

DOW CHEMICAL CO /DE/  
Form 10-K  
February 13, 2015  
Table of Contents

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549  
FORM 10-K

☐ ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934  
For the fiscal year ended DECEMBER 31, 2014

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

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

Commission file number: 1-3433

THE DOW CHEMICAL COMPANY

(Exact name of registrant as specified in its charter)

Delaware

38-1285128

State or other jurisdiction of  
incorporation or organization

(I.R.S. Employer Identification No.)

2030 DOW CENTER, MIDLAND, MICHIGAN 48674

(Address of principal executive offices) (Zip Code)

Registrant's telephone number, including area code: 989-636-1000

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

Title of each class

Name of each exchange on which registered

Common Stock, par value \$2.50 per share

New York Stock Exchange

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

☐ Yes ☐ No

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

☐ Yes ☐ No

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

☐ Yes ☐ No

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

☐ Yes ☐ No

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

☐

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

Large accelerated filer ☐ Accelerated filer ☐ Non-accelerated filer ☐ Smaller reporting company ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). ☐ Yes ☐ No

Edgar Filing: DOW CHEMICAL CO /DE/ - Form 10-K

The aggregate market value of voting common stock held by non-affiliates as of June 30, 2014 (based upon the closing price of \$51.46 per common share as quoted on the New York Stock Exchange), was approximately \$61.4 billion. For purposes of this computation, it is assumed that the shares of voting stock held by Directors and Officers would be deemed to be stock held by affiliates. Non-affiliated common stock outstanding at June 30, 2014 was 1,194,093,171 shares.

Total common stock outstanding at January 31, 2015 was 1,157,695,055 shares.

DOCUMENTS INCORPORATED BY REFERENCE

Part III: Proxy Statement for the Annual Meeting of Stockholders to be held on May 14, 2015.

---

Table of Contents

The Dow Chemical Company  
 ANNUAL REPORT ON FORM 10-K  
 For the fiscal year ended December 31, 2014  
 TABLE OF CONTENTS

	PAGE
<u>PART I</u>	
<u>Item 1.</u> Business.	<u>4</u>
<u>Item 1A.</u> Risk Factors.	<u>19</u>
<u>Item 1B.</u> Unresolved Staff Comments.	<u>23</u>
<u>Item 2.</u> Properties.	<u>24</u>
<u>Item 3.</u> Legal Proceedings.	<u>25</u>
<u>Item 4.</u> Mine Safety Disclosures.	<u>27</u>
<u>PART II</u>	
<u>Item 5.</u> Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.	<u>28</u>
<u>Item 6.</u> Selected Financial Data.	<u>29</u>
<u>Item 7.</u> Management's Discussion and Analysis of Financial Condition and Results of Operations.	<u>30</u>
<u>Item 7A.</u> Quantitative and Qualitative Disclosures About Market Risk.	<u>66</u>
<u>Item 8.</u> Financial Statements and Supplementary Data.	<u>67</u>
<u>Item 9.</u> Changes in and Disagreements With Accountants on Accounting and Financial Disclosure.	<u>135</u>
<u>Item 9A.</u> Controls and Procedures.	<u>136</u>
<u>Item 9B.</u> Other Information.	<u>139</u>
<u>PART III</u>	
<u>Item 10.</u> Directors, Executive Officers and Corporate Governance.	<u>140</u>
<u>Item 11.</u> Executive Compensation.	<u>140</u>
<u>Item 12.</u> Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.	<u>140</u>

Item 13. Certain Relationships and Related Transactions, and Director Independence. 140

Item 14. Principal Accounting Fees and Services. 140

PART IV

Item 15. Exhibits, Financial Statement Schedules. 141

SIGNATURES 143

Table of Contents

The Dow Chemical Company and Subsidiaries

FORWARD-LOOKING STATEMENTS

Certain statements in this report, other than purely historical information, including estimates, projections, statements relating to business plans, objectives, and expected operating results, and the assumptions upon which those statements are based, are “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995, Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. Forward-looking statements may appear throughout this report including, without limitation, the following sections: “Item 1. Business,” “Management's Discussion and Analysis,” and “Risk Factors.” These forward-looking statements are generally identified by the words “anticipate,” “believe,” “estimate,” “expect,” “future,” “intend,” “may,” “opportunity,” “outlook,” “project,” “should,” “strategy,” “will,” “would,” “will be,” “will continue,” “will likely result” and similar expressions. Forward-looking statements are based on current expectations and assumptions that are subject to risks and uncertainties which may cause actual results to differ materially from the forward-looking statements. A detailed discussion of principal risks and uncertainties which may cause actual results and events to differ materially from such forward-looking statements is included in the section titled “Risk Factors” (Part I, Item 1A of this Form 10-K). The Dow Chemical Company undertakes no obligation to update or revise publicly any forward-looking statements whether because of new information, future events, or otherwise, except as required by securities and other applicable laws.

Table of Contents

The Dow Chemical Company and Subsidiaries  
PART I, Item 1. Business.

