic position of its Fibers segment. Despite continued challenging acetate tow market conditions, including additional industry capacity and lower capacity utilization rates, management expects continued strong Fibers segment cash flow.

SELECTED FINANCIAL DATA

Statements of Earnings Data	**Year Ended December 31,**				
(Dollars in millions, except per share amounts)	**2017**	**2016**	**2015**	**2014**	**2013**
Sales	$ 9,549	$ 9,008	$ 9,648	$ 9,527	$ 9,350
Operating earnings	1,532	1,383	1,384	1,162	1,862
Earnings from continuing operations	1,388	859	854	755	1,172
Earnings from discontinued operations	—	—	—	2	—
Net earnings	1,388	859	854	757	1,172
Less: Net earnings attributable to noncontrolling interest	4	5	6	6	7
Net earnings attributable to Eastman	$ 1,384	$ 854	$ 848	$ 751	$ 1,165
Amounts attributable to Eastman:					
Earnings from continuing operations, net of tax	$ 1,384	$ 854	$ 848	$ 749	$ 1,165
Earnings from discontinued operations, net of tax	—	—	—	2	—
Net earnings attributable to Eastman	$ 1,384	$ 854	$ 848	$ 751	$ 1,165
Basic earnings per share attributable to Eastman:					
Earnings from continuing operations	$ 9.56	$ 5.80	$ 5.71	$ 5.01	$ 7.57
Earnings from discontinued operations	—	—	—	0.02	—
Net earnings	$ 9.56	$ 5.80	$ 5.71	$ 5.03	$ 7.57
Diluted earnings per share attributable to Eastman:					
Earnings from continuing operations	$ 9.47	$ 5.75	$ 5.66	$ 4.95	$ 7.44
Earnings from discontinued operations	—	—	—	0.02	—
Net earnings	$ 9.47	$ 5.75	$ 5.66	$ 4.97	$ 7.44
Statements of Financial Position Data					
Current assets	$ 3,143	$ 2,866	$ 2,878	$ 3,173	$ 2,840
Net properties	5,607	5,276	5,130	5,087	4,290
Goodwill	4,527	4,461	4,518	4,486	2,637
Intangible assets, net of accumulated amortization	2,373	2,479	2,650	2,905	1,781
Total assets	15,999	15,457	15,580	16,072	11,845
Current liabilities	1,982	1,795	2,056	2,022	1,470
Long-term borrowings	6,147	6,311	6,577	7,248	4,254
Total liabilities	10,519	10,849	11,559	12,482	7,970
Total Eastman stockholders' equity	5,403	4,532	3,941	3,510	3,796
Dividends declared per share	2.09	1.89	1.66	1.45	1.25

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 ("CI") 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 business is managed and reported in the Advanced Materials ("AM") segment.

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

On August 6, 2014, the Company acquired Knowlton Technologies, LLC, for a total cash purchase price of $42 million. The acquisition was accounted for as a business combination. The acquired 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".

EASTMAN

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

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 2017 Annual Report (this “Annual Report”). All references to earnings per share ("EPS") contained in this report are to diluted earnings per share unless otherwise noted.

CRITICAL ACCOUNTING ESTIMATES

In preparing the consolidated financial statements in conformity with GAAP, 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, Eastman 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 Eastman 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 the price that would be received to sell an asset in an orderly transaction between market participants. 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

Eastman 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 2017 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 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 of the assets and liabilities of the reporting unit, would be necessary to determine the amount, if any, of goodwill impairment.

As a result of the tests performed during fourth quarter 2017, there were no impairments of the Company's goodwill. Fair values substantially exceeded the carrying values for each reporting unit tested, except for the crop protection reporting unit (part of the Additives & Functional Products operating segment).

As of December 31, 2017, goodwill of $274 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 nine 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. The fair value was eight percent less than the carrying value with a one percent decrease in the target market long-term growth rate and ten percent less than the carrying value with a one percent increase in the discount rate. The business performance for 2017 exceeded expectations 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

Eastman 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 respective carrying value.

Indefinite-lived intangible assets, consisting primarily 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 $539 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 2017. 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.

Environmental Costs

Eastman 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 $280 million to the maximum of $483 million and from the best estimate or minimum of $295 million to the maximum of $503 million at December 31, 2017 and December 31, 2016, respectively. The best estimate or minimum estimated future environmental expenditures are considered to be probable and reasonably estimable and include the amounts accrued at both December 31, 2017 and December 31, 2016.

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 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 was $24 million and $26 million at December 31, 2017 and December 31, 2016, respectively.

The Company's total amount reserved for environmental loss contingencies, including the remediation and closure and post-closure costs described above, was $304 million and $321 million at December 31, 2017 and December 31, 2016, respectively. This loss contingency reserve represents the best estimate or minimum for undiscounted remediation costs and the best estimate of the amount accrued to date for discounted asset retirement obligation costs.

Pension and Other Postretirement Benefits

Eastman maintains defined benefit pension plans that provide eligible employees with retirement benefits. Under its other postretirement benefit plans in the U.S., Eastman provides life insurance for eligible retirees hired prior to January 1, 2007. Eastman provides a subsidy for pre-Medicare health care and dental benefits to eligible retirees hired prior to January 1, 2007 that will end on December 31, 2021. Company funding is also provided for eligible Medicare retirees hired prior to January 1, 2007 with a health reimbursement arrangement. The estimated amounts of the costs and obligations related to these benefits primarily reflect the Company's assumptions related to discount 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 3.57 percent and 2.25 percent, respectively, and weighted average expected returns on plan assets of 7.48 percent and 4.83 percent, respectively at December 31, 2017. The Company assumed a weighted average discount rate of 3.54 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, 2017. 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 2017 which included a review of the mortality tables. As a result of the experience study, the Company has updated the mortality assumptions used to a modified RP-2017 table with modified MP-2017 improvement scale and no collar adjustment.

The projected benefit obligation as of December 31, 2017 and 2018 expense are affected by year-end 2017 assumptions. The following table illustrates the sensitivity to changes in the Company's long-term assumptions in the assumed discount rate and expected return on plan assets 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 2018 Pre-tax Benefits Expense (Excludes mark-to-market impact) for Pension Plans	Impact on December 31, 2017 Projected Benefit Obligation for Pension Plans		Impact on 2018 Pre-tax Benefits Expense (Excludes mark-to-market impact) for Other Postretirement Benefit Plans	Impact on December 31, 2017 Benefit Obligation for Other Postretirement Benefit Plans
		U.S.	Non-U.S.		
25 basis point decrease in discount rate	-$3 Million	+$57 Million	+$43 Million	-$1 Million	+$18 Million
25 basis point increase in discount rate	+$3 Million	-$55 Million	-$39 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 assumed discount rate and expected return on plan assets used to calculate the Company's pension and other postretirement benefit obligations are established each December 31. 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 cash flows 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. 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.

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. The MTM gain or loss, as described in the next paragraph, is typically 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 10, "Retirement Plans" to the Company's consolidated financial statements in this Annual Report.

The Company uses fair value accounting for plan assets. If actual experience differs from actuarial assumptions, primarily discount rates and long-term assumptions for asset returns which were used in determining the current year expense, the difference is recognized 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 gain or loss applied to net earnings in 2017, 2016, and 2015 due to the actual experience versus actuarial assumptions for the defined benefit pension and other postretirement benefit plans were a net gain of $21 million, net loss of $97 million, and net loss of $115 million, respectively. The 2017 MTM net gain included an actuarial loss of approximately $115 million, resulting primarily from the Company's December 31, 2017 weighted-average assumed discount rate of 3.25 percent, down from the prior year, and changes in other actuarial assumptions. Overall asset values increased approximately $135 million due to asset values appreciating in excess of the assumed weighted-average rate of return. The actual return was approximately $315 million, or an approximately 11 percent gain, which was above the expected return of approximately $180 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 10, "Retirement Plans", to the Company's consolidated financial statements in this Annual Report.

Litigation and Contingent Liabilities

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 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 Eastman'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 opportunities. 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 (benefit from) provision for income taxes could have a material impact on the consolidated results of operations and statement of financial position. As of December 31, 2017 and 2016, valuation allowances of $410 million and $278 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.

On December 22, 2017, the 2017 "Tax Cuts and Jobs Act" ("Tax Reform Act") was enacted. Accounting for the impacts of newly enacted tax legislation are generally required to be completed in the period of enactment. Following enactment of the Tax Reform Act, the SEC provided guidance for initial accounting for the Tax Reform Act in Staff Accounting Bulletin No. 118, "Income Tax Accounting Implications of the Tax Cuts and Jobs Act" ("SAB 118"). The period to finalize accounting for the Tax Reform Act is up to one year following the enactment date and SAB 118 allows companies to provide for the impact of the Tax Reform Act under three scenarios: (1) a company is complete with its accounting for certain effects of tax reform, (2) a company is able to determine a reasonable estimate for certain effects of the Tax Reform Act and records that estimate as a provisional amount, or (3) a company is not able to determine a reasonable estimate and therefore continues to apply accounting based on the provisions of the tax laws that were in effect immediately prior to tax reform being enacted. Because enactment of the Tax Reform Act was close to Eastman's year end, the Company was not able to complete the accounting for certain effects of the changes in tax law, but has been able to reasonably estimate the effects and has recognized those estimates as provisional amounts as of December 31, 2017. For further information, see Note 7, "Income Taxes", to the Company's consolidated financial statements in this Annual Report.

As of December 31, 2017, management estimated a $339 million net tax benefit, primarily resulting from the Tax Reform Act and a tax loss from outside-U.S. entity reorganizations as part of the formation of an international treasury services center. The final impact of the recent tax law changes on the Company may differ due to changes in the Company's current interpretation and assumptions, clarification and implementation guidance, and actions the Company may take. In addition, any future additional changes in U.S. tax law may have a significant impact on the provision for income taxes to recognize an incremental tax liability in the period the change occurs.

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 below in this section and in "Overview", "Results of Operations", "Summary by Operating Segment", and "Outlook" in this MD&A.

Company Use of Non-GAAP Financial Measures

Non-Core Items and any Unusual or Non-Recurring Items

In addition to evaluating Eastman'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 result from Eastman's normal, or "core", business and operations, or are otherwise of an unusual or non-recurring nature.

- Non-core 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, and have included 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.

- In 2017, two events resulted in unusual net costs and gains - net costs resulting from the fourth quarter coal gasification incident described below and a net income tax benefit resulting primarily from fourth quarter tax law changes and a tax loss from outside-U.S. entity reorganizations as part of the formation of an international treasury services center. Management considers the coal gasification incident unusual because of the Company's operational and safety history and the magnitude of the unplanned disruption, and considers the one-time net tax benefit unusual because of the infrequent nature of such changes in tax law and the significant one-time impact on fourth quarter and full year earnings.

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 the Company's 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.

Adjusted Tax Rate and Provision for Income Taxes

In interim periods, Eastman discloses non-GAAP earnings with an adjusted effective tax rate and a resulting adjusted provision for income taxes using the Company's current forecasted tax rate for the full year. The adjusted effective tax rate and resulting adjusted provision for income taxes are equal to the Company's projected full year effective tax rate and provision for income taxes on earnings excluding non-core, unusual, or non-recurring items for completed periods. The adjusted effective tax rate and resulting adjusted provision for income taxes may fluctuate during the year for changes in events and circumstances that change the Company's forecasted annual effective tax rate and resulting provision for income taxes excluding non-core, unusual, or non-recurring items. Management discloses this adjusted effective tax rate, and the related reconciliation to the GAAP effective tax rate, to provide investors more complete and consistent comparisons of the Company's operational performance on a period-over-period interim basis and on the same basis as management evaluates quarterly financial results to provide a better indication of expected full year results.

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', performances, make resource allocation decisions and evaluate organizational and individual performances 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 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 and transaction 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 repayment of borrowings;
- Cost of disposition of claims against operations that were discontinued by Solutia, Inc. prior to the Company's acquisition of Solutia in 2012;
- Gain from sale of the formulated electronics cleaning solutions business, which was part of the Additives & Functional Products segment;
- Gain from sale of the Company's 50 percent interest in the Primester cellulose acetate flake joint venture; and
- Tax benefit associated with a previously impaired site.

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

- Net costs of the disruption, repairs, and reconstruction of the Kingsport site's coal gasification operations area resulting from the previously reported October 4, 2017 explosion ("the coal gasification incident"); and
- Estimated net income tax benefit resulting from tax law changes (primarily the Tax Reform Act) and a tax loss from outside-U.S. entity reorganizations as part of the formation of an international treasury services center.

Non-GAAP Financial Measures -- Excluded Non-Core and Unusual Items

(Dollars in millions)	2017	2016	2015
Non-core items impacting operating earnings:			
Mark-to-market pension and other postretirement benefits (gain) loss, net	$ (21)	$ 97	$ 115
Asset impairments and restructuring charges, net	8	45	183
Acquisition integration and transaction costs	—	9	28
Additional costs of acquired inventories	—	—	7
Unusual item impacting operating earnings:			
Net costs resulting from coal gasification incident	112	—	—
Total non-core and unusual items impacting operating earnings	99	151	333
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	9	5	—
Gains from sale of businesses	(3)	(17)	—
Total non-core items impacting earnings before income taxes	6	73	—
Less: Items impacting (benefit from) provision for income taxes:			
Tax effect for non-core and unusual items	30	75	90
Tax benefit associated with previously impaired site	8	—	—
Estimated net tax benefit from tax law changes and tax loss from outside-U.S. entity reorganizations	339	—	—
Total items impacting (benefit from) provision for income taxes	377	75	90
Total items impacting net earnings attributable to Eastman	$ (272)	$ 149	$ 243

The non-core item "mark-to-market pension and other postretirement benefits (gain) loss, net" does not include a $61 million credit, $44 million credit, and $4 million credit for defined benefit pension and other postretirement benefit plans credits or costs for the years ended December 31, 2017, 2016, and 2015, respectively. The calculated MTM gains and losses included expected amounts of and percentage returns on assets of approximately $180 million (7 percent), $175 million (7 percent), and $190 million (7 percent) for the years ended December 31, 2017, 2016, and 2015, respectively, compared with actual amounts of and percentage returns on plan assets of approximately $315 million (11 percent), $250 million (9 percent), and $15 million loss (-1 percent) for the years ended December 31, 2017, 2016, and 2015, 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 10, "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 this Annual Report.

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

- Gross profit,
- Selling, general, and administrative ("SG&A") expenses,
- Research and development ("R&D") expenses,
- Operating earnings,
- Other (income) charges, net,
- (Benefit from) provision for income taxes,
- Net earnings attributable to Eastman, and
- Diluted earnings per share.

Other Non-GAAP Financial Measures

<u>Alternative Non-GAAP Cash Flow Measures</u>

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 sources or uses of cash or including cash from or used by activities that are managed as part of core business operations ("adjusted cash provided by operating activities") 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, and generally includes cash from or used in activities that are managed as operating activities and in business operating decisions. 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.

From time to time, Eastman evaluates and discloses to investors and securities analysts an alternative non-GAAP measure of "free cash flow", which management defines as adjusted cash provided by operating activities, described above, less the amount of capital expenditures. Management believes such capital expenditures 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, organic and inorganic growth opportunities, and 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, or 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 earnings 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 peer and other companies.

OVERVIEW

Eastman'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 uses an innovation-driven growth model which consists of leveraging world class scalable technology platforms, delivering differentiated application development capabilities, and relentlessly engaging the market. The Company's world class technology platforms form the foundation of sustainable growth by differentiated products through significant scale advantages in R&D and advantaged global market access. Differentiated application development converts market complexity into opportunities for growth and accelerates innovation by enabling a deeper understanding of the value of Eastman's products and how they perform within customers' and end user products. Key areas of application development include thermoplastic processing, functional films, coatings formulations, rubber additive formulations, adhesives formulations, non-wovens and textiles, and animal nutrition. The Company engages the market by working directly with customers and downstream users, targeting attractive niche markets, and leveraging disruptive macro trends such as health and wellness, natural resource efficiency, an increasing middle class in emerging economies, and feeding a growing population. Management believes that these elements of the Company's innovation-driven growth model combined with disciplined portfolio management and balanced capital deployment will result in consistent, sustainable earnings growth and strong cash flow.

The Company generated sales revenue of $9.5 billion and $9.0 billion for 2017 and 2016, respectively. Sales revenue increased $541 million in 2017 as increases in the AFP, CI, and AM segments more than offset a decline in the Fibers segment.

Operating earnings were $1.5 billion and $1.4 billion in 2017 and 2016, respectively. Excluding the non-core and unusual items referenced in "Non-GAAP Financial Measures", adjusted operating earnings were $1.6 billion in 2017 and $1.5 billion in 2016. Operating earnings and adjusted operating earnings increased in 2017 due to increases in the CI, AFP, and AM segments partially offset by decreased Fibers segment operating earnings.

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

	2017		2016	
(Dollars in millions, except diluted EPS)	$	EPS	$	EPS
Net earnings attributable to Eastman	$ 1,384	$ 9.47	$ 854	$ 5.75
Total non-core and unusual items, net of tax[1][2]	(272)	(1.86)	149	1.01
Net earnings attributable to Eastman excluding non-core and unusual items	$ 1,112	$ 7.61	$ 1,003	$ 6.76

(1) See "Results of Operations - Net Earnings and Diluted Earnings per Share" for the tax effected amount of non-core and unusual items.

(2) The (benefit from) provision for income taxes for non-core and unusual items is calculated using the tax rate for the jurisdiction where the gains are taxable and the expenses are deductible.

The Company generated $1.7 billion of cash from operating activities in 2017, compared to $1.4 billion of cash generated from operating activities during 2016.

As previously reported, in fourth quarter 2017 an explosion in the Kingsport site's coal gasification area disrupted manufacturing operations, primarily for the Fibers and CI segments which are significant internal users of cellulose and acetyl stream intermediates. While the Company continues to assess the financial impact of the incident, the total impact, net of insurance recoveries, is expected to reduce earnings by a total of between $25 million and $50 million spread across 2017 and 2018. Costs in fourth quarter 2017 of the disruption, repairs, and reconstruction of coal gasification operations were $112 million, net of insurance recoveries.

RESULTS OF OPERATIONS

Eastman's results of operations as presented in the Company's consolidated financial statements in this Annual Report are summarized and analyzed below.

Sales

	2017 Compared to 2016			2016 Compared to 2015		
(Dollars in millions)	2017	2016	Change	2016	2015	Change
Sales	$ 9,549	$ 9,008	6%	$ 9,008	$ 9,648	(7)%
Volume / product mix effect			4%			1 %
Price effect			2%			(7)%
Exchange rate effect			—%			(1)%

2017 Compared to 2016

Sales revenue increased $541 million as increases in the AFP, CI, and AM segments more than offset a decline in the Fibers segment.

2016 Compared to 2015

Sales revenue decreased $640 million 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.

Gross Profit

	2017 Compared to 2016			2016 Compared to 2015		
(Dollars in millions)	2017	2016	Change	2016	2015	Change
Gross Profit	$ 2,454	$ 2,350	4%	$ 2,350	$ 2,580	(9)%
Mark-to-market pension and other postretirement benefit (gain) loss, net	(11)	78		78	84	
Net costs resulting from coal gasification incident	112	—		—	—	
Additional costs of acquired inventories	—	—		—	7	
Gross Profit excluding non-core and unusual items	$ 2,555	$ 2,428	5%	$ 2,428	$ 2,671	(9)%

2017 Compared to 2016

Gross profit included an $11 million MTM pension and other postretirement benefit gain, net in 2017 and a $78 million MTM pension and other postretirement benefit loss, net in 2016. Gross profit in 2017 included $112 million of net costs resulting from the coal gasification incident. Excluding these non-core and unusual items, gross profit increased as a result of increases in the CI, AFP, and AM segments more than offsetting a decline in the Fibers segment. Gross profit in 2017 was increased by lower labor and manufacturing costs from corporate cost reduction actions.

2016 Compared to 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 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 in 2016.

Selling, General and Administrative Expenses

	2017 Compared to 2016			2016 Compared to 2015		
(Dollars in millions)	2017	2016	Change	2016	2015	Change
Selling, General & Administrative Expenses	$ 699	$ 703	(1)%	$ 703	$ 771	(9)%
Mark-to-market pension and other postretirement benefit gain (loss), net	8	(14)		(14)	(18)	
Acquisition integration and transaction costs	—	(9)		(9)	(28)	
Selling, General, and Administrative Expenses excluding non-core items	$ 707	$ 680	4 %	$ 680	$ 725	(6)%

2017 Compared to 2016

SG&A expenses included an $8 million MTM pension and other postretirement benefit gain, net in 2017 and a $14 million MTM pension and other postretirement benefit loss, net in 2016. 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. Excluding these non-core items, SG&A expenses increased primarily due to higher performance-based variable compensation costs, and strategic initiative expenditures partially offset by cost reductions resulting from corporate actions taken in 2016.

2016 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 primarily due to lower costs resulting from corporate cost reduction actions taken in 2016 and lower variable compensation costs.

Research and Development Expenses

	2017 Compared to 2016			2016 Compared to 2015		
(Dollars in millions)	2017	2016	Change	2016	2015	Change
Research & Development Expenses	$ 215	$ 219	(2)%	$ 219	$ 242	(10)%
Mark-to-market pension and other postretirement benefit gain (loss), net	2	(5)		(5)	(13)	
Research & Development Expenses excluding non-core item	$ 217	$ 214	1 %	$ 214	$ 229	(7)%

2017 Compared to 2016

R&D expenses included a $2 million MTM pension and other postretirement benefit gain, net in 2017 and a $5 million MTM pension and other postretirement benefit loss, net in 2016. Excluding this non-core item, R&D expenses were slightly higher in 2017. The Company has shifted R&D investment by eliminating multiple programs and reallocating resources in the Company's core segments. R&D investments are being focused where disruptive macro trends create unmet needs in attractive niche markets where the Company's core technologies can deliver material solutions.

2016 Compared to 2015

R&D expenses included a $5 million and $13 million MTM pension and other postretirement benefit loss, net in 2016 and 2015, respectively. Excluding this non-core item, R&D expenses were lower primarily due to corporate cost reduction actions taken in 2016.

Asset Impairments and Restructuring Charges, Net

	For years ended December 31,		
(Dollars in millions)	**2017**	**2016**	**2015**
Asset impairments	$ 1	$ 12	$ 85
Gain on sale of assets, net	—	(2)	(1)
Intangible asset and goodwill impairments	—	—	22
Severance charges	6	32	68
Site closure and restructuring charges	1	3	9
Total	$ 8	$ 45	$ 183

2017

In fourth quarter 2017 asset impairments and restructuring charges, net included $3 million of asset impairments and restructuring charges, including severance, in the AFP segment related to the closure of a facility in China. Additionally, the Company recognized restructuring charges of approximately $5 million for severance.

2016

The Company impaired a capital project in the AFP segment that resulted in a charge of $12 million.

As part of an announced plan to reduce costs, the Company recognized restructuring charges of $34 million primarily for severance. Management anticipated and realized total cost savings of approximately $50 million mostly in 2017 primarily in SG&A expenses and cost of sales.

The Company recognized a gain of $2 million in the AFP segment for the sale of previously impaired assets at the Crystex® insoluble sulfur R&D site in France.

2015

The Company took actions 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, the Company recognized intangible asset impairments of $18 million in the AM segment primarily to reduce the carrying value of the V-KOOL® 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.

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

Operating Earnings

	2017 Compared to 2016			2016 Compared to 2015		
(Dollars in millions)	**2017**	**2016**	**Change**	**2016**	**2015**	**Change**
Operating earnings	$ 1,532	$ 1,383	11%	$ 1,383	$ 1,384	— %
Mark-to-market pension and other postretirement benefit (gain) loss, net	(21)	97		97	115	
Net costs resulting from coal gasification incident	112	—		—	—	
Asset impairments and restructuring charges, net	8	45		45	183	
Acquisition integration and transaction costs	—	9		9	28	
Additional costs of acquired inventories	—	—		—	7	
Operating earnings excluding non-core and unusual items	$ 1,631	$ 1,534	6%	$ 1,534	$ 1,717	(11)%

Net Interest Expense

	2017 Compared to 2016			2016 Compared to 2015		
(Dollars in millions)	**2017**	**2016**	**Change**	**2016**	**2015**	**Change**
Gross interest expense	$ 251	$ 265		$ 265	$ 273	
Less: Capitalized interest	7	7		7	7	
Interest Expense	244	258		258	266	
Less: Interest income	3	3		3	3	
Net interest expense	$ 241	$ 255	(5)%	$ 255	$ 263	(3)%

2017 Compared to 2016

Net interest expense decreased $14 million primarily as a result of prior year refinancing of certain outstanding public debt and repayment of term loan borrowings in 2017.

2016 Compared to 2015

Net interest expense decreased $8 million primarily as a result of the Company refinancing certain outstanding public debt with proceeds of the sale of new euro-denominated debt securities in second quarter 2016.

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 the 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.

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 8, "Borrowings", to the Company's consolidated financial statements in this Annual Report.

Other (Income) Charges, Net

(Dollars in millions)	2017	2016	2015
Foreign currency transaction losses (gains), net	$ 5	$ 27	$ 6
(Income) loss from equity investments and other investment (gains) losses, net	(14)	(15)	(15)
Cost of disposition of claims against discontinued Solutia operations	9	5	—
Gains from sale of businesses	(3)	(17)	—
Other, net	5	(6)	1
Other (income) charges, net	$ 2	$ (6)	$ (8)
Cost of disposition of claims against discontinued Solutia operations	(9)	(5)	—
Gains from sale of businesses	3	17	—
Other (income) charges, net excluding non-core items	$ (4)	$ 6	$ (8)

Included in other (income) charges, net are primarily losses or gains on foreign exchange transactions, equity investments, and non-operating assets.

In 2017, the net loss on the revaluation of foreign entity assets and liabilities was partially offset by a net gain on the foreign exchange non-qualifying derivatives, both items impacted primarily by the euro. See Note 9, "Derivative and Non-Derivative Financial Instruments", to the Company's consolidated financial statements in this Annual Report. Also included in 2017 other (income) charges, net is a $9 million cost of disposition of claims against operations that were discontinued by Solutia prior to the Company's acquisition of Solutia in 2012 and a $3 million gain from the sale of the formulated electronics cleaning solutions business.

In 2016, the net loss from foreign exchange non-qualifying derivatives was partially offset by the net gain on the revaluation of foreign entity assets and liabilities, both items impacted primarily by the euro. Included in 2016 other (income) charges, net is $5 million cost of disposition of claims against operations that were discontinued by Solutia prior to the Company's acquisition of Solutia in 2012. Also 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 5, "Equity Investments", to the Company's consolidated financial statements in this Annual Report.

In 2015, the net loss from foreign exchange non-qualifying derivatives was partially offset by the net gain on the revaluation of foreign entity assets and liabilities, both items impacted primarily by the euro.

(Benefit from) Provision for Income Taxes

	2017 Compared to 2016				2016 Compared to 2015			
(Dollars in millions)	2017		2016		2016		2015	
	$	%	$	%	$	%	$	%
(Benefit from) provision for income taxes and effective tax rate	$ (99)	(8)%	$ 190	18%	$ 190	18%	$ 275	24%
Tax provision for non-core and unusual items	30		75		75		90	
Tax benefit associated with previously impaired site	8		—		—		—	
Estimated net tax benefit from tax law changes and tax loss from outside-U.S. entity reorganizations	339		—		—		—	
Adjusted provision for income taxes and effective tax rate	$ 278	20 %	$ 265	21%	$ 265	21%	$ 365	25%

The 2017 effective tax rate was lower than the 2016 effective tax rate due to a $339 million net benefit resulting from tax law changes (primarily the Tax Reform Act) and a tax loss from outside-U.S. entity reorganizations as part of the formation of an international treasury services center (see Note 7, "Income Taxes", to the Company's consolidated financial statements in this Annual Report, for principal impacts of the tax law change that resulted in the one-time net tax benefit), a $20 million benefit due to amendments to prior years' domestic income tax returns, and a $30 million benefit reflecting the finalization of prior years' foreign income tax returns. The 2017 effective tax rate also includes an $8 million tax benefit due to a tax ruling permitting deductibility of a liquidation loss on a previously impaired site. The 2016 effective tax rate included one-time tax benefits discussed immediately below.

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.

Net Earnings Attributable to Eastman and Diluted Earnings per Share

	2017		2016		2015	
(Dollars in millions, except per share amounts)	$	EPS	$	EPS	$	EPS
Net earnings and diluted earnings per share attributable to Eastman	$ 1,384	$ 9.47	$ 854	$ 5.75	$ 848	$ 5.66
Non-core items, net of tax: (1)						
Mark-to-market pension and other postretirement benefit (gain) loss, net	(14)	(0.09)	68	0.46	70	0.47
Asset impairments and restructuring charges, net	(3)	(0.02)	28	0.19	151	1.00
Acquisition transaction, integration, and financing costs	—	—	5	0.04	18	0.12
Additional costs of acquired inventories	—	—	—	—	4	0.03
Early debt extinguishment and other related costs	—	—	56	0.37	—	—
Cost of disposition of claims against discontinued Solutia operations	5	0.03	3	0.02	—	—
Gains from sale of businesses	(1)	(0.01)	(11)	(0.07)	—	—
Unusual items, net of tax: (1)						
Net costs resulting from coal gasification incident	80	0.55	—	—	—	—
Estimated net tax benefit from tax law changes and tax loss from outside-U.S. entity reorganizations	(339)	(2.32)	—	—	—	—
Adjusted net earnings and diluted earnings per share attributable to Eastman	$ 1,112	$ 7.61	$ 1,003	$ 6.76	$ 1,091	$ 7.28

(1) The (benefit from) provision for income taxes for non-core and unusual items is calculated using the tax rate for the jurisdiction where the gains are taxable and the expenses are deductible.

SUMMARY BY OPERATING SEGMENT

Eastman'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 the “About Our Business” section of this Annual Report and Note 19, "Segment Information", to the Company's consolidated financial statements in this Annual Report.

Additives & Functional Products Segment

	2017 Compared to 2016				2016 Compared to 2015			
			Change				Change	
(Dollars in millions)	2017	2016	$	%	2016	2015	$	%
Sales	$ 3,343	$ 2,979	$ 364	12%	$ 2,979	$ 3,159	$ (180)	(6)%
Volume / product mix effect			313	10%			46	1 %
Price effect			45	2%			(214)	(7)%
Exchange rate effect			6	—%			(12)	— %
Operating earnings	646	601	45	7%	601	660	(59)	(9)%
Asset impairments and restructuring charges, net	3	10	(7)		10	—	10	
Net costs resulting from coal gasification incident	8	—	8		—	—	—	
Operating earnings excluding non-core and unusual items	657	611	46	8%	611	660	(49)	(7)%

2017 Compared to 2016

Sales revenue increased primarily due to higher sales volume across the segment, including for specialty fluids due to the timing of customer solar energy project completions, animal nutrition products, and tire additives products.

Operating earnings in 2017 included $3 million of asset impairment and restructuring charges, including severance, related to the closure of a facility in China and $8 million of net costs resulting from the coal gasification incident. 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 and unusual items, operating earnings increased primarily due to higher sales volume of $97 million partially offset by higher raw material and energy costs, including the reduced negative impact of hedges of commodity prices on raw material costs, exceeding higher selling prices by $60 million.

2016 Compared to 2015

Sales revenue decreased 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 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.

Growth Initiatives

Eastman'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 the Company's low-cost cellulose and acetyl manufacturing stream in North America.

In 2017, the Company advanced growth and innovation of Crystex® insoluble sulfur rubber additives through completion of an expansion of the manufacturing facility in Kuantan, Malaysia that management expects will produce material qualified for commercial sales in 2018. This expansion is expected to allow the Company to capitalize on recent enhancements of technology for the manufacture of Crystex® insoluble sulfur by improving the Company's cost position and facilitating the introduction of new products into the tire markets.

Advanced Materials Segment

	2017 Compared to 2016				2016 Compared to 2015			
			Change				Change	
(Dollars in millions)	2017	2016	$	%	2016	2015	$	%
Sales	$ 2,572	$ 2,457	$ 115	5%	$ 2,457	$ 2,414	$ 43	2 %
Volume / product mix effect			113	5%			119	5 %
Price effect			1	—%			(67)	(3)%
Exchange rate effect			1	—%			(9)	— %
Operating earnings	482	471	11	2%	471	384	87	23 %
Additional costs of acquired inventories	—	—	—		—	7	(7)	
Asset impairments and restructuring charges, net	—	—	—		—	18	(18)	
Net costs resulting from coal gasification incident	11	—	11		—	—	—	
Operating earnings excluding non-core and unusual items	493	471	22	5%	471	409	62	15 %

2017 Compared to 2016

Sales revenue increased primarily due to higher sales volume across the segment, including of premium products such as automotive performance films, Tritan® copolyester, and Saflex® acoustic interlayers.

Operating earnings in 2017 included $11 million of net costs resulting from the coal gasification incident. Excluding this unusual item, operating earnings increased primarily due to the combined impact of higher sales volume, lower unit costs due to higher capacity utilization, and improved product mix of premium products of $83 million. The increase was partially offset by higher raw material and energy costs of $48 million and increased costs of growth initiatives.

2016 Compared to 2015

Sales revenue increased due to higher sales volume of premium products, including Tritan® copolyester, Saflex® 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 increased 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.

Growth Initiatives

The acquisition of Commonwealth in December 2014 further expanded the AM segment's product portfolio and sales 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.

In 2017, the Company advanced the continued success of Tritan® copolyester in the durable goods and health and wellness markets, supported by construction of an additional 60,000 metric ton expansion of Tritan® copolyester capacity at the Kingsport, Tennessee manufacturing facility expected to be complete in early 2018 and fully operational in first half 2018.

In 2017, the Company advanced growth and innovation of Saflex® and head up displays acoustic interlayers used in the transportation and building and construction markets, supported by construction of a manufacturing facility for polyvinyl butyral ("PVB") resin at the Kuantan, Malaysia site which became fully operational in first quarter 2018.