THE COMPANY

The Dow Chemical Company was incorporated in 1947 under Delaware law and is the successor to a Michigan corporation, of the same name, organized in 1897. The Company's principal executive offices are located at 2030 Dow Center, Midland, Michigan 48674. Throughout this Annual Report on Form 10-K, except as otherwise indicated by the context, the terms "Company" or "Dow" as used herein mean The Dow Chemical Company and its consolidated subsidiaries.

Available Information

The Company's annual reports on Form 10-K, quarterly reports on Form 10-Q and current reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, are available free of charge through the Investor Relations section of the Company's website ([www.dow.com/investors](http://www.dow.com/investors)), as soon as reasonably practicable after the reports are electronically filed or furnished with the U.S. Securities and Exchange Commission ("SEC"). The SEC maintains a website that contains these reports as well as proxy statements and other information regarding issuers that file electronically. The SEC's website is at [www.sec.gov](http://www.sec.gov). The Company's website and its content are not deemed incorporated by reference into this report.

General

Dow combines the power of science and technology to passionately innovate what is essential to human progress. The Company is driving innovations that extract value from the intersection of chemical, physical and biological sciences to help address many of the world's most challenging problems such as the need for clean water, clean energy generation and conservation, and increasing agricultural productivity. Dow's integrated, market-driven, industry-leading portfolio of specialty chemical, advanced materials, agrosiences and plastics businesses delivers a broad range of technology-based products and solutions to customers in approximately 180 countries and in high growth sectors such as packaging, electronics, water, coatings and agricultural. In 2014, Dow had annual sales of more than \$58 billion and employed approximately 53,000 people worldwide. The Company's more than 6,000 products are manufactured at 201 sites in 35 countries across the globe. The Company conducts its worldwide operations through global businesses, which are reported in five operating segments: Agricultural Sciences, Consumer Solutions, Infrastructure Solutions, Performance Materials & Chemicals and Performance Plastics.

Strategy

Dow's strategy is to invest in a market-driven portfolio of advantaged and technology-enabled businesses that create value for our shareholders and customers.

Table of Contents

## BUSINESS SEGMENTS AND PRODUCTS

## AGRICULTURAL SCIENCES

The Agricultural Sciences segment is a global leader in providing crop protection and seed/plant biotechnology products and technologies, urban pest management solutions and healthy oils. The business invents, develops, manufactures and markets products for use in agricultural, industrial and commercial pest management, and food service. The segment has broad global reach with sales in 135 countries and research and development ("R&D") and manufacturing facilities located in all geographic areas. Growth is achieved through the development of innovative new products and technologies, successful segmentation of market offerings with leading brands, diverse channels to market, competitive cost positions, strategic bolt-on acquisitions, and commercial and R&D collaborations. The Company is committed to the development of innovative new crop protection and biological products and technologies.

Details on Agricultural Sciences' 2014 sales, by business and geographic area, are as follows:

## Products

Key product lines, including crop application, are listed below:

Key Product Lines	Crop Application					Range and Pasture	Rice	Soybeans	Sunflower	Trees, Fruits and Vegetables	Others
	Canola	Cereals	Corn	Cotton							
Insecticides	x	x	x	x			x	x	x	x	x
Fungicides		x					x	x		x	x
Herbicides	x	x	x	x	x		x	x	x	x	x
Seeds	x	x	x	x	x			x	x		x
Other			x							x	x

The Company's ability to produce seeds can be materially impacted by weather conditions, local political conditions and the availability of reliable contract growers.

## Table of Contents

Agricultural Sciences is focused on delivering results through technology leadership. Major brands and technologies, by key product line, are listed below:

### Key Product Lines Brands and Technologies

Insecticides ISOCLAST™; LORSBAN™; RADIANT™; SENTRICON™; TELONE™; TRACER™

Fungicides DITHANE™

Herbicides BROADWAY™; CLINCHER™; DURANGO™; FENCER™; GARLON™; LONTREL™; MILESTONE™; PANZER™; PRIMUS™; SPIDER™; STARANE™; SURESTART™; TORDON™

AGROMEN™; BRODBECK™; DAIRYLAND SEED™; Grand Valley Hybrids; HYLAND™; MYCOGEN™; NEXERA™; Omega-9 Healthier Oils; PFISTER™; PHYTOGEN™; POWERCORE™ Ins

Seeds Trait Technology<sup>(2)</sup>; PRAIRIE BRAND SEEDS™; REFUGE ADVANCED® powered by SmartStax®<sup>(2)</sup>; SmartStax® Insect Trait Technology<sup>(2)</sup>; TRIUMPH™

Other HARVISTA™ Technology; N-SERVE™ Nitrogen Stabilizer; RIPELOCK™ Quality Systems

(1) AGROMEN trademark used under license from Agromen Sementes Agrícolas Ltda.

Smartstax® and POWERCORE™ multi-event technology developed by Dow AgroSciences LLC and Monsanto.