Chemical Intermediates Segment

	2017 Compared to 2016				2016 Compared to 2015			
			Change				Change	
(Dollars in millions)	2017	2016	$	%	2016	2015	$	%
Sales	$ 2,728	$ 2,534	$ 194	8 %	$ 2,534	$ 2,811	$ (277)	(10)%
Volume / product mix effect			(55)	(2)%			48	2 %
Price effect			253	10 %			(317)	(11)%
Exchange rate effect			(4)	— %			(8)	(1)%
Operating earnings	255	171	84	49 %	171	294	(123)	(42)%
Net costs resulting from coal gasification incident	44	—	44		—	—	—	
Operating earnings excluding unusual item	299	171	128	75 %	171	294	(123)	(42)%

2017 Compared to 2016

Sales revenue increased due to higher selling prices attributed to higher raw material prices and improved market conditions. The increase was partially offset by lower intermediates sales volume due to the coal gasification incident.

Operating earnings in 2017 included $44 million of net costs resulting from the coal gasification incident. Excluding this unusual item, operating earnings increased primarily due to the reduced negative impact of hedges of commodity prices on raw material costs, primarily for propane, of $100 million, lower scheduled maintenance costs of $24 million, and lower operating costs of $21 million. The increase was partially offset by higher raw material and energy costs more than offsetting higher selling prices by $27 million.

2016 Compared to 2015

Sales revenue decreased 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 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.

Cost and Growth Initiatives

In 2017, to support the increased emphasis on specialty businesses and products, the Company continued to pursue 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.

The Company is party to 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. The Company expects to begin purchasing propylene from this plant in first half 2018. Prior to beginning these purchases, the Company will continue to benefit from a propylene market contract with an advantaged cost position for purchased propylene.

Fibers Segment

	2017 Compared to 2016				2016 Compared to 2015			
(Dollars in millions)			Change				Change	
	2017	2016	$	%	2016	2015	$	%
Sales	$ 852	$ 992	$ (140)	(14)%	$ 992	$ 1,219	$ (227)	(19)%
Volume / product mix effect			(53)	(5)%			(150)	(13)%
Price effect			(86)	(9)%			(74)	(6)%
Exchange rate effect			(1)	— %			(3)	— %
Operating earnings	175	310	(135)	(44)%	310	292	18	6 %
Asset impairments and restructuring charges, net	—	—	—		—	98	(98)	
Net costs resulting from coal gasification incident	49	—	49		—	—		
Operating earnings excluding non-core and unusual items	224	310	(86)	(28)%	310	390	(80)	(21)%

2017 Compared to 2016

Sales revenue decreased primarily due to lower selling prices and lower sales volume, particularly for acetate tow. Lower acetate tow selling prices were primarily attributed to lower industry capacity utilization rates. Lower acetate tow sales volume was primarily attributed to reduced sales in China.

Operating earnings in 2017 included $49 million of net costs resulting from the coal gasification incident. Excluding this unusual item, operating earnings decreased primarily due to approximately $103 million of lower selling prices and lower sales volume, partially offset by lower operating costs resulting from changes in segment business operations and assets.

2016 Compared to 2015

Sales revenue decreased 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 decreased 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.

Costs and Growth Initiatives

The Fibers segment R&D efforts focus on serving existing customers, leveraging proprietary cellulose ester and spinning technology for differentiated application development in new markets, optimizing asset productivity, and working with suppliers to reduce costs. For acetate tow, these efforts are assisting customers in the effective use of the segment's products and customers' product development efforts. Beyond acetate tow, these efforts are using the elements of the innovation-driven growth model to focus on innovation in the textiles market.

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 had 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.

Other

(Dollars in millions)	2017	2016	2015
Sales	$ 54	$ 46	$ 45
Operating loss			
Growth initiatives and businesses not allocated to operating segments	$ (114)	$ (82)	$ (87)
Pension and other postretirement benefit plans income (expense), net not allocated to operating segments	93	(44)	(76)
Restructuring and acquisition integration and transaction costs	(5)	(44)	(83)
Operating loss before non-core items	(26)	(170)	(246)
Mark-to-market pension and other postretirement benefit plans (gain) loss, net	(21)	97	115
Acquisition integration and transaction costs	—	9	28
Asset impairments and restructuring charges, net	5	35	67
Operating loss excluding non-core items	$ (42)	$ (29)	$ (36)

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 all periods presented above are primarily sales from the microfiber technology platform.

Included in 2017 operating losses are restructuring charges of approximately $5 million for severance.

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.

The Company continues to explore and invest in R&D initiatives such as high performance materials and advanced cellulosics that are aligned with disruptive macro trends such as health and wellness, natural resource efficiency, an increasing middle class in emerging economies, and feeding a growing population. 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 BY CUSTOMER LOCATION

	Sales Revenue							
			Change				Change	
(Dollars in millions)	2017	2016	$	%	2016	2015	$	%
United States and Canada	$ 4,189	$ 4,025	$ 164	4%	$ 4,025	$ 4,350	$ (325)	(7)%
Asia Pacific	2,306	2,163	143	7%	2,163	2,333	(170)	(7)%
Europe, Middle East, and Africa	2,539	2,305	234	10%	2,305	2,422	(117)	(5)%
Latin America	515	515	—	—%	515	543	(28)	(5)%
	$ 9,549	$ 9,008	$ 541	6%	$ 9,008	$ 9,648	$ (640)	(7)%

2017 Compared to 2016

Sales revenue in United States and Canada increased primarily due to higher CI segment selling prices.

Sales revenue in Asia Pacific increased primarily due to higher AFP, AM, and CI segments sales volume partially offset by lower Fibers segment sales volume.

Sales revenue in Europe, Middle East, and Africa increased primarily due to higher AFP and Fibers segments sales volume. Higher AFP segment sales volume is primarily due to higher sales volume across the segment, including specialty fluids due to the timing of customer solar energy project completions, tire additives products, and animal nutrition products.

Sales revenue in Latin America was unchanged.

2016 Compared to 2015

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

Sales revenue in Asia Pacific decreased 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 primarily due to lower selling prices in all operating segments.

Sales revenue in Latin America decreased 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.

LIQUIDITY, CAPITAL RESOURCES, AND OTHER FINANCIAL INFORMATION

Cash Flows

(Dollars in millions)	2017	2016	2015
Net cash provided by (used in):			
Operating activities	$ 1,657	$ 1,385	$ 1,624
Investing activities	(643)	(655)	(693)
Financing activities	(1,006)	(838)	(844)
Effect of exchange rate changes on cash and cash equivalents	2	(4)	(8)
Net change in cash and cash equivalents	10	(112)	79
Cash and cash equivalents at beginning of period	181	293	214
Cash and cash equivalents at end of period	$ 191	$ 181	$ 293

2017 Compared to 2016

Cash provided by operating activities increased $272 million in 2017 compared with 2016. The increase was primarily due to higher earnings and lower pension and other postretirement contributions due to the advanced funding of U.S. defined pension plans in 2016.

Cash used in investing activities in 2017 was primarily for capital expenditures and was relatively unchanged compared with 2016.

Cash used in financing activities increased $168 million in 2017 compared with 2016. The increase was primarily due to increases in both share repurchases and dividend payments partially offset by less net debt repayments in 2017.

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 Eastman's ownership interest in the Primester cellulose acetate joint venture, $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 in this Annual Report.

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 8, "Borrowings", to the Company's consolidated financial statements in this Annual Report.

Liquidity and Capital Resources

The Company had cash and cash equivalents as follows:

(Dollars in millions)	December 31,		
	2017	2016	2015
Cash and cash equivalents	$ 191	$ 181	$ 293

Eastman 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 available liquidity for general corporate purposes and supports commercial paper borrowings. See Note 8, "Borrowings", to the Company's consolidated financial statements in this Annual Report.

The Company 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. See Note 8, "Borrowings", to the Company's consolidated financial statements in this Annual Report.

The Credit and A/R Facilities and other borrowing arrangements contain customary covenants and events of default, some of which require the Company to maintain certain financial ratios that determine the amounts available and terms of borrowings. The Company was in compliance with all covenants at both December 31, 2017 and December 31, 2016. The amount of available borrowings under the A/R and Credit Facilities was approximately $866 million as of December 31, 2017. The amount of available borrowings was limited by a financial ratio covenant under the Credit Facility. For additional information, see Section 5.03 of the Credit Facility at Exhibit 10.02 to the Company's 2016 Annual Report on Form 10-K.

The Company has access to borrowings of up to €150 million ($180 million) under a receivables facility based on the discounted value of selected customer accounts receivable. This facility expires December 2020 and renews for another one year period if not terminated with 90 days notice by either party. These arrangements include receivables in the United States, Belgium, and Finland, and are subject to various eligibility requirements. Borrowings under this facility are subject to interest at an agreed spread above EURIBOR for euro denominated drawings and the counterparty's cost of funds for drawings in any other currencies, plus administration and insurance fees and are classified as short-term. See Note 8, "Borrowings", to the Company's consolidated financial statements in 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.

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**	**Total**
2018	$ —	$ 393	$ 228	$ 230	$ 67	$ 234	$ 1,152
2019	250	1	229	222	55	85	842
2020	797	—	207	184	44	90	1,322
2021	185	200	190	92	34	91	792
2022	738	—	178	160	23	92	1,191
2023 and beyond	3,976	—	1,619	2,032	47	1,056	8,730
Total	$ 5,946	$ 594	$ 2,651	$ 2,920	$ 270	$ 1,648	$ 14,029

At December 31, 2017, Eastman's borrowings totaled approximately $6.5 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. Estimated future payments of debt securities assumes the repayment of principal upon stated maturity, and actual amounts and the timing of such payments may differ materially due to repayment or other changes in the terms of such debt prior to maturity. For information on debt securities, credit facilities and other, and interest payable, see Note 8, "Borrowings", to the Company's consolidated financial statements in this Annual Report.

For information about purchase obligations and operating leases, see Note 11, "Commitments and Off Balance Sheet Arrangements", to the Company's consolidated financial statements in this Annual Report.

Amounts in other liabilities 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, one-time transition tax on deferred foreign income under the 2017 Tax Cuts and Jobs Act, 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 "2023 and beyond" line item.

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 10, "Retirement Plans", to the Company's consolidated financial statements in 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 the availability of legal defenses, the Company's preliminary assessment of actions that may be required, and, if applicable, the expected sharing of costs, 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, results of operations, or cash flows. See Note 1, "Significant Accounting Policies", to the Company's consolidated financial statements in this Annual Report for the Company's accounting policy for environmental costs and see Note 12, "Environmental Matters and Asset Retirement Obligations", to the Company's consolidated financial statements in this Annual Report for more information regarding outstanding environmental matters and asset retirement obligations.

Off Balance Sheet Arrangements

For information about off balance sheet arrangements, see Note 11, "Commitments and Off Balance Sheet Arrangements" - "Guarantees" and "Other Off Balance Sheet Arrangements", to Eastman's consolidated financial statements in 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 $649 million, $626 million, and $652 million in 2017, 2016, and 2015, respectively. Capital expenditures in 2017 were primarily for AFP and AM segments manufacturing expansions in Kuantan, Malaysia, an AM segment expansion of Tritan® copolyester capacity in Kingsport, Tennessee, an AFP segment expansion of specialty ketones manufacturing capacity in Kingsport, Tennessee, and site modernization projects in Longview, Texas. Capital expenditures in 2017 included $49 million for repair and reconstruction of the manufacturing facilities damaged in the previously reported fourth quarter 2017 coal gasification incident. The Company expects that 2018 capital spending will be approximately $550 million primarily for targeted growth initiatives and maintenance.

The Company had capital expenditures related to environmental protection and improvement of approximately $38 million, $45 million, and $52 million in 2017, 2016, and 2015, 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, Eastman's Board of Directors authorized repurchase of up to $1 billion of the Company's outstanding common stock at such times, in such amounts, and on such terms, as determined by management to be in the best interests of the Company. As of December 31, 2017, a total of 10,726,827 shares have been repurchased under this authorization for a total amount of $848 million.

In February 2018, Eastman's Board of Directors authorized the repurchase of up to an additional $2 billion of the Company's outstanding common stock at such times, in such amounts, and on such terms, as determined by management to be in the best interests of the Company.

The Board of Directors has declared a cash dividend of $0.56 per share during the first quarter of 2018, payable on April 6, 2018 to stockholders of record on March 15, 2018.

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 9, "Derivative and Non-Derivative Financial Instruments", to the Company's consolidated financial statements in this Annual Report.

RECENTLY ISSUED ACCOUNTING STANDARDS

For information regarding the impact of recently issued accounting standards, see Note 22, "Recently Issued Accounting Standards", to Eastman's consolidated financial statements in this Annual Report.

OUTLOOK

Eastman uses an innovation-driven growth model which consists of leveraging world class scalable technology platforms, delivering differentiated application development capabilities, and relentlessly engaging the market. The Company's world class technology platforms form the foundation of sustainable growth by differentiated products through significant scale advantages in R&D and advantaged global market access. Differentiated application development converts market complexity into opportunities for growth and accelerates innovation by enabling a deeper understanding of the value of Eastman's products and how they perform within customers' and end user products. Key areas of application development include thermoplastic processing, functional films, coatings formulations, rubber additive formulations, adhesives formulations, non-wovens and textiles, and animal nutrition. The Company engages the market by working directly with customers and downstream users, targeting attractive niche markets, and leveraging disruptive macro trends such as health and wellness, natural resource efficiency, an increasing middle class in emerging economies, and feeding a growing population. Management believes that these elements of the Company's innovation-driven growth model combined with disciplined portfolio management and balanced capital deployment will result in consistent, sustainable earnings growth and strong cash flow.

For 2018, management expects:

- earnings to benefit from a robust portfolio of specialty businesses in attractive niche end-markets, strong growth in high margin, innovative products, and a modestly lower tax rate;
- earnings to be negatively impacted by higher costs of strategic growth initiatives, higher scheduled maintenance costs, and volatile market prices for commodity products and raw materials and energy, particularly for olefins;
- cash generated by operating activities of approximately $1.6 billion;
- capital spending of approximately $550 million;
- priorities for uses of available cash in 2018 to include payment of the quarterly dividend, repayment of debt, funding targeted organic and inorganic growth initiatives, and repurchasing shares; and
- the full year effective tax rate on reported earnings before income tax to be 18 to 20 percent, excluding non-core, unusual, or non-recurring items.

While the Company continues to assess the financial impact of the coal gasification incident, the total impact, net of insurance recoveries, is expected to reduce earnings by a total of between $25 million and $50 million spread across 2017 and 2018. The Company anticipates that in 2018 insurance recoveries will more than offset costs of the incident recognized in 2018.

Based on the foregoing expectations and assumptions, management expects adjusted 2018 earnings per share, excluding any non-core, unusual, or non-recurring items, to be eight to twelve percent higher than adjusted 2017 earnings per share excluding non-core and unusual items of $7.61. The Company's 2018 financial results forecasts do not include non-core, unusual, or non-recurring items. Accordingly, management is unable to reconcile projected full-year 2018 earnings excluding non-core, unusual, or non-recurring items to projected reported GAAP earnings without unreasonable efforts.

See "Forward-Looking Statements" and "Risk Factors" below.

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 prices and 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, stock repurchases 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 and technology and product innovation 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 "Risk Factors" below. 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. Investors are advised, however, to consult any further public Company disclosures (such as filings with the Securities and Exchange Commission or in Company press releases) on related subjects.

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 Eastman'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, and its related impacts, such as, the credit market crisis, declining consumer and business confidence, fluctuating commodity prices, volatile exchange rates, and other challenges that affected the global economy. Continuing uncertainty in the global economy and financial markets and uncertainty over timing and extent of recovery may adversely affect 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 the Company's financial results.

Eastman 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 do not eliminate all exposure to market fluctuations and may limit the Company fully benefiting from lower raw material costs and, conversely, offset the impact of higher raw material costs. 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.

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

Although Eastman has an extensive customer base, loss of, or material financial weakness of, certain of the Company's 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, Eastman's 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, credit ratings, 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. Unplanned disruptions of manufacturing operations or related infrastructure 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. As previously reported, in fourth quarter 2017 the Company had an operational incident in the Kingsport manufacturing site coal gasification operations area that negatively impacted manufacturing operations and earnings.

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.

Eastman continues to identify and pursue growth opportunities through both organic and inorganic initiatives. These growth opportunities include development and commercialization or licensing of innovative new products and technologies and related employee leadership, expertise, skill development and retention, expansion into new markets and geographic regions, 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 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.

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

More than half of Eastman's sales for 2017 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.

Eastman 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 of 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, future changes in U.S. Federal legislation and regulation may 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.

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 Eastman's growth strategy, acquisitions of large companies (such as the previous acquisitions 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.

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.

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. To mitigate foreign currency risk, from time to time, the Company 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, 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, 2017, 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 $45 million, with an additional $5 million exposure for each additional one percentage point adverse change in those foreign currency rates. At December 31, 2016, 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 $39 million, with an additional $4 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.

At December 31, 2017, a 10 percent fluctuation in the euro currency rate would have had a $149 million impact on the designated net investment values in the foreign subsidiaries. At December 31, 2016, a 10 percent fluctuation in the euro currency rate would have had 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 in this Annual Report.

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 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, 2017 and December 31, 2016, 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 $30 million and $37 million, respectively, with an additional $3 million and $4 million, respectively, of exposure at each date for each one percentage point move in closing price thereafter.

Interest Rate Risk

Eastman is exposed to interest rate risk 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 regular operational and financing strategies. The Company had variable interest rate borrowings (including credit facility borrowings and commercial paper borrowings) of $589 million and $829 million at December 31, 2017 and 2016, respectively. These borrowings represented approximately 10 percent and 15 percent of total outstanding debt and bore weighted average interest rates of 1.89 percent and 1.69 percent at December 31, 2017 and 2016, respectively. A hypothetical 10 percent increase in the average interest rate applicable to these borrowings would change annualized interest expense by approximately $1 million as of both December 31, 2017 and 2016.