(2) Smartstax®, the Smartstax® logo, POWERCORE™ and the POWERCORE™ logo are trademarks of Monsanto Technology, LLC.

U.S. federal regulatory approvals have been obtained for the commercialization of ENLIST™ Corn and Soybeans including the U.S. Environmental Protection Agency's registration of ENLIST DUO™, the companion herbicide for use with ENLIST™ Corn and Soybeans, in six key states. Regulatory approvals in certain other countries are still pending.

### Patents, Trademarks and Licenses

Agricultural Sciences has significant technology-driven growth, led by plant biotechnology traits and crop protection products that utilize proprietary formulations. As a result, the Company uses patents, trademarks, licenses and registrations to protect its investment in germplasm, traits and proprietary chemistries and formulations. The Company also licenses plant biotechnology traits from third parties and engages in research collaborations with global industry, academia and governments. The Company does not regard the Agricultural Sciences segment as being materially dependent on any single or group of related patents, trademarks, licenses or registrations.

### Competition

Agricultural Sciences competes with producers of crop protection chemicals and agricultural biotechnology in the United States and abroad. The Company competes on the basis of technology and trait leadership, price, quality and cost competitiveness. Key competitors include BASF, Bayer, E. I. DuPont de Nemours, Monsanto and Syngenta, as well as generic and regional seed companies.

### Distribution

Agricultural Sciences has a diverse worldwide network which markets and distributes the Company's brands to customers globally. This network consists of the Company's sales and marketing organization partnering with distributors, independent retailers and growers, cooperatives and agents throughout the world.

### Seasonality

Agricultural Sciences sales and EBITDA are strongest in the first half of the year, aligning with the planting and growing season in the northern hemisphere, where approximately 60 percent of the segment's annual sales are generated. Inventory tends to be at peak levels in the first quarter, in advance of the northern hemisphere planting and growing season. Accounts receivable tends to be highest at the end of the second quarter, consistent with the peak sales period in the northern hemisphere.



## CONSUMER SOLUTIONS

The Consumer Solutions segment consists of three global businesses: Consumer Care, Dow Automotive Systems and Dow Electronic Materials. These global businesses develop and market customized materials using advanced technology and unique chemistries for specialty applications - including semiconductors and organic light-emitting diodes, adhesives and foams used by the transportation industry, and cellulose for innovative pharmaceutical formulations and food solutions. These businesses serve the needs of market segments as diverse as: automotive; electronics and entertainment; healthcare and medical; and, personal and home care goods. The segment's commitment to continuous innovation and rapid new product development enables it to maximize opportunities in emerging geographies and high-growth industries.

## Table of Contents

Details on Consumer Solutions' 2014 sales, by business and geographic area, are as follows:

### Consumer Care

The Consumer Care portfolio of businesses delivers technologies for the consumer at the intersection of physics, biology and chemistry, connecting the businesses to the human element. Developing performance-enhancing solutions that enable customers to differentiate their products in the global pharmaceutical, food, home and personal care markets, Consumer Care provides the expertise that makes end-use products better so consumers feel better.

Consumer Care's principal businesses each serve one or more key market segments, as noted below:

Business	Market Segments	Technologies
Dow Home, Institutional & Personal Care Solutions	Personal care, home care and specialty applications with key focus on hair care, skin care, sun care, cleansing, oral care, as well as, fabric, dish, floor and hard surface applications	From polymers and emollients to chelants and dispersants, Dow offers the key enabling technologies that differentiate customers' products while maintaining a strong commitment to offering more sustainable options. Other notable technologies include opacifiers, rheology modifiers, surfactants and solvents
Dow Pharma and Food Solutions	Pharmaceutical, food and nutrition	Cellulosic and other technologies used to help bring new classes of pharmaceutical solutions to the market and enable healthier foods (gluten-free, reduced oil/fat content). Other notable technologies include solubility enhancers, reagents, granulation and binders, as well as coatings and controlled release
SAFECHM	A service business responsible for the sustainable and innovative use of solvents	Offers cleaning solutions, equipment and services for metal and dry cleaning applications. Provides close-loop SAFE-TAINER™ System delivery systems to ensure emission free use of cleaning agents

### Dow Automotive Systems

Dow Automotive Systems is a leading global provider of collaborative solutions and advanced materials for original equipment manufacturers, tier suppliers, aftermarket customers and commercial transportation manufacturers. Dow Automotive Systems' leading technologies, materials engineering, testing and service support are complemented by a robust line of structural, elastic and rubber-to-substrate adhesives; composite materials technologies; polyurethane foams and acoustical management systems; and films and fluids.