Eastman may enter into interest rate swaps, collars, or similar instruments with the objective of reducing interest rate volatility relating to the Company's borrowing costs. As of both December 31, 2017 and 2016, the Company had an interest rate swap outstanding with a notional value of $75 million. 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 of the interest rate swap hedging the interest rate risk on the 3.8% bonds maturing March 2025 was $1 million as of both December 31, 2017 and December 31, 2016.

FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

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"). 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. PricewaterhouseCoopers LLP, 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 Corporate Audit Services, 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
	Chief Financial Officer
March 1, 2018	March 1, 2018

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of
Eastman Chemical Company

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated statements of financial position of Eastman Chemical Company (the “Company”) and its subsidiaries as of December 31, 2017 and December 31, 2016, and the related consolidated statements of earnings, comprehensive income and retained earnings and of cash flows for each of the three years in the period ended December 31, 2017, including the related notes (collectively referred to as the “consolidated financial statements”). We also have audited the Company's internal control over financial reporting as of December 31, 2017, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2017 and December 31, 2016**,** and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2017 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, 2017, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO.

Basis for Opinions

The Company's management is responsible for these consolidated 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 the Company’s consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) ("PCAOB") and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. 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.

Definition and Limitations of Internal Control over Financial Reporting

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
March 1, 2018

We have served as the Company's auditor since 1993.

CONSOLIDATED STATEMENTS OF EARNINGS, COMPREHENSIVE INCOME AND RETAINED EARNINGS

(Dollars in millions, except per share amounts)	For years ended December 31, 2017	2016	2015
Sales	$ 9,549	$ 9,008	$ 9,648
Cost of sales	7,095	6,658	7,068
Gross profit	2,454	2,350	2,580
Selling, general and administrative expenses	699	703	771
Research and development expenses	215	219	242
Asset impairments and restructuring charges, net	8	45	183
Operating earnings	1,532	1,383	1,384
Net interest expense	241	255	263
Early debt extinguishment and other related costs	—	85	—
Other (income) charges, net	2	(6)	(8)
Earnings before income taxes	1,289	1,049	1,129
(Benefit from) provision for income taxes	(99)	190	275
Net earnings	1,388	859	854
Less: Net earnings attributable to noncontrolling interest	4	5	6
Net earnings attributable to Eastman	$ 1,384	$ 854	$ 848
Basic earnings per share attributable to Eastman	$ 9.56	$ 5.80	$ 5.71
Diluted earnings per share attributable to Eastman	$ 9.47	$ 5.75	$ 5.66
Comprehensive Income			
Net earnings including noncontrolling interest	$ 1,388	$ 859	$ 854
Other comprehensive income (loss), net of tax:			
Change in cumulative translation adjustment	85	(97)	(216)
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	(27)	(30)	(19)
Derivatives and hedging:			
Unrealized gain (loss) during period	7	93	(48)
Reclassification adjustment for losses included in net income, net	7	79	83
Total other comprehensive income (loss), net of tax	72	109	(113)
Comprehensive income including noncontrolling interest	1,460	968	741
Less: Comprehensive income attributable to noncontrolling interest	4	5	6
Comprehensive income attributable to Eastman	$ 1,456	$ 963	$ 735
Retained Earnings			
Retained earnings at beginning of period	$ 5,721	$ 5,146	$ 4,545
Net earnings attributable to Eastman	1,384	854	848
Cash dividends declared	(303)	(279)	(247)
Retained earnings at end of period	$ 6,802	$ 5,721	$ 5,146

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

CONSOLIDATED STATEMENTS OF FINANCIAL POSITION

(Dollars in millions, except per share amounts)	December 31, 2017	December 31, 2016
Assets		
Current assets		
Cash and cash equivalents	$ 191	$ 181
Trade receivables, net of allowance for doubtful accounts	1,026	812
Miscellaneous receivables	360	399
Inventories	1,509	1,404
Other current assets	57	70
Total current assets	3,143	2,866
Properties		
Properties and equipment at cost	12,370	11,699
Less: Accumulated depreciation	6,763	6,423
Net properties	5,607	5,276
Goodwill	4,527	4,461
Intangible assets, net of accumulated amortization	2,373	2,479
Other noncurrent assets	349	375
Total assets	$ 15,999	$ 15,457
Liabilities and Stockholders' Equity		
Current liabilities		
Payables and other current liabilities	$ 1,589	$ 1,512
Borrowings due within one year	393	283
Total current liabilities	1,982	1,795
Long-term borrowings	6,147	6,311
Deferred income tax liabilities	893	1,206
Post-employment obligations	963	1,018
Other long-term liabilities	534	519
Total liabilities	10,519	10,849
Commitments and contingencies (Note 11)		
Stockholders' equity		
Common stock ($0.01 par value per share – 350,000,000 shares authorized; shares issued – 218,369,992 and 217,707,600 for 2017 and 2016, respectively)	2	2
Additional paid-in capital	1,983	1,915
Retained earnings	6,802	5,721
Accumulated other comprehensive loss	(209)	(281)
	8,578	7,357
Less: Treasury stock at cost (75,454,111 shares for 2017 and 71,269,474 shares for 2016)	3,175	2,825
Total Eastman stockholders' equity	5,403	4,532
Noncontrolling interest	77	76
Total equity	5,480	4,608
Total liabilities and stockholders' equity	$ 15,999	$ 15,457

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

CONSOLIDATED STATEMENTS OF CASH FLOWS

	For years ended December 31,		
(Dollars in millions)	2017	2016	2015
Operating activities			
Net earnings	$ 1,388	$ 859	$ 854
Adjustments to reconcile net earnings to net cash provided by operating activities:			
Depreciation and amortization	587	580	571
Mark-to-market pension and other postretirement benefit plans (gain) loss, net	(21)	97	115
Asset impairment charges	1	9	107
Early debt extinguishment and other related costs	—	85	—
Gains from sale of businesses	(3)	(17)	—
(Benefit from) provision for deferred income taxes	(394)	177	107
Changes in operating assets and liabilities, net of effect of acquisitions and divestitures:			
(Increase) decrease in trade receivables	(53)	(29)	114
(Increase) decrease in inventories	(71)	54	(26)
Increase (decrease) in trade payables	123	7	(102)
Pension and other postretirement contributions in excess of expenses	(115)	(329)	(217)
Variable compensation less than expenses	71	17	71
Other items, net	144	(125)	30
Net cash provided by operating activities	1,657	1,385	1,624
Investing activities			
Additions to properties and equipment	(649)	(626)	(652)
Proceeds from sale of businesses and assets	14	41	4
Acquisitions, net of cash acquired	(4)	(26)	(45)
Other items, net	(4)	(44)	—
Net cash used in investing activities	(643)	(655)	(693)
Financing activities			
Net increase (decrease) in commercial paper and other borrowings	(19)	(150)	195
Proceeds from borrowings	675	1,848	250
Repayment of borrowings	(1,025)	(2,126)	(950)
Dividends paid to stockholders	(296)	(272)	(238)
Treasury stock purchases	(350)	(145)	(103)
Dividends paid to noncontrolling interests	(7)	(8)	(6)
Proceeds from stock option exercises and other items, net	16	15	8
Net cash used in financing activities	(1,006)	(838)	(844)
Effect of exchange rate changes on cash and cash equivalents	2	(4)	(8)
Net change in cash and cash equivalents	10	(112)	79
Cash and cash equivalents at beginning of period	181	293	214
Cash and cash equivalents at end of period	$ 191	$ 181	$ 293

The accompanying notes are an integral part of these 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.

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

Eastman 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.

Accounts Receivable and Allowance for Doubtful Accounts

Trade accounts receivable are recorded at the invoiced amount and do not bear interest. Eastman 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 $12 million and $10 million at December 31, 2017 and 2016, 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. Eastman 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

Eastman 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 4, "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 Eastman 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 the price that would be received to sell an asset in an orderly transaction between market participants.

Goodwill

Eastman 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 2017 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 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 of the assets and liabilities of the reporting unit, would be necessary to determine the amount, if any, of goodwill impairment.

Indefinite-lived Intangible Assets

Eastman 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 respective carrying value.

Indefinite-lived intangible assets, primarily 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 Eastman 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.

Pension and Other Postretirement Benefits

Eastman maintains defined benefit pension plans that provide eligible employees with retirement benefits. Under its other postretirement benefit plans in the U.S., Eastman provides life insurance for eligible retirees hired prior to January 1, 2007. Eastman provides a subsidy for pre-Medicare health care and dental benefits to eligible retirees hired prior to January 1, 2007 that will end on December 31, 2021. Company funding is also provided for eligible Medicare retirees hired prior to January 1, 2007 with a health reimbursement arrangement. The estimated amounts of the costs and obligations related to these benefits reflect the Company's assumptions related to discount 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, primarily 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 in the quarter in which such remeasurement event occurs.

For additional information, see Note 10, "Retirement Plans".

Environmental Costs

Eastman 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.

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 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 12, "Environmental Matters and Asset Retirement Obligations".

Derivative and Non-Derivative Financial Instruments

Eastman uses derivative and non-derivative instruments to manage its exposure to market risks, such as changes in foreign currency exchange rates, commodity prices, and interest rates. The Company does not enter into derivative transactions for speculative purposes.

Counterparties to the 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 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's derivative instruments are recognized as either assets or liabilities on the Consolidated Statements of Financial Position and measured at fair value. For qualifying derivatives designated as cash flow hedges, the effective portion of the changes in the fair value are reported as a component of AOCI in the Consolidated Statements of Financial Position and recognized in earnings when the hedged items affect earnings. For qualifying derivatives designated as fair value hedges, the effective portion of the changes in the fair value are reported as "Long-term borrowings" on the Consolidated Statements of Financial Position and recognized in earnings when the hedged items affect earnings. For qualifying non-derivatives designated as net investment hedges, the effective portion of the changes in fair value are reported as a translation adjustment in the "Change in cumulative translation adjustment" ("CTA") within OCI located in the Consolidated Statements of Earnings, Comprehensive Income and Retained Earnings. The ineffective portion of hedges, hedge components excluded from the assessment of effectiveness, and changes in the fair value of nonqualifying derivatives or derivatives that are not designated as hedges, are recognized in current earnings. Hedge accounting will be discontinued prospectively for all hedges that no longer qualify for hedge accounting treatment. Cash flows from derivative instruments designated as hedges are reported in the same category as the cash flows from the items being hedged.

For additional information, see Note 9, "Derivative and Non-Derivative Financial Instruments".

Litigation and Contingent Liabilities

Eastman 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.

Revenue Recognition and Customer Incentives

Eastman 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 purchasing 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

Eastman records restructuring charges for costs 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 and charges 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. For additional information, see Note 15, "Asset Impairments and Restructuring Charges, Net".

Share-based Compensation

Eastman 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 17, "Share-Based Compensation Plans and Awards".

Income Taxes

The (benefit from) 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 (benefit from) 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 Eastman'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.

2. INVENTORIES

	December 31,	
(Dollars in millions)	2017	2016
Finished goods	$ 1,114	$ 997
Work in process	213	198
Raw materials and supplies	470	473
Total inventories at FIFO or average cost	1,797	1,668
Less: LIFO reserve	288	264
Total inventories	$ 1,509	$ 1,404

Inventories valued on the LIFO method were approximately 60 percent of total inventories at both December 31, 2017 and 2016.

3. PROPERTIES AND ACCUMULATED DEPRECIATION

(Dollars in millions)	December 31, 2017	December 31, 2016
Properties		
Land	$ 161	$ 157
Buildings	1,325	1,256
Machinery and equipment	10,122	9,646
Construction in progress	762	640
Properties and equipment at cost	$ 12,370	$ 11,699
Less: Accumulated depreciation	6,763	6,423
Net properties	$ 5,607	$ 5,276

Depreciation expense was $420 million, $412 million, and $402 million for 2017, 2016, and 2015, respectively.

Cumulative construction-period interest of $111 million and $169 million, reduced by accumulated depreciation of $49 million and $111 million, is included in net properties at December 31, 2017 and 2016, respectively.

Eastman capitalized $8 million of interest in 2017 and $7 million of interest in both 2016 and 2015.

4. GOODWILL AND OTHER INTANGIBLE ASSETS

Changes in the carrying amount of goodwill follow:

(Dollars in millions)	Additives & Functional Products	Adhesives & Plasticizers	Advanced Materials	Chemical Intermediates	Other	Total
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	(32)	—	(18)	(7)	—	(57)
Balance at December 31, 2016	2,416	—	1,275	760	10	4,461
Acquisitions	17	—	—	—	—	17
Goodwill written off as a result of sale of business	(1)	—	—	—	—	(1)
Currency translation adjustments	27	—	14	9	—	50
Balance at December 31, 2017	$ 2,459	$ —	$ 1,289	$ 769	$ 10	$ 4,527

As of December 31, 2017 and 2016, the reported balance of goodwill included accumulated impairment losses of $23 million, $12 million, and $14 million in the Additives & Functions Products ("AFP") segment, Chemical Intermediates ("CI") segment, and other segments, respectively.

The carrying amounts of intangible assets follow:

		December 31, 2017			December 31, 2016		
(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	8 - 25	$ 1,583	$ 345	$ 1,238	$ 1,542	$ 267	$ 1,275
Technology	7 - 20	690	247	443	675	196	479
Contracts	5	180	111	69	180	75	105
Other	5 - 37	102	19	83	99	14	85
Indefinite-lived intangible assets:							
Tradenames		530	—	530	525	—	525
Other		10	—	10	10	—	10
Total identified intangible assets		$ 3,095	$ 722	$ 2,373	$ 3,031	$ 552	$ 2,479

Amortization expense of definite-lived intangible assets was $164 million, $166 million, and $163 million for 2017, 2016, and 2015, respectively. Estimated amortization expense for future periods is $165 million in each year for 2018 through 2019 and $125 million in each year for 2020 through 2022.

5. 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 Consolidated Statements of Financial Position and the gain of $17 million was recorded in "Other (income) charges, net" in the 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® 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. At December 31, 2017 and 2016, the Company's total investment in these joint ventures was $95 million and $107 million, respectively.

6. PAYABLES AND OTHER CURRENT LIABILITIES

	December 31,	
(Dollars in millions)	2017	2016
Trade creditors	$ 842	$ 704
Accrued payrolls, vacation, and variable-incentive compensation	199	196
Accrued taxes	111	106
Post-employment obligations	89	110
Other	348	396
Total payables and other current liabilities	$ 1,589	$ 1,512

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

7. INCOME TAXES

On December 22, 2017, the 2017 "Tax Cuts and Jobs Act" ("Tax Reform Act") was enacted. Accounting for the impacts of newly enacted tax legislation are generally required to be completed in the period of enactment. Following enactment of the Tax Reform Act, the SEC provided guidance for initial accounting for the Tax Reform Act in Staff Accounting Bulletin No. 118, "Income Tax Accounting Implications of the Tax Cuts and Jobs Act" ("SAB 118"). The period to finalize accounting for the Tax Reform Act is up to one year following the enactment date and SAB 118 allows companies to provide for the impact of the Tax Reform Act under three scenarios: (1) a company is complete with its accounting for certain effects of tax reform, (2) a company is able to determine a reasonable estimate for certain effects of the Tax Reform Act and records that estimate as a provisional amount, or (3) a company is not able to determine a reasonable estimate and therefore continues to apply accounting based on the provisions of the tax laws that were in effect immediately prior to tax reform being enacted. Because the enactment of the Tax Reform Act was close to Eastman's year end, the Company was not able to complete the accounting for certain effects of the changes in tax law but has been able to reasonably estimate the effects and has recognized those estimates as provisional amounts as of December 31, 2017.

The Company recognized a $339 million estimated net tax benefit in 2017, primarily resulting from the Tax Reform Act and a tax loss from outside-U.S. entity reorganizations as part of the formation of an international treasury services center. The net tax benefit included a $533 million benefit from the one-time revaluation of deferred tax liabilities, partially offset by a one-time transition tax on deferred foreign income of $71 million and $123 million in changes in valuation of deferred tax assets associated with tax law changes and outside-U.S. entity reorganizations as part of the formation of an international treasury services center.

The income tax payable for the transition tax will be paid over eight years. As of December 31, 2017, a non-current income tax payable of approximately $60 million attributable to the transition tax is reflected in “Other long term liabilities” of the Consolidated Statement of Financial Position.

As of December 31, 2017, the Company considers the accounting for the following impacts of the Tax Reform Act to be provisional and, accordingly, subject to adjustment in future periods: the transition tax on deferred foreign income (which consists of post-1986 accumulated earnings and profits of controlled foreign corporations and the determination of cash versus non-cash balances), the impact of the change in income tax rates on deferred tax assets and liabilities, and the evaluation of gross foreign tax credit carryforwards and related valuation allowances. In preparing the provisional estimates for the year ended December 31, 2017, the Company has considered notices and revenue procedures issued by the Internal Revenue Service and authoritative accounting guidance issued through February 12, 2018.

Certain of the provisional amounts will be finalized in conjunction with the filing of the Company's U.S. federal income tax return for the year ended December 31, 2017 that will not be finalized until later in 2018. While historically differences between amounts reported in the Company's consolidated financial statements and the Company's U.S. federal income tax return have resulted in offsetting changes in estimates in current and deferred taxes for items which are timing related, the reduction of the U.S. tax rate will result in adjustments to the Company's income tax (benefit) provision when recognized. The Company also considers it likely that further technical guidance regarding certain aspects of the new provisions included in the Tax Reform Act, as well as clarity regarding state income tax conformity to current federal tax code, may be issued which could result in changes to the provisional amounts reported as of December 31, 2017 and related state income tax effects.

The Company is analyzing the future impact of the Tax Reform Act for the fiscal year beginning January 1, 2018, including the new provisions known as the base erosion anti-abuse tax ("BEAT") and global intangible low-tax income ("GILTI") tax, as well as other provisions. Under U.S. GAAP, companies can make an accounting policy election to either treat taxes resulting from GILTI as a current-period expense when incurred or factor such amounts into the measurement of deferred taxes. The Company has not completed its analysis of the effects of the GILTI provisions and will further consider the accounting policy election within the measurement period as provided under SAB 118.

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

	For years ended December 31,		
(Dollars in millions)	2017	2016	2015
Earnings before income taxes			
United States	$ 654	$ 422	$ 618
Outside the United States	635	627	511
Total	$ 1,289	$ 1,049	$ 1,129
(Benefit from) provision for income taxes			
United States Federal			
Current [1]	$ 220	$ (80)	$ 87
Deferred [2]	(383)	214	119
Outside the United States			
Current	62	91	59
Deferred	2	(18)	16
State and other			
Current	13	2	22
Deferred	(13)	(19)	(28)
Total	$ (99)	$ 190	$ 275

(1) Includes a one-time transition tax of $71 million on deferred foreign income.

(2) Includes one-time benefit of $517 million primarily due to the re-measurement of certain net deferred tax liabilities using the lower U.S. corporate income tax rate and a one-time $72 million valuation allowance on deferred tax assets for foreign tax credit carryforwards.

The following represents the deferred tax (benefit) charge recorded as a component of AOCI in the Consolidated Statements of Financial Position:

	For years ended December 31,		
(Dollars in millions)	2017	2016	2015
Defined benefit pension and other postretirement benefit plans	$ (16)	$ 21	$ 42
Derivatives and hedging	8	105	21
Total	$ (8)	$ 126	$ 63

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

	For years ended December 31,		
(Dollars in millions)	2017	2016	2015
Earnings before income taxes	$ (99)	$ 190	$ 275
Other comprehensive income	(8)	126	63
Total	$ (107)	$ 316	$ 338

Differences between the (benefit from) provision for income taxes and income taxes computed using the U.S. Federal statutory income tax rate follow:

	For years ended December 31,		
(Dollars in millions)	2017	2016	2015
Amount computed using the statutory rate	$ 450	$ 366	$ 393
State income taxes, net	(4)	(18)	(3)
Foreign rate variance	(150)	(121)	(93)
Domestic manufacturing deduction	(18)	(7)	(12)
Change in reserves for tax contingencies	20	—	(7)
General business credits	(65)	(20)	(15)
U.S. tax on foreign earnings	29	25	7
Foreign tax credits	(26)	(10)	(9)
Tax law changes and tax loss from outside-U.S. entity reorganizations (1)	(339)	—	—
Other	4	(25)	14
(Benefit from) provision for income taxes	$ (99)	$ 190	$ 275
Effective income tax rate	(8)%	18%	24%

(1) Includes one-time net benefit primarily due to the re-measurement of certain net deferred tax liabilities using the lower U.S. corporate income tax rate partially offset by the transition tax on deferred foreign income and changes in the valuation of deferred tax assets associated with tax law changes and the tax impact from intercompany reorganization activities.

The 2017 effective tax rate was lower than the 2016 effective tax rate due to a $339 million net tax benefit, primarily resulting from the Tax Reform Act and a tax loss from outside-U.S. entity reorganizations as part of the formation of an international treasury services center, a $20 million benefit due to amendments to prior years' domestic income tax returns, and a $30 million benefit reflecting the finalization of prior years' foreign income tax returns. The 2016 effective tax rate included one-time tax benefits discussed immediately below.

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 significant components of deferred tax assets and liabilities follow:

	December 31,	
(Dollars in millions)	2017	2016
Deferred tax assets		
Post-employment obligations	$ 242	$ 378
Net operating loss carryforwards	690	337
Tax credit carryforwards	202	248
Environmental reserves	72	119
Unrealized derivative loss	17	50
Other	90	186
Total deferred tax assets	1,313	1,318
Less: Valuation allowance	410	278
Deferred tax assets less valuation allowance	$ 903	$ 1,040
Deferred tax liabilities		
Property, plant, and equipment	$ (835)	$ (1,237)
Intangible assets	(535)	(847)
Investments	(274)	—
Other	(131)	(128)
Total deferred tax liabilities	$ (1,775)	$ (2,212)
Net deferred tax liabilities	$ (872)	$ (1,172)
As recorded in the Consolidated Statements of Financial Position:		
Other noncurrent assets	$ 21	$ 34
Deferred income tax liabilities	(893)	(1,206)
Net deferred tax liabilities	$ (872)	$ (1,172)

As of December 31, 2017, the Company has accumulated undistributed earnings generated by our foreign subsidiaries of approximately $1.2 billion which was subject to the one-time transition tax of approximately $71 million on deferred foreign income as required by the Tax Reform Act. We continue to consider these earnings as reinvested indefinitely.

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 $17 million at December 31, 2017 has been provided against the deferred tax asset resulting from these operating loss carryforwards.

At December 31, 2017, foreign net operating loss carryforwards totaled $2.5 billion. Of this total, $285 million will expire in 1 to 20 years and $2.2 billion have no expiration date. A valuation allowance of approximately $260 million has been provided against such net operating loss carryforwards.

At December 31, 2017, federal net operating loss carryforwards of $16 million were available to offset future taxable income, which expire from 2027 to 2030. At December 31, 2017, foreign tax credit carryforwards of approximately $72 million were available to reduce possible future U.S. income taxes and which expire from 2018 to 2021. As a result of the Tax Reform Act, the Company may no longer be able to utilize the Solutia, Inc. ("Solutia") U.S. foreign tax credit carryforwards; therefore, management established a full valuation allowance of $72 million on the remaining deferred tax asset as of December 31, 2017.

A partial valuation allowance of $54 million has been established for the Solutia 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.

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

	December 31,	
(Dollars in millions)	2017	2016
Miscellaneous receivables	$ 215	$ 235
Payables and other current liabilities	$ 58	$ 56
Other long-term liabilities	137	60
Total income taxes payable	$ 195	$ 116

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

(Dollars in millions)	2017	2016	2015
Balance at January 1	$ 114	$ 125	$ 117
Adjustments based on tax positions related to current year	29	(7)	(12)
Additions based on acquisitions	—	—	27
Lapse of statute of limitations	(1)	(4)	(7)
Balance at December 31	$ 142	$ 114	$ 125

All of the 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, 2017, the Company had accrued a liability of $4 million for interest, net of tax, and $1 million for estimated tax penalties. During 2017, the Company recognized $3 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, associated with the expiration of the statute of limitations. At December 31, 2017, the Company had accrued balances of $6 million for interest, net of tax benefit, and $1 million for penalties.

As of January 1, 2016, the Company had accrued a liability of $4 million for interest, net of tax, and $1 million for tax penalties. 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, 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.

As of January 1, 2015, the Company had accrued a liability of $4 million for interest, net of tax, and $3 million for tax penalties. 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, 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.

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 for Eastman legal entities and years before 2002 for Solutia legal entities. 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.

It is reasonably possible that, 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 within the next twelve months by up to $20 million.

8. BORROWINGS

	December 31,	
(Dollars in millions)	2017	2016
Borrowings consisted of:		
5.5% notes due November 2019	$ 250	$ 249
2.7% notes due January 2020	797	796
4.5% notes due January 2021	185	184
3.6% notes due August 2022	738	741
1.50% notes due May 2023 (1)	895	786
7 1/4% debentures due January 2024	197	197
7 5/8% debentures due June 2024	43	43
3.8% notes due March 2025	690	689
1.875% notes due November 2026 (1)	592	519
7.60% debentures due February 2027	195	195
4.8% notes due September 2042	493	493
4.65% notes due October 2044	871	870
Commercial paper and short-term borrowings	389	280
Credit facilities borrowings	200	549
Capital leases and other	5	3
Total borrowings	6,540	6,594
Borrowings due within one year	393	283
Long-term borrowings	$ 6,147	$ 6,311

(1) The carrying value of the euro-denominated 1.50% notes due May 2023 and 1.875% notes due November 2026 will fluctuate with changes in the euro exchange rate. The carrying value of these euro-denominated borrowings have been designated as non-derivative net investment hedges of a portion of the Company's net investments in euro functional-currency denominated subsidiaries to offset foreign currency fluctuations. During the twelve months ended December 31, 2017, pre-tax losses of $180 million were recognized in "Other comprehensive income (loss)" for revaluation of these notes.

In November 2016, Eastman 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 9, "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 the 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. The book value of the redeemed debt was $1,061 million. For further information on the related derivatives and hedging items, see Note 9, "Derivative and Non-Derivative Financial Instruments".

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 9, "Derivative and Non-Derivative Financial Instruments".

Credit Facilities and Commercial Paper Borrowings

In December 2014, Eastman borrowed $1.0 billion under a five-year term loan ("2019 Term Loan"). As of December 31, 2017, the Company had repaid the remaining balance of $250 million using available cash. As of December 31, 2016, the 2019 Term Loan agreement balance outstanding was $250 million with an interest rate of 2.02 percent. In December 2016, the Company borrowed $300 million under the 2021 Term Loan. As of December 31, 2017, the 2021 Term Loan agreement balance outstanding was $200 million with an interest rate of 2.60 percent. In 2017, $99 million of the Company's borrowings under the 2021 Term Loan agreement were repaid using available cash. As of December 31, 2016, the 2021 Term Loan agreement balance outstanding was $299 million with an interest rate of 1.95 percent. Borrowings under the 2021 Term Loan agreement 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 available liquidity for general corporate purposes and supports commercial paper borrowings. Commercial paper borrowings are classified as short-term. At December 31, 2017 and 2016, the Company had no outstanding borrowings under the Credit Facility. At December 31, 2017, the Company's commercial paper borrowings were $280 million with a weighted average interest rate of 1.61 percent. At December 31, 2016, the Company's commercial paper borrowings were $280 million with a weighted average interest rate of 1.12 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, 2017 and 2016, the Company had no borrowings under the A/R Facility.

The Credit and A/R Facilities and other borrowing agreements contain customary covenants and events of default, some of which require the Company to maintain certain financial ratios that determine the amounts available and terms of borrowings. The Company was in compliance with all covenants at both December 31, 2017 and December 31, 2016.

The Company has access to borrowings of up to €150 million ($180 million) under a receivables facility based on the discounted value of selected customer accounts receivable. This facility expires December 2020 and renews for another one year period if not terminated with 90 days notice by either party. These arrangements include receivables in the United States, Belgium, and Finland, and are subject to various eligibility requirements. Borrowings under this facility are subject to interest at an agreed spread above EURIBOR for euro denominated drawings and the counterparty's cost of funds for drawings in any other currencies, plus administration and insurance fees and are classified as short-term. The amount of outstanding borrowings under this facility were $109 million at December 31, 2017 with a weighted average interest rate of 1.31 percent.

Fair Value of Borrowings

Eastman has classified its total borrowings at December 31, 2017 and 2016 under the fair value hierarchy as defined in the accounting policies in Note 1, "Significant Accounting Policies". The fair value for fixed-rate debt securities is based on current market prices and is classified as Level 1. The fair value for the Company's other borrowings primarily under the Term Loans, commercial paper, and a receivables facility equals the carrying value and is classified as Level 2. The Company had no borrowings classified as Level 3 as of December 31, 2017 and December 31, 2016.

		Fair Value Measurements at December 31, 2017			
(Dollars in millions)	Recorded Amount December 31, 2017	Total Fair Value	Quoted Prices in Active Markets for Identical Liabilities (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Total borrowings	$ 6,540	$ 6,980	$ 6,386	$ 594	$ —

		Fair Value Measurements at December 31, 2016			
(Dollars in millions)	Recorded Amount December 31, 2016	Total Fair Value	Quoted Prices in Active Markets for Identical Liabilities (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Total borrowings	$ 6,594	$ 6,868	$ 6,036	$ 832	$ —

9. DERIVATIVE AND NON-DERIVATIVE FINANCIAL INSTRUMENTS

Overview of Hedging Programs

Eastman 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 reported 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 net of the change in the hedge instrument and item being hedged for qualifying cash flow hedges is 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

Eastman 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, 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, from time to time, enters into forward exchange contract cash flow hedges to hedge certain firm commitments denominated in foreign currencies.

Commodity Hedging

Certain raw material and energy sources used by Eastman, 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, 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. The Company weights its hedge portfolio more heavily in the first year with declining coverage over the remaining periods.

Interest Rate Hedging

Eastman'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 net of the change in the hedge instrument and item being hedged for qualifying fair value hedges is 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

Eastman'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, from time to time, the Company 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 typically 100 percent effective, there is normally no impact on earnings due to hedge ineffectiveness.

In 2016, the Company entered into a $75 million notional fixed-to-floating interest rate swap on 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 net of the change in the hedge instrument and item being hedged for qualifying net investment hedges is 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.

The Company designated the euro-denominated 1.50% notes due May 2023 in the principal amounts of €200 million ($213 million) in fourth quarter 2016 and €550 million ($614 million) in second quarter 2016 and the euro-denominated 1.875% notes due November 2026 in the principal amount of €500 million ($534 million) in fourth quarter 2016 as non-derivative net investment hedges of a portion of the Company's net investments in euro functional currency-denominated subsidiaries to offset foreign currency fluctuations.

Summary of Financial Position and Financial Performance of Hedging Instruments

The following table presents the notional amounts outstanding at December 31, 2017 and 2016 associated with Eastman's hedging programs.

Notional Outstanding	**December 31, 2017**	**December 31, 2016**
Derivatives designated as cash flow hedges:		
Foreign Exchange Forward and Option Contracts (in millions)		
EUR/USD (in EUR)	€525	€378
EUR/USD (in approximate USD equivalent)	$630	$398
JPY/USD (in JPY)	¥0	¥1,800
JPY/USD (in approximate USD equivalent)	$0	$15
Commodity Forward and Collar Contracts		
Feedstock (in million barrels)	7	11
Energy (in million million british thermal units)	23	23
Derivatives designated as fair value hedges:		
Fixed-for-floating interest rate swaps (in millions)	$75	$75
Non-derivatives designated as net investment hedges:		
Foreign Currency Net Investment Hedges (in millions)		
EUR/USD (in EUR)	€1,240	€1,238

<u>Fair Value Measurements</u>

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.

All 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 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 years ended December 31, 2017 or 2016.

All 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 does not have any cash collateral due under such agreements.

The Company elected to present derivative contracts on a gross basis within the Consolidated Statements of Financial Position. The following table presents the financial assets and liabilities valued on a recurring and gross basis and includes where the financial assets and liabilities are located within the Consolidated Statements of Financial Position as of December 31, 2017 and 2016.

The Financial Position and Fair Value Measurements of Hedging Instruments on a Gross Basis

(Dollars in millions)

Derivative Type	Statements of Financial Position Location	December 31, 2017 Level 2	December 31, 2016 Level 2
Derivatives designated as cash flow hedges:			
Commodity contracts	Other current assets	$ 9	$ 5
Commodity contracts	Other noncurrent assets	4	2
Foreign exchange contracts	Other current assets	23	49
Foreign exchange contracts	Other noncurrent assets	2	47
Derivatives designated as fair value hedges:			
Fixed-for-floating interest rate swap	Other current assets	1	1
Total Derivative Assets		$ 39	$ 104
Derivatives designated as cash flow hedges:			
Commodity contracts	Payables and other current liabilities	$ 28	$ 62
Commodity contracts	Other long-term liabilities	10	69
Foreign exchange contracts	Payables and other current liabilities	6	—
Foreign exchange contracts	Other long-term liabilities	4	—
Derivatives designated as fair value hedges:			
Fixed-for-floating interest rate swap	Long-term borrowings	4	4
Total Derivative Liabilities		$ 52	$ 135
Total Net Derivative Liabilities		$ 13	$ 31

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 $1.5 billion and $1.3 billion associated with non-derivative instruments designated as foreign currency net investment hedges as of December 31, 2017 and 2016, respectively. The designated foreign currency-denominated borrowings are included as part of "Long-term borrowings" within the Consolidated Statements of Financial Position.