Table of Contents

Dow Automotive Systems' principal businesses offer the following technologies and serve the following market segments:

Business	Market Segments	Technologies
Adhesives	Elastic, structural and specialty adhesives to enhance vehicle durability and performance	Innovative and differentiated adhesive technologies to meet customer specifications for durability and crash performance
	Performance plastics, fluids and polyurethane foam solutions for comfort and acoustic management	Technologies that differentiate customers' products with improved performance characteristics

#### Dow Electronic Materials

Dow Electronic Materials is a leading global supplier of enabling materials for a broad range of consumer electronics including smartphones, tablets, television monitors and personal computers, as well as electronic devices and systems used in a variety of industries. The business produces materials for chemical mechanical planarization ("CMP"); materials used in the production of electronic displays, including films, filters and organic light-emitting diodes ("OLEDs"); metalorganic precursors for light-emitting diodes ("LEDs"); products and technologies that drive leading-edge semiconductor design; materials used in the fabrication of printed circuit boards; and integrated metallization processes for metal finishing and decorative applications.

Dow Electronic Materials is comprised of four principal businesses, each serving one or more key market segments, as noted below:

Business	Market Segments	Technologies
Semiconductor Technologies	Integrated circuit fabrication for memory and logic	CMP consumables, photolithography materials
Interconnect Technologies	Printed circuit board, electronic and industrial finishing	Interconnect metallization and imaging process chemistries
Display Technologies	Display materials	Display films and filters, OLED materials
Growth Technologies	New and emerging technologies	Advanced chip packaging materials, metalorganic precursors, optical and ceramic materials

#### Competition

The Consumer Solutions segment experiences competition in each business within the segment. The competitors include many large, multinational chemical firms as well as a number of regional and local competitors. The segment's products have unique performance characteristics that are required by customers who demand a high-level of customer service and technical expertise from the Company's sales force and scientists; therefore, Dow is well positioned to withstand competitive threats. Key competitors include Ashland, BASF, Bayer, JSR Micro and Shin-Etsu Chemical.

#### Joint Ventures

The Consumer Solutions segment includes a portion of the Company's share of the results of Dow Corning Corporation, a joint venture that manufactures silicone and silicone products, which is owned 50 percent by the Company.



## Table of Contents

### INFRASTRUCTURE SOLUTIONS

The Infrastructure Solutions segment is comprised of an industry-leading portfolio of businesses utilizing advanced technology to deliver products such as architectural and industrial coating applications, building insulation, adhesives, microbial protection for the oil and gas industry, and water technologies. With unmatched R&D capabilities, a broad range of chemistries, extensive geographic reach and strong channels to market, this segment is well positioned to capitalize on market trends. The segment has broad geographic reach with sales in 145 countries and R&D and manufacturing facilities located in key geographic areas.

Details on Infrastructure Solutions' 2014 sales, by business and geographic area, are as follows:

#### Dow Building & Construction

Dow Building & Construction is comprised of two businesses - Dow Building Solutions and Dow Construction Chemicals. Leveraging more than 60 years of building science experience and deep application expertise, Dow creates high-performance solutions designed to help make residential and commercial buildings more comfortable, last longer, save energy and reduce emissions. The business group offers extensive lines of industry-leading durable insulation solutions and functional ingredients that provide improved thermal performance, air sealing, weatherization and fire retardancy for construction products.

#### Dow Coating Materials

The Dow Coating Materials business manufactures and delivers solutions that leverage high quality, technologically advanced product offerings for architectural paint and coatings, as well as industrial coatings applications, including paper, leather, concrete, wood, automotive, maintenance and protective industries. Dow Coating Materials introduced the industry's first waterborne technology in 1953 and has since led the industry's conversion away from solvent borne technology to allow for lower volatile organic compounds and an improved sustainability profile while pushing performance boundaries.

#### Energy & Water Solutions

Energy & Water Solutions is comprised of four businesses - Dow Microbial Control; Dow Oil, Gas & Mining; Dow Solar; and Dow Water and Process Solutions. Dow Microbial Control provides technology used to predict, diagnose and sustainably solve the planet's most difficult microbial challenges while Dow Oil, Gas & Mining is helping to provide energy to the world by supplying smart, innovative and customized solutions to enable the tapping of both conventional and unconventional sources. Providing building-integrated photovoltaics, Dow Solar enables energy solutions in the infrastructure market sector. Also aligned to the infrastructure market sector is Dow Water and Process Solutions, a leading provider of purification and separation technologies including reverse osmosis membranes and ion exchange resins to help customers with a broad array of separation and purification needs such as reusing waste water streams, making fresh drinking water from sea water, creating a closed loop water system for oil field operations, and removing impurities in dairy processing.

#### Performance Monomers

The Performance Monomers business produces specialty monomer products that are sold externally as well as consumed internally as building blocks used in downstream polymer businesses. The business' products are used in several applications, including cleaning materials, personal care products, paints, coatings and inks.