The following table presents the effect of the Company's hedging instruments on OCI and financial performance for the twelve months ended December 31, 2017 and 2016:

(Dollars in millions)	Change in amount of after tax gain/(loss) recognized in OCI on Derivatives		Pre-tax amount of gain/(loss) reclassified from AOCI into income (effective portion)		Additional gain/(loss) recognized in earnings (effective portion)		
	December 31		December 31		December 31		
Hedging Relationships	**2017**	**2016**	**2017**	**2016**	**2017**	**2016**	**Income Statement Classification**
Derivatives in cash flow hedging relationships:							
Commodity contracts	$ 62	$ 193	$ (43)	$ (168)	$ —	$ —	Cost of sales
Foreign exchange contracts	(50)	(29)	35	63	—	—	Sales
Forward starting interest rate and treasury lock swap contracts	3	(2)	(5)	(7)	—	—	Net interest expense
Derivatives in fair value hedging relationships:							
Fixed-for-floating interest rate swaps	—	—	—	—	4	11	Net interest expense
Non-derivatives in net investment hedging relationships:							
Net investment hedges (pre-tax)	(180)	43	—	—	—	—	N/A
Derivatives not designated as hedges[(1)]:							
Foreign exchange contracts	—	—	—	—	1	(34)	Other (income) charges, net

(1) The gains or losses on derivatives that are not designated as hedges are marked-to-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 $214 million at December 31, 2017 and losses of $57 million at December 31, 2016. Losses in AOCI increased in 2017 compared to 2016 primarily as a result of an increase in foreign currency exchange rates, particularly the euro, partially offset by an increase in commodity prices, particularly propane. If realized, approximately $6 million in pre-tax losses will be reclassified into earnings during the next 12 months.

The Company had no material ineffectiveness from the hedging programs during the years ended December 31, 2017 or 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 8, "Borrowings".

10. RETIREMENT PLANS

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

Defined Contribution Plans

Eastman 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"), under Section 401(a) of the Internal Revenue Code. Eastman made a contribution in February 2018 to the EIP/ESOP for substantially all U.S. employees equal to 5 percent of their eligible compensation for the 2017 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 2,130,176; 2,183,950; and 2,199,000 shares as of December 31, 2017, 2016, and 2015, 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 $64 million, $63 million, and $62 million for 2017, 2016, and 2015, 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.

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 in the U.S., Eastman provides life insurance for eligible retirees hired prior to January 1, 2007. Eastman provides a subsidy for pre-Medicare health care and dental benefits to eligible retirees hired prior to January 1, 2007 that will end on December 31, 2021. Company funding is also provided for eligible Medicare retirees hired prior to January 1, 2007 with a health reimbursement arrangement. 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.

Below is a summary balance sheet of the change in plan assets during 2017 and 2016, the funded status of the plans and amounts recognized in the Consolidated Statements of Financial Position.

Summary of Changes

	Pension Plans				Postretirement Benefit Plans	
	2017		2016		2017	2016
(Dollars in millions)	U.S.	Non-U.S.	U.S.	Non-U.S.		
Change in projected benefit obligation:						
Benefit obligation, beginning of year	$ 2,141	$ 801	$ 2,262	$ 763	$ 737	$ 853
Service cost	37	13	39	12	3	5
Interest cost	66	20	74	23	23	27
Actuarial (gain) loss	94	(11)	38	123	30	12
Settlement	—	—	(54)	—	—	—
Plan amendments and other	—	—	2	—	—	(106)
Plan participants' contributions	—	1	—	1	12	14
Effect of currency exchange	—	90	—	(100)	1	—
Federal subsidy on benefits paid	—	—	—	—	1	1
Benefits paid	(184)	(21)	(220)	(21)	(69)	(69)
Benefit obligation, end of year	$ 2,154	$ 893	$ 2,141	$ 801	$ 738	$ 737
Change in plan assets:						
Fair value of plan assets, beginning of year	$ 1,959	$ 667	$ 1,887	$ 650	$ 149	$ 157
Actual return on plan assets	271	31	142	103	22	12
Effect of currency exchange	—	76	—	(84)	—	—
Company contributions	8	19	204	18	43	39
Reserve for third party contributions	—	—	—	—	(10)	(5)
Plan participants' contributions	—	1	—	1	12	14
Benefits paid	(184)	(21)	(220)	(21)	(69)	(69)
Federal subsidy on benefits paid	—	—	—	—	1	1
Settlements	—	—	(54)	—	—	—
Fair value of plan assets, end of year	$ 2,054	$ 773	$ 1,959	$ 667	$ 148	$ 149
Funded status at end of year	$ (100)	$ (120)	$ (182)	$ (134)	$ (590)	$ (588)
Amounts recognized in the Consolidated Statements of Financial Position consist of:						
Other noncurrent assets	$ 12	$ 8	$ 3	$ —	$ 38	$ 30
Current liabilities	(3)	(1)	(7)	(1)	(44)	(42)
Post-employment obligations	(109)	(127)	(178)	(133)	(584)	(576)
Net amount recognized, end of year	$ (100)	$ (120)	$ (182)	$ (134)	$ (590)	$ (588)
Accumulated benefit obligation	$ 2,031	$ 845	$ 2,030	$ 753		
Amounts recognized in accumulated other comprehensive income consist of:						
Prior service (credit) cost	$ 1	$ 1	$ (3)	$ 2	$ (222)	$ (262)

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

(Dollars in millions)	2017		2016	
	U.S.	Non-U.S.	U.S.	Non-U.S.
Projected benefit obligation	$ 1,709	$ 658	$ 1,865	$ 801
Fair value of plan assets	1,597	530	1,680	667

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

(Dollars in millions)	2017		2016	
	U.S. (1)	Non-U.S.	U.S.	Non-U.S.
Projected benefit obligation	$ 170	$ 618	$ 1,865	$ 557
Accumulated benefit obligation	159	596	1,754	535
Fair value of plan assets	117	492	1,680	434

(1) Return on assets during 2017, including returns on $200 million contributions made in 2016, resulted in the fair value of plan assets exceeding the accumulated benefit obligation for a significant U.S. pension plan.

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

	Pension Plans						Postretirement Benefit Plans		
	2017		2016		2015		2017	2016	2015
(Dollars in millions)	U.S.	Non-U.S.	U.S.	Non-U.S.	U.S.	Non-U.S.			
Components of net periodic benefit (credit) cost:									
Service cost	$ 37	$ 13	$ 39	$ 12	$ 39	$ 15	$ 3	$ 5	$ 8
Interest cost	66	20	74	23	87	26	23	27	39
Expected return on plan assets	(140)	(35)	(138)	(32)	(148)	(37)	(5)	(6)	(6)
Curtailment gain (1)	—	—	—	—	—	(7)	—	—	(2)
Amortization of:									
Prior service (credit) cost	(4)	1	(4)	—	(4)	1	(40)	(44)	(24)
Mark-to-market pension and other postretirement benefits (gain) loss, net	(37)	(7)	34	52	140	(20)	23	11	(5)
Net periodic benefit (credit) cost	$ (78)	$ (8)	$ 5	$ 55	$ 114	$ (22)	$ 4	$ (7)	$ 10
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 (credit) cost	(4)	1	(4)	—	(4)	1	(40)	(44)	(24)
Total	$ (4)	$ 1	$ (7)	$ —	$ (4)	$ (2)	$ (40)	$ 62	$ 116

(1) 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.

In fourth quarter 2016, Eastman 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 AOCI 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 AOCI 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 AOCI into net periodic cost in 2018 is $1 million and $40 million, respectively.

Plan Assumptions

The assumptions used to develop the projected benefit obligation for Eastman'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:	**2017**		**2016**		**2015**		**2017**	**2016**	**2015**
	U.S.	**Non-U.S.**	**U.S.**	**Non-U.S.**	**U.S.**	**Non-U.S.**			
Discount rate	3.57%	2.25%	3.89%	2.33%	4.13%	3.26%	3.54%	3.91%	4.17%
Rate of compensation increase	3.25%	2.95%	3.25%	2.94%	3.50%	3.00%	3.25%	3.25%	3.50%
Health care cost trend									
Initial							6.75%	7.00%	7.50%
Decreasing to ultimate trend of							5.00%	5.00%	5.00%
in year							2025	2021	2021

	Pension Plans						Postretirement Benefit Plans		
Weighted-average assumptions used to determine net periodic cost for years ended December 31:	**2017**		**2016**		**2015**		**2017**	**2016**	**2015**
	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%
Discount rate for service cost	3.89%	2.33%	4.13%	3.26%	3.80%	3.10%	4.31%	4.57%	3.91%
Discount rate for interest cost	3.24%	2.33%	3.33%	3.26%	3.80%	3.10%	3.28%	3.42%	3.91%
Expected return on assets	7.49%	5.02%	7.60%	5.11%	7.78%	5.50%	3.75%	3.75%	3.75%
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							5.00%	5.00%	5.00%
in year							2021	2021	2020

A 6.75 percent rate of increase in per capita cost of covered health care benefits is assumed for 2018. The rate is assumed to decrease gradually to five percent in 2025 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 2017 service and interest costs or the 2017 benefit obligation, because the Company's contributions for benefits are fixed.

In 2017, the Company performed a five year experience study on assumptions for the U.S. plans, including a review of the mortality tables. As a result of the study, the Company has updated the mortality assumptions used to a modified RP-2017 table with a modified MP-2017 improvement scale and no collar adjustment.

The fair value of plan assets for the U.S. pension plans at December 31, 2017 and 2016 was $2.1 billion and $2.0 billion, respectively, while the fair value of plan assets at December 31, 2017 and 2016 for non-U.S. pension plans was $773 million and $667 million, respectively. At December 31, 2017 and 2016, the expected weighted-average long-term rate of return on U.S. pension plan assets was 7.48 percent and 7.49 percent, respectively. The expected weighted-average long-term rate of return on non-U.S. pension plans assets was 4.83 percent and 5.02 percent at December 31, 2017 and 2016, respectively.

Plan Assets

The following tables reflect the fair value of the defined benefit pension plans assets.

(Dollars in millions)			Fair Value Measurements at December 31, 2017					
Description	**December 31, 2017**		**Quoted Prices in Active Markets for Identical Assets (Level 1)**		**Significant Other Observable Inputs (Level 2)**		**Significant Unobservable Inputs (Level 3)**	
Pension Assets:	**U.S.**	**Non-U.S.**	**U.S.**	**Non-U.S.**	**U.S.**	**Non-U.S.**	**U.S.**	**Non-U.S.**
Cash & Cash Equivalents (1)	$ 20	$ 57	$ 20	$ 57	$ —	$ —	$ —	$ —
Public Equity - United States (2)	4	—	4	—	—	—	—	—
Other Investments (3)	—	51	—	—	—	—	—	51
Total Assets at Fair Value	$ 24	$ 108	$ 24	$ 57	$ —	$ —	$ —	$ 51
Investments Measured at Net Asset Value (4)	2,030	665						
Total Assets	$ 2,054	$ 773						

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

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

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

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

(4) 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 following tables reflect the fair value of the postretirement benefit plan assets. 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 December 31, 2017		
Description	December 31, 2017	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Postretirement Benefit Plan Assets:				
Cash & Cash Equivalents [1]	$ 2	$ 2	$ —	$ —
Debt [2]:				
Fixed Income (U.S.)	82	—	82	—
Fixed Income (Non-U.S.)	31	—	31	—
Total	$ 115	$ 2	$ 113	$ —

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

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

(2) 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.

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

	Fair Value Measurements Using Significant Unobservable Inputs (Level 3)
	Other Investments[1]
(Dollars in millions)	Non-U.S. Pension Plans
Balance at December 31, 2015	$ 42
Unrealized gains	2
Balance at December 31, 2016	44
Unrealized gains	7
Balance at December 31, 2017	$ 51

(1) Primarily consists of insurance contracts.

The following table reflects the target allocation for the Company's U.S. and non-U.S. pension and postretirement benefit plans assets for 2018 and the asset allocation at December 31, 2017 and 2016, by asset category.

	U.S. Pension Plans			Non-U.S. Pension Plans			Postretirement Benefit Plan		
	2018 Target Allocation	Plan Assets at December 31, 2017	Plan Assets at December 31, 2016	2018 Target Allocation	Plan Assets at December 31, 2017	Plan Assets at December 31, 2016	2018 Target Allocation	Plan Assets at December 31, 2017	Plan Assets at December 31, 2016
Asset category									
Equity securities	44%	48%	47%	26%	22%	30%	—%	—%	—%
Debt securities	40%	40%	41%	51%	55%	52%	100%	100%	100%
Real estate	3%	2%	2%	5%	7%	2%	—%	—%	—%
Other investments [1]	13%	10%	10%	18%	16%	16%	—%	—%	—%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%

(1) 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.

Investment Strategy

Eastman'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 investments 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 that includes senior management.

Eastman's investment strategy for its VEBA trust is to invest in 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 made no contributions in 2017. For 2018, 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 Benefit Plans
(Dollars in millions)	U.S.	Non-U.S.	
2018	$ 197	$ 23	$ 58
2019	165	23	58
2020	162	25	58
2021	154	25	57
2022	151	26	53
2023-2027	722	164	220

11. COMMITMENTS AND OFF BALANCE SHEET ARRANGEMENTS

Eastman's obligations 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	Total
2018	$ —	$ 393	$ 228	$ 230	$ 67	$ 234	$ 1,152
2019	250	1	229	222	55	85	842
2020	797	—	207	184	44	90	1,322
2021	185	200	190	92	34	91	792
2022	738	—	178	160	23	92	1,191
2023 and beyond	3,976	—	1,619	2,032	47	1,056	8,730
Total	$ 5,946	$ 594	$ 2,651	$ 2,920	$ 270	$ 1,648	$ 14,029

Estimated future payments of debt securities assumes the repayment of principal upon stated maturity, and actual amounts and the timing of such payments may differ materially due to repayment or other changes in the terms of such debt prior to maturity.

Eastman had various purchase obligations at December 31, 2017 totaling approximately $2.9 billion over a period of approximately 30 years for materials, supplies, and energy incident to the ordinary conduct of business. The Company also had various lease commitments for property and equipment under cancelable, noncancelable, and month-to-month operating leases totaling approximately $270 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 $94 million, $90 million, and $79 million in 2017, 2016, and 2015, respectively.

Amounts in other liabilities 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, one-time transition tax on deferred foreign income under the 2017 Tax Cuts and Jobs Act, 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 "2023 and beyond" line item.

Guarantees

Eastman 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 $71 million at December 31, 2017 and consist primarily of leases for railcars that will expire beginning in third quarter 2018. 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 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.

Other Off Balance Sheet Arrangements

The Company has off balance sheet non-recourse factoring facilities with various commitment dates. These arrangements include customer specific receivables in the United States and Europe. The Company sells the receivables at face value which equals the carrying value and fair value, and thus no gain or loss is recognized. There is no continuing involvement with these receivables once sold and no credit loss exposure. The total amount of cumulative receivables sold in 2017 was $35 million.

12. 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 certain cleanup costs. In addition, the Company will 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 the availability of legal defenses, the Company's preliminary assessment of actions that may be required, and, if applicable, the expected sharing of costs, 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, results of operations, or cash flows. The Company's total reserve for environmental loss contingencies was $304 million and $321 million at December 31, 2017 and December 31, 2016, respectively. The environmental reserve includes costs 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 of $7 million and $8 million at December 31, 2017 and December 31, 2016, respectively.

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:

(Dollars in millions)	December 31,	
	2017	2016
Environmental contingent liabilities, current	$ 25	$ 30
Environmental contingent liabilities, long-term	279	291
Total	$ 304	$ 321

Environmental Remediation

Estimated future environmental expenditures for undiscounted remediation costs ranged from the best estimate or minimum of $280 million to the maximum of $483 million and from the best estimate or minimum of $295 million to the maximum of $503 million at December 31, 2017 and December 31, 2016, respectively. The best estimate or minimum estimated future environmental expenditures are considered to be probable and reasonably estimable and include the amounts accrued at both December 31, 2017 and December 31, 2016.

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, $84 million had been paid for costs at the Shared Sites as of December 31, 2017. As of December 31, 2017, an additional $204 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 for twelve months ended 2017 are summarized below:

(Dollars in millions)	Environmental Remediation Liabilities
Balance at December 31, 2016	$ 295
Cash reductions	(15)
Balance at December 31, 2017	$ 280

Asset Retirement Obligations

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. Eastman 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 for these asset retirement obligation costs was $24 million and $26 million at December 31, 2017 and December 31, 2016, respectively.

Other

Environmental costs are capitalized if they extend the life of the related property, increase its capacity, or mitigate the possibility of future contamination. The cost of operating and maintaining environmental control facilities is charged to expense as incurred. Eastman's cash expenditures related to environmental protection and improvement were $257 million, $267 million, and $290 million in 2017, 2016, and 2015, 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 $38 million and $45 million in 2017 and 2016, 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 $49 million and $46 million at December 31, 2017 and December 31, 2016, respectively.

13. LEGAL MATTERS

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 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.

14. STOCKHOLDERS' EQUITY

A reconciliation of the changes in stockholders' equity for 2017, 2016, and 2015 is provided below:

(Dollars in millions)	Common Stock at Par Value	Additional Paid-in Capital	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Treasury Stock at Cost	Total Eastman Stockholders' Equity	Noncontrolling Interest	Total Equity
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 [1]	—	—	(247)	—	—	(247)	—	(247)
Other Comprehensive (Loss)	—	—	—	(113)	—	(113)	—	(113)
Share-Based Compensation Expense [2]	—	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 [1]	—	—	(279)	—	—	(279)	—	(279)
Other Comprehensive Income	—	—	—	109	—	109	—	109
Share-Based Compensation Expense [2]	—	35	—	—	—	35	—	35
Stock Option Exercises	—	21	—	—	—	21	—	21
Other	—	(4)	—	—	—	(4)	(1)	(5)
Share Repurchase	—	—	—	—	(145)	(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
Net Earnings	—	—	1,384	—	—	1,384	4	1,388
Cash Dividends [1]	—	—	(303)	—	—	(303)	—	(303)
Other Comprehensive Income	—	—	—	72	—	72	—	72
Share-Based Compensation Expense [2]	—	52	—	—	—	52	—	52
Stock Option Exercises	—	22	—	—	—	22	—	22
Other	—	(6)	—	—	—	(6)	1	(5)
Share Repurchase	—	—	—	—	(350)	(350)	—	(350)
Distributions to noncontrolling interest	—	—	—	—	—	—	(4)	(4)
Balance at December 31, 2017	$ 2	$ 1,983	$ 6,802	$ (209)	$ (3,175)	$ 5,403	$ 77	$ 5,480

(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.

Eastman 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 $2.09 in 2017, $1.89 in 2016, and $1.66 in 2015.

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 2017, 2016, and 2015 are primarily for compensation expense of equity awards and employee stock option exercises.

In February 2014, the Company's Board of Directors authorized repurchase of up to $1 billion of the Company's outstanding common stock at such times, in such amounts, and on such terms, as determined by management to be in the best interests of the Company. As of December 31, 2017, a total of 10,726,827 shares have been repurchased under this authorization for a total of $848 million. During 2017, the Company repurchased 4,184,637 shares of common stock for a cost of approximately $350 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.

In February 2018, the Company's Board of Directors authorized the repurchase of up to an additional $2 billion of Eastman's outstanding common stock at such times, in such amounts, and on such terms, as determined by management to be in the best interests of the Company.

The Company's charitable foundation held 50,798 shares of the Company's common stock at December 31, 2017, 2016, and 2015 which are included in treasury stock.

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

	For years ended December 31,		
(In millions, except per share amounts)	2017	2016	2015
Numerator			
Net earnings attributable to Eastman	$ 1,384	$ 854	$ 848
Denominator			
Weighted average shares used for basic EPS	144.8	147.3	148.6
Dilutive effect of stock options and other award plans	1.3	1.1	1.2
Weighted average shares used for diluted EPS	146.1	148.4	149.8
EPS [1]			
Basic	$ 9.56	$ 5.80	$ 5.71
Diluted	$ 9.47	$ 5.75	$ 5.66

(1) Earnings per share are calculated using whole dollars and shares.

Stock options excluded from the 2017, 2016, and 2015 calculations of diluted earnings per share were 204,978, 1,072,468, and 768,134, respectively, because the market value of option exercises for these awards were less than the cash proceeds that would be received from these exercises.

Shares of common stock issued, including shares held in treasury, are presented below:

	For years ended December 31,		
	2017	2016	2015
Balance at beginning of year	217,707,600	216,899,964	216,256,971
Issued for employee compensation and benefit plans	662,392	807,636	642,993
Balance at end of year	218,369,992	217,707,600	216,899,964

Accumulated Other Comprehensive Income (Loss)

(Dollars in millions)	Cumulative Translation Adjustment	Benefit Plans Unrecognized Prior Service Credits	Unrealized Gains (Losses) on Cash Flow Hedges	Unrealized Losses on Investments	Accumulated Other Comprehensive Income (Loss)
Balance at December 31, 2015	$ (284)	$ 129	$ (234)	$ (1)	$ (390)
Period change	(97)	34	172	—	109
Balance at December 31, 2016	(381)	163	(62)	(1)	(281)
Period change	85	(27)	14	—	72
Balance at December 31, 2017	$ (296)	$ 136	$ (48)	$ (1)	$ (209)

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

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

	For years ended December 31,					
	2017		2016		2015	
(Dollars in millions)	Before Tax	Net of Tax	Before Tax	Net of Tax	Before Tax	Net of Tax
Change in cumulative translation adjustment	$ 85	$ 85	$ (97)	$ (97)	$ (216)	$ (216)
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	(43)	(27)	(48)	(30)	(30)	(19)
Change in defined benefit pension and other postretirement benefit plans	(43)	(27)	55	34	110	68
Derivatives and hedging:						
Unrealized gain (loss) during period	11	7	150	93	(78)	(48)
Reclassification adjustment for losses included in net income, net	11	7	127	79	134	83
Change in derivatives and hedging	22	14	277	172	56	35
Total other comprehensive income (loss)	$ 64	$ 72	$ 235	$ 109	$ (50)	$ (113)

For additional information regarding the impact of reclassifications into earnings, refer to Note 9, "Derivative and Non-Derivative Financial Instruments" and Note 10, "Retirement Plans".

15. ASSET IMPAIRMENTS AND RESTRUCTURING CHARGES, NET

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

	For years ended December 31,		
(Dollars in millions)	2017	2016	2015
Asset impairments	$ 1	$ 12	$ 85
Gain on sale of assets, net	—	(2)	(1)
Intangible asset and goodwill impairments	—	—	22
Severance charges	6	32	68
Site closure and restructuring charges	1	3	9
Total	$ 8	$ 45	$ 183

2017

In fourth quarter 2017 asset impairments and restructuring charges, net included $3 million of asset impairment and restructuring charges, including severance, in the AFP segment related to the closure of a facility in China. Additionally, the Company recognized restructuring charges of approximately $5 million for severance.

2016

The Company impaired a capital project in the AFP segment that resulted in a charge of $12 million.

As part of an announced plan to reduce costs primarily in 2017, the Company recognized restructuring charges of $34 million primarily for severance.

The Company recognized a gain of $2 million in the AFP segment for the sale of previously impaired assets at the Crystex® insoluble sulfur research and development ("R&D") site in France.

2015

The Company took actions 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, the Company recognized intangible asset impairments of $18 million in the AM segment primarily to reduce the carrying value of the V-KOOL® 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.

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, 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.

Net asset impairments and restructuring charges included $4 million of restructuring charges primarily for severance associated with the integration of Taminco Corporation.

Reconciliations of the beginning and ending restructuring liability amounts are as follows:

	Balance at January 1, 2017	Provision/ Adjustments	Non-cash Reductions/ Additions	Cash Reductions	Balance at December 31, 2017
Noncash charges	$ —	$ 1	$ (1)	$ —	$ —
Severance costs	42	6	—	(29)	19
Site closure & restructuring costs	13	1	1	(5)	10
Total	$ 55	$ 8	$ —	$ (34)	$ 29

	Balance at January 1, 2016	Provision/ Adjustments	Non-cash Reductions/ Additions	Cash Reductions	Balance at December 31, 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 at January 1, 2015	Provision/ Adjustments	Non-cash Reductions/ Additions	Cash Reductions	Balance at December 31, 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

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

16. OTHER (INCOME) CHARGES, NET

	For years ended December 31,		
(Dollars in millions)	2017	2016	2015
Foreign exchange transaction losses (gains), net	$ 5	$ 27	$ 6
(Income) loss from equity investments and other investment (gains) losses, net	(14)	(15)	(15)
Cost of disposition of claims against discontinued Solutia operations	9	5	—
Gains from sale of businesses	(3)	(17)	—
Other, net	5	(6)	1
Other (income) charges, net	$ 2	$ (6)	$ (8)

In 2017, the net loss on the revaluation of foreign entity assets and liabilities was partially offset by a net gain on the foreign exchange non-qualifying derivatives, both items impacted primarily by the euro. See Note 9, "Derivative and Non-Derivative Financial Instruments". Also included in 2017 other (income) charges, net is a $9 million cost of disposition of claims against operations that were discontinued by Solutia prior to the Company's acquisition of Solutia in 2012 and a $3 million gain from the sale of the formulated electronics cleaning solutions business.

In 2016, the net loss from foreign exchange non-qualifying derivatives was partially offset by the net gain on the revaluation of foreign entity assets and liabilities, both items impacted primarily by the euro. Included in 2016 other (income) charges, net is $5 million cost of disposition of claims against operations that were discontinued by Solutia prior to the Company's acquisition of Solutia in 2012. Also 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 5, "Equity Investments".

In 2015, the net loss from foreign exchange non-qualifying derivatives was partially offset by the net gain on the revaluation of foreign entity assets and liabilities, both items impacted primarily by the euro.

17. SHARE-BASED COMPENSATION PLANS AND AWARDS

2017 Omnibus Stock Compensation Plan

Eastman's 2017 Omnibus Stock Compensation Plan ("2017 Omnibus Plan") was approved by stockholders at the May 4, 2017 Annual Meeting of Stockholders and shall remain in effect until its fifth anniversary. The 2017 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 2017 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 2017 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 2017 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 2017 Director Stock Compensation Subplan ("Directors' Subplan"), a component of the 2017 Omnibus Plan, remains in effect until terminated by the Board of Directors or the earlier termination of the 2017 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 2017 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 2017 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.

It has been the Company's practice to issue new shares rather than treasury shares for equity awards for compensation plans, including the 2017 Omnibus Plan and the Directors' Subplan, 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.

Compensation Expense

For 2017, 2016, and 2015, total share-based compensation expense (before tax) of approximately $52 million, $36 million, and $36 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 $8 million, $7 million, and $7 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 2017, 2016, and 2015, approximately $2 million of stock option compensation expense was recognized each year 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 2017 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 2017, 2016, and 2015 are provided in the table below:

Assumptions	2017	2016	2015
Expected volatility rate	20.45%	23.71%	24.11%
Expected dividend yield	2.64%	2.31%	1.75%
Average risk-free interest rate	1.91%	1.23%	1.45%
Expected term years	5.0	5.0	4.8

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 2017, 2016, and 2015 is presented below:

	2017		2016		2015	
	Options	Weighted-Average Exercise Price	Options	Weighted-Average Exercise Price	Options	Weighted-Average Exercise Price
Outstanding at beginning of year	2,363,700	$ 61	2,434,600	$ 53	2,209,800	$ 46
Granted	745,800	80	554,000	65	512,700	74
Exercised	(489,300)	44	(618,500)	33	(271,200)	30
Cancelled, forfeited, or expired	(6,100)	74	(6,400)	77	(16,700)	77
Outstanding at end of year	2,614,100	$ 70	2,363,700	$ 61	2,434,600	$ 53
Options exercisable at year-end	1,335,500		1,378,000		1,643,100	
Available for grant at end of year	9,943,033		3,807,724		5,413,250	

The following table provides the remaining contractual term and weighted average exercise prices of stock options outstanding and exercisable at December 31, 2017:

	Options Outstanding			Options Exercisable	
Range of Exercise Prices	Number Outstanding at December 31, 2017	Weighted-Average Remaining Contractual Life (Years)	Weighted-Average Exercise Price	Number Exercisable at December 31, 2017	Weighted-Average Exercise Price
$18-$35	62,500	1.7	$ 27	62,500	$ 27
$36-$50	271,500	3.2	39	271,500	39
$51-$73	823,300	7.1	67	454,000	68
$74-$87	1,456,800	8.0	79	547,500	80
	2,614,100	7.1	$ 70	1,335,500	$ 65

The range of exercise prices of options outstanding at December 31, 2017 is approximately $18 to $87 per share. The aggregate intrinsic value of total options outstanding and total options exercisable at December 31, 2017 is $59 million and $37 million, respectively. Intrinsic value is the amount by which the closing market price of the stock at December 31, 2017 exceeds the exercise price of the option grants.

The weighted average remaining contractual life of all exercisable options at December 31, 2017 is 5.6 years.

The weighted average fair value of options granted during 2017, 2016, and 2015 was $11.79, $10.97, and $13.89, respectively. The total intrinsic value of options exercised during the years ended December 31, 2017, 2016, and 2015, was $19 million, $23 million, and $13 million, respectively. Cash proceeds received by the Company from option exercises and the related tax benefit totaled $22 million and $5 million, respectively, for 2017, $21 million and $7 million, respectively, for 2016, and $8 million and $4 million, respectively, for 2015. The total fair value of shares vested during the years ended December 31, 2017, 2016, and 2015 was $6 million, $6 million, and $3 million, respectively.

A summary of the changes in the Company's nonvested options during the year ended December 31, 2017 is presented below:

Nonvested Options	Number of Options	Weighted-Average Grant Date Fair Value
Nonvested at January 1, 2017	985,700	$12.56
Granted	745,800	$11.79
Vested	(446,800)	$13.36
Forfeited or expired	(6,100)	$13.89
Nonvested options at December 31, 2017	1,278,600	$11.82

For nonvested options at December 31, 2017, approximately $3 million in compensation expense will be recognized over the next two years.

Other Share-Based Compensation Awards

In addition to stock option awards, Eastman 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 2017-2019, 2016-2018, and 2015-2017 periods were 357 thousand, 427 thousand, and 347 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 2017, 2016, and 2015 were 172 thousand, 190 thousand, and 233 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, 2017, 2016, and 2015 was approximately $44 million, $29 million, and $29 million, respectively. The unrecognized compensation expense before tax for these same type awards at December 31, 2017 was approximately $50 million and will be recognized primarily over a period of two years.

18. 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 December 31,		
(Dollars in millions)	2017	2016	2015
Current assets	$ 13	$ (35)	$ 5
Other assets	29	37	75
Current liabilities	59	(98)	22
Long-term liabilities	43	(29)	(72)
Total	$ 144	$ (125)	$ 30

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.

Cash paid for interest and income taxes is as follows:

	For years ended December 31,		
(Dollars in millions)	2017	2016	2015
Interest, net of amounts capitalized	$ 263	$ 280	$ 265
Income taxes	97	120	124
Non-cash investing and financing activities:			
Outstanding trade payables related to capital expenditures	27	34	10
(Gain) loss from equity investments	(14)	(15)	(15)

19. 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 & Functional Products Segment

In the AFP segment, the Company manufactures chemicals for products in the transportation, consumables, building and construction, animal nutrition, crop protection, energy, personal and home care, and other markets.

The products the Company manufactures in the coatings and inks additives product line can be broadly classified as polymers and additives and solvents and include specialty coalescents, specialty solvents, paint additives, and specialty polymers. The adhesives resins product line consists of hydrocarbon and rosin resins. The tire additives product line includes insoluble sulfur rubber additives, antidegradant rubber additives, and performance resins. The care chemicals 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 heat transfer and aviation fluids products. The animal nutrition business consists of formic acid-based solutions product lines. The crop protection business consists of metam-based soil fumigants, thiram and ziram-based fungicides, and plant growth regulator products.

	Percentage of Total Segment Sales		
Product Lines	**2017**	**2016**	**2015**
Coatings and Inks Additives	23%	24%	24%
Adhesives Resins	18%	21%	21%
Tire Additives	17%	17%	17%
Care Chemicals	17%	15%	15%
Specialty Fluids	13%	11%	11%
Animal Nutrition and Crop Protection	12%	12%	12%
Total	100%	100%	100%

Advanced Materials Segment

In the AM segment, the Company produces and markets 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.

The specialty plastics product line consists of two primary products: copolyesters and cellulose esters. The advanced interlayers product line includes polyvinyl butyral sheet and specialty polyvinyl butyral intermediates. The performance films product line primarily consists of window film and protective film products for aftermarket applied films.

	Percentage of Total Segment Sales		
Product Lines	**2017**	**2016**	**2015**
Specialty Plastics	51%	50%	51%
Advanced Interlayers	33%	34%	33%
Performance Films	16%	16%	16%
Total	100%	100%	100%

Chemical Intermediates Segment

The CI segment leverages large scale and vertical integration from the cellulose and acetyl, olefins, and alkylamines streams to support the Company's specialty operating segments with advantaged cost positions. The CI segment sells excess intermediates beyond the Company's internal specialty needs into markets such as industrial chemicals and processing, building and construction, health and wellness, and agrochemicals.

In the intermediates product line, the Company produces olefin derivatives, acetyl derivatives, ethylene, and commodity solvents. The plasticizers product line consists of a unique set of primary non-phthalate and phthalate plasticizers and a range of niche non-phthalate plasticizers. The functional amines product lines include methylamines and salts, and higher amines and solvents.

	Percentage of Total Segment Sales		
Product Lines	**2017**	**2016**	**2015**
Intermediates	64%	65%	65%
Plasticizers	19%	20%	20%
Functional Amines	17%	15%	15%
Total	100%	100%	100%

Fibers Segment

In the Fibers segment, Eastman manufactures and sells cellulose acetate tow for use in filtration media, primarily cigarette filters. The acetyl chemicals product line consists of triacetin, cellulose acetate flake, and acetyl raw materials for other acetate fiber producers. The acetate yarn product line consists of natural (undyed) acetate and polyester yarn and solution-dyed acetate yarn for use in apparel, home furnishings, and industrial fabrics.

	Percentage of Total Segment Sales		
Product Lines	**2017**	**2016**	**2015**
Acetate Tow	77%	80%	78%
Acetyl Chemical Products	15%	13%	14%
Acetate Yarn	8%	7%	8%
Total	100%	100%	100%

Other

The Company continues to explore and invest in R&D initiatives such as high performance materials and advanced cellulosics that are aligned with disruptive macro trends such as health and wellness, natural resource efficiency, an increasing middle class in emerging economies, and feeding a growing population. 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).