Table of Contents

## Products

Infrastructure Solutions' businesses each serve one or more key market segments, as noted below:

Business	Applications/Market Segments	Major Products
Dow Building & Construction	Rigid and spray foam insulation; weatherization and air sealing; caulks and sealants; elastomeric roof coatings; exterior insulation finishing systems; roof tiles and siding; industrial non-wovens; cement-based tile adhesives; plasters and renders; tape joint compounds; and concrete additives	AQUASET™ acrylic thermosetting resins, DOW™ latex powders, FROTH-PAK™ foam insulation and sealants, GREAT STUFF™ insulating foam sealants and adhesives, RHOPLEX™ and PRIMAL™ acrylic polymer emulsions, STYROFOAM™ brand insulation products, WALOCEL™ cellulose ethers, XENERGY™ high performance insulation, LIQUID ARMOR™ flashing and sealant
Dow Coating Materials	Acrylic binders; architectural paint and coatings; dispersants; rheology modifiers; surfactants for both architectural and industrial applications	ACRYSOL™ Rheology Modifiers, AVANSE™ acrylic binders, EVOQUE™ Pre-Composite Polymer, FORMASHIELD™ acrylic binder, RHOPLEX™ acrylic resin, TAMOL™ Dispersants
Energy & Water Solutions	Helping customers in exploration, production, transmission, refining and gas processing to optimize supply, improve efficiencies and manage emissions. Providing expertise and localized solutions for microbial control for well souring, industrial cooling water, fabric odor elimination, in-can preservation and dry film protection. Providing advanced, cost effective separation and purification technology for water treatment and filtration, pharmaceutical, food and beverage, and chemical processing	Demulsifiers, drilling and completion fluids, heat transfer fluids, perchloroethylene, rheology modifiers, scale inhibitors, shale inhibitors, specialty amine solvents, surfactants, water clarifiers, DOW ADSORBSIA™ selective media, DOW EDI™ modules, DOWEX™ and AMBERJET™ ion exchange resins, DOWEX™ OPTIPORE™ polymeric adsorbent resins, DOW FILMTEC™ reverse osmosis and nanofiltration elements, TEQUATIC™ PLUS fine particle filter, AMBERLYST™ polymeric catalysts, AQUACAR™, BIOBAN™, SILVADUR™ antimicrobial, DOW POWERHOUSE™ Solar Shingles
Performance Monomers	Super absorbents, water treatment, flocculants and detergents, acrylic sheets, coatings, inks and paints, molding compounds, impact modifiers, processing aids, electronic displays, adhesives, textiles, automotive and architectural safety glass	Acrylates, methacrylates, vinyl acetate monomers, acrolein derivatives, high-quality impact modifiers, processing aids, foam cell promoters and weatherable acrylic capstock compounds for thermoplastic and thermosetting materials

## Competition

Competitors of the Infrastructure Solutions segment include many large multinational chemical firms as well as a number of regional and local competitors. The segment's products have unique performance characteristics that are required by customers who demand a high level of customer service and expertise from our sales force and scientists; therefore, Dow is well positioned to withstand competitive threats. Key competitors include Arkema, Ashland, BASF, Elementis, Hydranautics, Lanxess, Lonza, Owens-Corning and Shin-Etsu Chemical.

## Joint Ventures

The Infrastructure Solutions segment includes a portion of the Company's share of the results of Dow Corning Corporation, a joint venture that manufactures silicone and silicone products, which is owned 50 percent by the Company.

#### PERFORMANCE MATERIALS & CHEMICALS

The Performance Materials & Chemicals segment is comprised of five technology-driven, customer-centric global businesses that are advantaged through integration and driven by innovative technology and solutions: Chlor-Alkali and Vinyl, Chlorinated Organics, Epoxy, Industrial Solutions and Polyurethanes. Products produced by this segment are back-integrated into feedstocks, supporting a low-cost manufacturing base and consistent, reliable supply. The Performance Materials & Chemicals segment is positioned for growth through diverse markets and product offerings. The segment has broad geographic reach with sales in nearly 150 countries and manufacturing facilities located in all geographic areas. Performance Materials & Chemicals has a diverse product line that serves customers in a large number of industries including appliance, construction and industrial.

## Table of Contents

Details on Performance Materials & Chemicals' 2014 sales, by business and geographic area, are as follows:

### Chlor-Alkali and Vinyl

The Chlor-Alkali and Vinyl business provides cost-advantaged chlorine and caustic soda supply and integration for Dow's performance businesses, including Chlorinated Organics, Crop Protection, Epoxy and Polyurethanes. Approximately 90 percent of the chlorine produced internally by Dow is consumed within the Performance Materials & Chemicals segment. Chlor-Alkali and Vinyl also includes the marketing of caustic soda, a valuable co-product of the chlor-alkali manufacturing process, and ethylene dichloride and vinyl chloride monomer, essential for the production of polyvinyl chloride.

### Chlorinated Organics

The Chlorinated Organics business is a recognized leader in supplying chlorinated organic products and solutions for safe and sustainable uses, such as intermediates or feedstocks to produce electronics, agricultural products and fluoropolymers and non-ozone depleting refrigerants.

### Epoxy

The Epoxy business is a global supplier of epoxy resins, curing agents, intermediates and systems which serve a diverse array of industries and market sectors, including electrical laminates, civil engineering, composites, industrial coatings, infrastructure and consumer goods.