(Dollars in millions)	For years ended December 31, 2017	2016	2015
Sales by Segment			
Additives & Functional Products	$ 3,343	$ 2,979	$ 3,159
Advanced Materials	2,572	2,457	2,414
Chemical Intermediates	2,728	2,534	2,811
Fibers	852	992	1,219
Total Sales by Operating Segment	$ 9,495	$ 8,962	$ 9,603
Other	54	46	45
Total Sales	$ 9,549	$ 9,008	$ 9,648

(Dollars in millions)	For years ended December 31, 2017	2016	2015
Operating Earnings (Loss)			
Additives & Functional Products	$ 646	$ 601	$ 660
Advanced Materials	482	471	384
Chemical Intermediates	255	171	294
Fibers	175	310	292
Total Operating Earnings by Operating Segment	1,558	1,553	1,630
Other			
Growth initiatives and businesses not allocated to operating segments	(114)	(82)	(87)
Pension and other postretirement benefit plans income (expense), net not allocated to operating segments	93	(44)	(76)
Restructuring and acquisition integration and transaction costs	(5)	(44)	(83)
Total Operating Earnings	$ 1,532	$ 1,383	$ 1,384

(Dollars in millions)	December 31, 2017	2016
Assets by Segment [1]		
Additives & Functional Products	$ 6,648	$ 6,255
Advanced Materials	4,379	4,247
Chemical Intermediates	3,000	2,927
Fibers	929	920
Total Assets by Operating Segment	14,956	14,349
Corporate Assets	1,043	1,108
Total Assets	$ 15,999	$ 15,457

(1) The chief operating decision maker holds operating segment management accountable for accounts receivable, inventory, fixed assets, goodwill, and intangible assets. Segment asset balances for shared fixed assets within the CI and Fibers segments as of December 31, 2016 have been reclassified to conform to current period allocation methodology.

(Dollars in millions)	For years ended December 31, 2017	2016	2015
Depreciation and Amortization Expense by Segment			
Additives & Functional Products	$ 213	$ 208	$ 203
Advanced Materials	164	160	161
Chemical Intermediates	148	157	149
Fibers	58	51	55
Total Depreciation and Amortization Expense by Operating Segment	583	576	568
Other	4	4	3
Total Depreciation and Amortization Expense	$ 587	$ 580	$ 571

(Dollars in millions)	For years ended December 31, 2017	2016	2015
Capital Expenditures by Segment			
Additives & Functional Products	$ 229	$ 212	$ 227
Advanced Materials	248	244	225
Chemical Intermediates	116	128	139
Fibers	52	38	57
Total Capital Expenditures by Operating Segment	645	622	648
Other	4	4	4
Total Capital Expenditures	$ 649	$ 626	$ 652

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

(Dollars in millions) **Geographic Information**	For years ended December 31, 2017	2016	2015
Sales			
United States	$ 3,999	$ 3,803	$ 4,096
All foreign countries	5,550	5,205	5,552
Total	$ 9,549	$ 9,008	$ 9,648

	December 31, 2017	2016	2015
Net properties			
United States	$ 4,203	$ 4,066	$ 3,939
All foreign countries	1,404	1,210	1,191
Total	$ 5,607	$ 5,276	$ 5,130

20. QUARTERLY SALES AND EARNINGS DATA – UNAUDITED

(Dollars in millions, except per share amounts)	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
2017				
Sales	$ 2,303	$ 2,419	$ 2,465	$ 2,362
Gross profit	625	651	691	487
Asset impairments and restructuring charges, net	—	—	—	8
Net earnings attributable to Eastman	278	292	323	491
Net earnings per share attributable to Eastman[1]				
Basic	$ 1.90	$ 2.01	$ 2.24	$ 3.42
Diluted	1.89	2.00	2.22	3.39

(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 Quarter	Second Quarter	Third Quarter	Fourth 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[1]				
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.

21. RESERVE ROLLFORWARDS

Valuation and Qualifying Accounts

(Dollars in millions)		Additions			
	Balance at January 1, 2017	Charges (Credits) to Cost and Expense	Other Accounts	Deductions	Balance at December 31, 2017
Reserve for:					
Doubtful accounts and returns	$ 10	$ 3	$ —	$ 1	$ 12
LIFO inventory	264	24	—	—	288
Non-environmental asset retirement obligations	46	2	1	—	49
Environmental contingencies	321	8	4	29	304
Deferred tax valuation allowance	278	126	6	—	410
	$ 919	$ 163	$ 11	$ 30	$ 1,063

(Dollars in millions)		Additions			
	Balance at January 1, 2016	Charges (Credits) to Cost and Expense	Other Accounts	Deductions	Balance at December 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

(Dollars in millions)		Additions			
	Balance at January 1, 2015	Charges (Credits) to Cost and Expense	Other Accounts	Deductions	Balance at December 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

22. RECENTLY ISSUED ACCOUNTING STANDARDS

In May 2014, the Financial Accounting Standards Board ("FASB") and International Accounting Standards Board jointly issued new principles-based accounting guidance for revenue recognition that provides a five-step process to the principles-based guidance. 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 regard 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, clarification of a completed contract for transition purposes and clarification in regards to the retrospective application, as well as, policy elections, and other 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 statements and related disclosures. The Company adopted the standard under the modified-retrospective approach on January 1, 2018.

In February 2016, the FASB issued guidance on lease accounting. The new guidance establishes two types of leases for lessees: finance and operating. Both finance and operating leases will have associated right-of-use assets and liabilities initially measured at the present value of the lease payments. 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 implementation options and impact on the Company's financial statements and related disclosures.
In June 2016, the FASB issued guidance relating to credit losses. The amendments require a financial asset (including trade receivables) 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 does not expect that changes in its accounting required by the new guidance will materially impact the Company's financial position or results of operations and related disclosures.

In October 2016, the FASB issued guidance as a part of its simplification initiative in regard 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 does not expect that changes in its accounting required by this new guidance will materially impact the Company's financial statements and related disclosures.

In January 2017, the FASB issued guidance clarifying the definition of a business that provides a two-step analysis in the determination of whether an acquisition or derecognition is a business or an asset. The update removes the evaluation of whether a market participant could replace any missing elements and provides a framework to assist entities in evaluating whether both an input and a substantive process are present. 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 for transactions that meet specified criteria. This guidance is to be applied on a prospective basis for transactions that occur after the effective date.

In January 2017, the FASB issued guidance as a part of its simplification initiative that bases the impairment of goodwill on any difference for which the carrying value is greater than the fair value of the reporting unit. This guidance is effective for annual reporting periods, or interim period testing performed, beginning after December 15, 2019. Early adoption is permitted for interim or annual goodwill impairment testing performed after January 1, 2017. This guidance is to be applied on a prospective basis for goodwill testing that occur after the effective date. Management does not expect that changes in its accounting required by the new guidance will materially impact the Company's financial position or results of operations and related disclosures.

In February 2017, the FASB issued guidance that clarifies the scope of nonfinancial asset derecognition and the accounting for partial sales of nonfinancial assets. This guidance is effective at the same time as the amendments in the revenue recognition standard stated above, for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2017, and must be applied in conjunction with that standard. Adoption can be applied either on a retrospective or modified retrospective approach. Management does not expect that changes in its accounting required by the new guidance will materially impact the Company's financial position or results of operations and related disclosures.

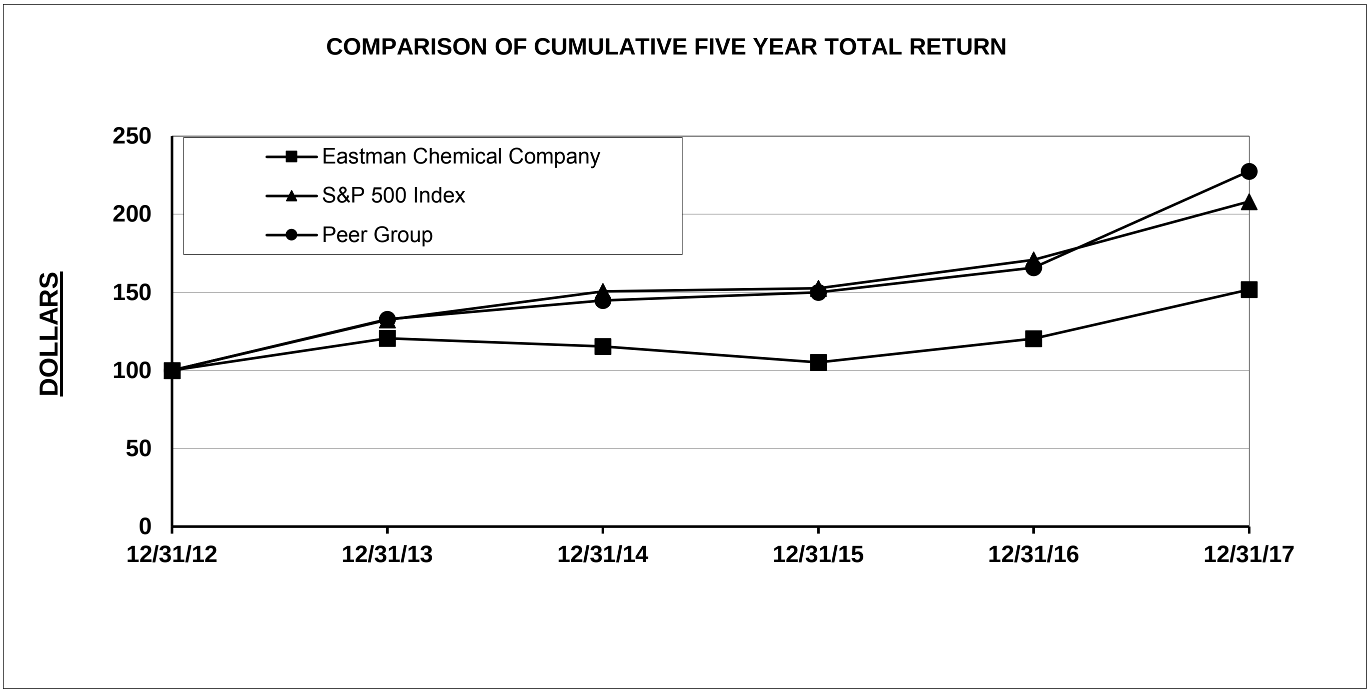
In March 2017, the FASB issued guidance to improve the presentation of net periodic pension and postretirement benefit costs that will require the reporting of the service cost component in the same line item or items as other compensation costs arising from services rendered by the pertinent employees during the period. The other components of net benefit cost (interest cost, expected return on plan assets, curtailment gains or losses, amortization of prior service costs or credits, and MTM gains or losses) are to be presented in the income statement separately from the service cost component and outside the subtotal of income from operations, if presented. In addition, the new requirement prescribes only the service cost component to be eligible for capitalization. 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 period for which financial statements (interim or annual) have not been issued or made available for issuance. The new guidance is to be applied retrospectively for income statement effect and prospectively for balance sheet effects. The total of other components of net benefit cost for 2017, 2016, and 2015 were $135 million credit, $3 million credit, and $40 million cost, respectively.

In May 2017, the FASB issued guidance to clarify when changes to the terms or conditions of a share-based payment award would require an entity to apply modification accounting. This guidance is effective for annual reporting periods, and interim periods within those annual periods, beginning after December 15, 2017. Early adoption is permitted, including adoption in any interim period, for reporting periods for which financial statements have not yet been issued. The new guidance is to be applied prospectively to an award modified on or after the adoption date.

In August 2017, the FASB issued guidance to simplify the application of the current hedge accounting guidance and improve the financial reporting of hedging relationships to better portray the economic results of an entity's risk management activities in the financial statements. This guidance is effective for fiscal years beginning after December 15, 2018, and interim periods within those fiscal years. Early adoption is permitted in any interim period after issuance of the guidance. Income statement impacts are to be adopted on a retrospective basis as of the beginning of the fiscal year of adoption. The amended presentation and disclosure guidance is required only prospectively. Management is currently evaluating the impact on the Company's financial statements and related disclosures.

PERFORMANCE GRAPH

The following graph compares the cumulative total return on Eastman Chemical Company common stock from December 31, 2012 through December 31, 2017 to that of the Standard & Poor's ("S&P") 500 Stock Index and a group of peer issuers in the chemical industry. The peer group consists of the thirteen chemical companies which meet three objective criteria: (i) common shares traded on a major trading market; (ii) similar lines of business to those of the Company; and (iii) more than $3 billion in annual sales. Cumulative total return represents the change in stock price and the amount of dividends received during the indicated period, assuming reinvestment of dividends. The graph assumes an investment of $100 on December 31, 2012. All data in the graph have been provided by S&P Capital IQ. The stock performance shown in the graph is included in response to Securities and Exchange Commission ("SEC") requirements and is not intended to forecast or to be indicative of future performance.



Company Name / Index	12/31/12	12/31/13	12/31/14	12/31/15	12/31/16	12/31/17
Eastman Chemical Company	100	120.59	115.37	105.12	120.28	151.75
S&P 500 Index	100	132.39	150.51	152.59	170.84	208.14
Peer Group [1]	100	132.79	144.74	149.91	165.86	227.56

[1] The peer group for 2017 consists of the following issuers: Akzo Nobel NV; Albemarle Corporation; Ashland Global Holdings Inc.; Celanese Corporation; DowDupont Inc.; FMC Corporation; Huntsman Corporation; International Flavors & Fragrances Inc.; Lanxess AG; LyondellBasell Industries NV; PPG Industries Inc.; The Sherwin Williams Company; and Westlake Chemical Corporation. In accordance with SEC requirements, the return for each issuer has been weighted according to the respective issuer's stock market capitalization at the beginning of each period for which a return is indicated.

Stockholder Information

Corporate Offices
Eastman Chemical Company
200 S. Wilcox Drive
P. O. Box 431
Kingsport, TN 37662-5280 U.S.A.
http://www.eastman.com

Stock Transfer Agent and Registrar
Inquiries and changes to stockholder accounts should be directed to our transfer agent:

American Stock Transfer & Trust Company
59 Maiden Lane
New York, NY 10038
In the United States: 800-937-5449
Outside the United States: (1) 212-936-5100 or (1) 718-921-8200
http://www.amstock.com

Annual Meeting
Crockett Amphitheatre
MeadowView Marriott Conference Resort and Convention Center
1901 Meadowview Parkway
Kingsport, Tennessee
Thursday, May 3, 2018
11:30 a.m.

Eastman Stockholder Information
877-EMN-INFO (877-366-4636)
http://www.eastman.com

Annual Report on Form 10-K
Eastman's Annual Report on Form 10-K for the year ended December 31, 2017, as filed with the Securities and Exchange Commission, is available upon written request of any stockholder to Eastman Chemical Company, P.O. Box 431, Kingsport, Tennessee 37662-5280, Attention: Investor Relations. This information is also available via the Internet at Eastman's Web site (www.eastman.com) in the investor information section, and on the SEC's website (www.sec.gov).

Stock Exchange Listing
Eastman Chemical Company common stock is listed and traded on the New York Stock Exchange under the ticker symbol EMN.

Dividends and Stock Price
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.

NYSE Common Stock Sales Prices	High	Low	Cash Dividends Declared
2017			
First Quarter	$82.10	$74.78	$0.51
Second Quarter	$86.28	$76.11	$0.51
Third Quarter	$90.97	$81.91	$0.51
Fourth Quarter	$94.96	$86.58	$0.56
2016			
First 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

Stockholders of record at year-end 2017: 15,804
Shares outstanding at year-end 2017: 142,966,679
Employees at year-end 2017: approximately 14,000

Eastman Board of Directors *1st row seated: Stephen R. Demeritt; Robert M. Hernandez; Mark J. Costa; Renée J. Hornbaker; Gary E. Anderson*
2nd row standing: David W. Raisbeck; Lewis M. Kling; James J. O' Brien; Brett D. Begemann; Julie F. Holder; Michael P. Connors; Humberto P. Alfonso

Board of Directors

Humberto P. Alfonso
Retired Chief Executive Officer,
Global
Yowie Group Ltd.

Gary E. Anderson
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Executive Officer,
Dow Corning Corporation

Brett D. Begemann
President and Chief
Operating Officer,
Monsanto Company

Michael P. Connors
Chairman of the Board and
Chief Executive Officer,
Information Services Group, Inc.

Mark J. Costa
Board Chair and
Chief Executive Officer,
Eastman Chemical Company

Stephen R. Demeritt
Retired Vice Chairman
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General Mills, Inc.

Robert M. Hernandez
Retired Vice Chairman of the
Board and Chief Financial Officer,
USX Corporation

Julie F. Holder
Retired Senior Vice President,
The Dow Chemical Company

Renée J. Hornbaker
Retired Executive Vice President
and Chief Financial Officer,
Stream Energy

Lewis M. Kling
Retired Executive Vice
Chairman of the Board,
President and Chief
Executive Officer,
Flowserve Corporation

James J. O'Brien
Retired Chairman of the Board
and Chief Executive Officer,
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Executive Officers

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Chief Executive Officer

Curtis E. Espeland
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Chief Financial Officer

Brad A. Lich
Executive Vice President and
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Lucian Boldea
Senior Vice President,
Additives & Functional Products

Mark K. Cox
Senior Vice President,
Chief Manufacturing,
Supply Chain, and
Engineering Officer

Stephen G. Crawford
Senior Vice President and
Chief Technology Officer

David A. Golden
Senior Vice President,
Chief Legal &
Sustainability Officer
and Corporate Secretary

Perry Stuckey III
Senior Vice President and
Chief Human Resources Officer

Damon C. Warmack
Senior Vice President,
Corporate Development and
Chemical Intermediates

Scott V. King
Vice President, Corporate
Controller and Chief
Accounting Officer

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