### Industrial Solutions

The Industrial Solutions business enables manufacturing of the world's goods and services with additive solutions that minimize friction and heat in mechanical processes, manage the oil and water interface, deliver active ingredients for maximum effectiveness, facilitate dissolvability and provide the foundational building blocks for the development of chemical technologies. The business supports industrial manufacturers associated with virtually all end-markets, notably electronics, agricultural chemicals, engine/heavy equipment, coatings, adhesives and inks, and detergents and cleaners. Industrial Solutions is also the world's largest producer of purified ethylene oxide. Approximately 80 percent of the ethylene oxide produced by Dow is consumed within the Performance Materials & Chemicals segment.

### Polyurethanes

Polyurethanes is comprised of four businesses: Isocyanates, Polyols, Polyurethane Systems and Propylene Oxide/Propylene Glycol ("PO/PG"). The Polyurethanes business is the world's largest producer of propylene oxide and propylene glycol as well a leading producer of polyether polyols and aromatic isocyanates that serve energy efficiency, consumer comfort and industrial market sectors. Propylene oxide is produced using the chlorohydrins process as well as by hydrogen peroxide to propylene oxide manufacturing technology<sup>(1)</sup>. Performance Materials & Chemicals businesses consume approximately 90 percent of the propylene oxide produced or procured by Dow.

### Competition

Competition for the Performance Materials & Chemicals segment varies based on the business. Key competitors include large, international chemical companies as well as chemical divisions of major national and international oil companies. Performance Materials & Chemicals back-integration into feedstocks supports a low-cost manufacturing base and consistent, reliable product supply. Dow is a full-service supplier with a global technical service network located close to the customer, which allows the Company to fuel growth in specialty applications and collaborate with customers to invent unique chemistries and tailored solutions. In addition to its competitive cost position, reliable supply and superior customer service, the Company also

(1) Hydrogen peroxide to propylene oxide manufacturing technology is utilized by MTP HPPO Manufacturing Company Limited, a Thailand-based consolidated variable interest entity ultimately owned 50 percent by the



Company and 50 percent by SCG Chemicals Co. Ltd.; and BASF DOW HPPO Production B.V.B.A., a Belgium-based joint venture ultimately owned 100 percent by HPPO Holding & Finance C.V., which is owned 50 percent by the Company and 50 percent by BASF.

## Table of Contents

competes worldwide on the basis of quality, technology and price. Key competitors include Axiall, BASF, Bayer, Hexion, Huntsman and Olin.

### Distribution

The Performance Materials & Chemicals segment markets its products primarily through the Company's sales force and also utilizes distributors worldwide.

### Joint Ventures

Principal joint ventures that impact the Performance Materials & Chemicals segment are listed below:

Aligned 100 percent with Performance Materials & Chemicals:

MEGlobal - headquartered in Dubai, United Arab Emirates and manufactures and markets monoethylene glycol, diethylene glycol and polyethylene terephthalate resins; owned 50 percent by the Company.

Performance Materials & Chemicals includes a portion of the results of:

EQUATE Petrochemicals Company K.S.C. - a Kuwait-based company that manufactures ethylene, polyethylene and ethylene glycol; owned 42.5 percent by the Company.

The Kuwait Olefins Company K.S.C. - a Kuwait-based company that manufactures ethylene and ethylene glycol; owned 42.5 percent by the Company.

Map Ta Phut Olefins Company Limited - effective ownership is 32.77 percent of which the Company directly owns 20.27 percent (aligned with Performance Materials & Chemicals) and indirectly owns 12.5 percent through its equity interest in Siam Polyethylene Company Limited and Siam Synthetic Latex Company Limited (both part of The SCG-Dow Group and aligned with Performance Plastics). This Thailand-based company manufactures propylene and ethylene.

Sadara Chemical Company - a development-stage Saudi Arabian company that will manufacture chlorine, ethylene and propylene for internal consumption and will produce and sell high-value added chemical products and performance plastics; owned 35 percent by the Company.

## PERFORMANCE PLASTICS

The Performance Plastics segment is the world's leading plastics franchise, and is a market-oriented portfolio composed of five global businesses: Dow Elastomers, Dow Electrical and Telecommunications, Dow Packaging and Specialty Plastics, Energy and Hydrocarbons. The segment is advantaged through its low cost position into key feedstocks and broad geographic reach, with sales in more than 110 countries and manufacturing facilities located in all geographic areas. It also benefits from Dow's R&D expertise to deliver leading-edge technology that provides a competitive benefit to customers in key strategic markets.

Details on Performance Plastics' 2014 sales, by business and geographic area, are as follows:

Dow Elastomers, Dow Electrical and Telecommunications, and Dow Packaging and Specialty Plastics serve high-growth, high-value sectors where Dow's world-class technology and rich innovation pipeline creates competitive advantages for customers and the entire value chain. Together, these three global businesses have complimentary market reach, asset capabilities and technology platforms that provide the Company with immediate and long-term growth synergies. Market growth is expected to be driven by major shifts in population demographics, improving socioeconomic status in emerging geographies, consumer and brand owner demand for increased consumer convenience, efforts to reduce food waste, growth in telecommunications networks, specifically broadband and LTE networks, and global development of electrical transmission and distribution infrastructure and renewable energy

applications. Market segments served by these businesses include adhesives, construction,

12

---

Table of Contents

food and specialty packaging, footwear, industrial and consumer packaging, hygiene and medical, infrastructure, pipe, telecommunications and transportation.

The Energy business is one of the world's largest industrial energy producers. This business produces or procures the energy used by Dow, sells energy to customers located on Dow manufacturing sites and also engages in opportunistic merchant sales driven by market conditions. Because of its unparalleled scale, purchasing power and global reach, the Energy business offers Dow tremendous knowledge of world energy markets and the agility to respond to sudden changes in conditions.

The Hydrocarbons business is one of the largest global producers of ethylene, an internal feedstock that is consumed primarily within Performance Plastics. The Hydrocarbons business is also a large purchaser and producer of propylene. The Company strategically locates its polyethylene production facilities near its ethylene production facilities to optimize integration benefits and drive low costs. Dow's global scale, operational discipline and feedstock flexibility creates a cost-advantaged foundation for the Company's downstream, market-driven businesses. In North America, shale gas opportunities - and the resulting increased supplies of natural gas and natural gas liquids ("NGLs") - remain a key, cost-competitive position for the Company's ethane- and propane-based production. The Company's U.S. and European ethylene production facilities allow Dow to use different feedstocks in response to price conditions. Meanwhile, the Company's planned U.S. Gulf Coast investments will strengthen ethylene and propylene integration and establish a platform for growth of Dow's downstream businesses.

**Products**

Major applications/market segments and products are listed below by business:

Business	Applications/Market Segments	Major Products
Dow Elastomers	Adhesives, footwear, housewares, infrastructure, sports recreation, toys and infant products, transportation	Elastomers, polyolefin plastomers, ethylene propylene diene monomer elastomers ("EPDMs")
Dow Electrical and Telecommunications	Building and construction, electrical transmission and distribution infrastructure, telecommunications infrastructure	Wire and cable insulation, semiconductive and jacketing compound solutions, bio-based plasticizers
Dow Packaging and Specialty Plastics	Adhesives, food and specialty packaging, hygiene and medical, industrial and consumer packaging, photovoltaic	Acrylics, polyethylene, low-density polyethylene, linear low-density polyethylene, high-density polyethylene, polyolefin emulsions, polyolefin plastomers
Energy	Principally for use in Dow's global operations	Power, steam and other utilities
Hydrocarbons	Purchaser of feedstocks; production of cost competitive monomers utilized by Dow's derivative businesses	Ethylene, propylene, benzene, butadiene, cumene, octene, aromatics co-products, crude C4
		Advantaged feedstock positions in the United States, Canada, Argentina and the Middle East

**Competition**

Competition for the Performance Plastics segment includes chemical divisions of major national and international oil companies, which provide competition in the United States and abroad. Dow competes worldwide on the basis of product quality, product supply, technology, price and customer service. Performance Plastics will continue to benefit from an advantaged feedstock position, including favorable shale gas dynamics in the United States, which will further strengthen the Company's low-cost position and enhance global cost competitiveness. Key competitors include Borealis, ExxonMobil, INEOS, LyondellBasell, Mitsui and SABIC.

#### Joint Ventures

Joint ventures play an integral role within the Performance Plastics segment by dampening earnings cyclicality and improving earnings growth. Principal joint ventures impacting Performance Plastics are listed below:

Aligned 100 percent with Performance Plastics:

- The Kuwait Styrene Company K.S.C. - a Kuwait-based company that manufactures styrene monomer; owned 42.5 percent by the Company.

The SCG-Dow Group consists of Siam Polyethylene Company Limited; Siam Polystyrene Company Limited; Siam Styrene Monomer Co., Ltd.; and Siam Synthetic Latex Company Limited. These Thailand-based companies manufacture polyethylene, polystyrene, styrene and latex; owned 50 percent by the Company.

## Table of Contents

Univation Technologies, LLC - a United States-based company that develops, markets and licenses the UNIPOL™ Polyethylene Process Technology and related catalysts, including metallocene catalysts; owned 50 percent by the Company.

Performance Plastics includes a portion of the results of:

• EQUATE Petrochemicals Company K.S.C. - a Kuwait-based company that manufactures ethylene, polyethylene and ethylene glycol; owned 42.5 percent by the Company.

• The Kuwait Olefins Company K.S.C. - a Kuwait-based company that manufactures ethylene and ethylene glycol; owned 42.5 percent by the Company.

Map Ta Phut Olefins Company Limited - effective ownership is 32.77 percent of which the Company directly owns 20.27 percent (aligned with Performance Materials & Chemicals) and indirectly owns 12.5 percent through its equity interest in Siam Polyethylene Company Limited and Siam Synthetic Latex Company Limited (both part of The SCG-Dow Group and aligned with Performance Plastics). This Thailand-based company manufactures propylene and ethylene.

Sadara Chemical Company - a development-stage Saudi Arabian company that will manufacture chlorine, ethylene and propylene for internal consumption and will produce and sell high-value added chemical products and performance plastics; owned 35 percent by the Company.

## Divestitures

On December 2, 2013, the Company sold its Polypropylene Licensing and Catalysts business to W. R. Grace & Co. This business was reported in the Performance Plastics segment through the date of divestiture.

## Future Investments

The Company announced a number of investments in the U.S. Gulf Coast to take advantage of increasing supplies of low-cost natural gas and NGLs derived from shale gas. As a result of these investments, the Company's exposure to purchased ethylene and propylene is expected to decline, offset by increased exposure to ethane and propane based feedstocks. The Company announced investments in a new on-purpose propylene production facility (expected to start-up in mid-2015) and a new, world-scale ethylene production facility (expected start-up in the first half of 2017), both located in Freeport, Texas. As a result of these U.S. Gulf Coast investments, Dow's ethylene production capabilities are expected to increase by as much as 20 percent.

The Company announced the location of four new Performance Plastics production facilities to be built on the U.S. Gulf Coast, which include an ELITE™ Polymer production facility in Freeport, Texas; a Low Density Polyethylene (LDPE) production facility in Plaquemine, Louisiana; a NORDEL™ Metallocene EPDM production facility in Plaquemine, Louisiana; and a High Melt Index (HMI) AFFINITY™ Polymer production facility in Freeport, Texas. Leveraging a low cost ethylene supply from advantaged feedstock positions from U.S. shale gas, these production facilities will support expected profitable growth of the Company's high value Performance Plastics franchise.

## CORPORATE

Corporate includes certain enterprise and governance activities (including insurance operations, geographic management, risk management such as foreign currency hedging activities, audit fees, donations, Company branding initiatives, etc.); the results of Ventures (including business incubation platforms, non-business aligned joint ventures, and venture capital); environmental operations; gains and losses on the sales of financial assets; severance costs; non-business aligned litigation expenses (including asbestos-related defense costs and reserve adjustments); and, foreign exchange results.

## INDUSTRY SEGMENTS AND GEOGRAPHIC AREA RESULTS

See Note 25 to the Consolidated Financial Statements for information regarding sales, EBITDA and total assets by segment as well as sales and total assets by geographic area.

#### SIGNIFICANT CUSTOMERS AND PRODUCTS

All products and services are marketed primarily through the Company's sales force, although in some instances more emphasis is placed on sales through distributors. No significant portion of any operating segment's sales is dependent upon a single customer. No single product accounted for more than five percent of the Company's consolidated net sales in 2014.

Table of Contents**RAW MATERIALS**

The Company operates in an integrated manufacturing environment. Basic raw materials are processed through many stages to produce a number of products that are sold as finished goods at various points in those processes. The two major raw material streams that feed the integrated production of the Company's finished goods are chlorine-based and hydrocarbon-based raw materials.

Salt, natural brine and electricity are the base raw materials used in the production of chlor-alkali products and derivatives. The Company owns salt deposits in Louisiana and Texas; Alberta, Canada; Brazil; and Germany. The Company also produces a portion of its electricity needs in Louisiana and Texas; Alberta, Canada; and Germany.

The Company purchases hydrocarbon raw materials including ethane, propane, butane, naphtha and condensate as feedstocks. These raw materials are used in the production of both saleable products and energy. The Company also purchases certain monomers, primarily ethylene and propylene, to supplement internal production. The Company purchases natural gas, primarily to generate electricity, and purchases electric power to supplement internal generation. Expenditures for hydrocarbon feedstocks and energy accounted for 38 percent of the Company's production costs and operating expenses for the year ended December 31, 2014. The Company purchases these raw materials on both short- and long-term contracts.

The Company had adequate supplies of raw materials during 2014, and expects to continue to have adequate supplies of raw materials in 2015. Significant raw materials, by operating segment, are listed below:

Significant Raw Materials				Performance	
Raw Material	Agricultural Sciences	Consumer Solutions	Infrastructure Solutions	Materials & Chemicals	Performance Plastics
Acrylonitrile			x	x	x
Ammonia			x	x	x
Aniline				x	
Benzene				x	x
Butadiene			x		x
Butanol (1)			x		
Butene				x	x
Carbon Black		x		x	x
Carbon Monoxide				x	x
Chlorine (2)	x	x	x	x	
Condensate					x
Cumene				x	
Electric Power				x	x
Ethane					x
Ethanol	x	x	x	x	x
Ethylene (1)			x	x	x
Formaldehyde		x	x	x	
Hexene					x
Hydrogen Peroxide (3)				x	
Liquified Petroleum Gases					x
Methanol	x		x	x	x
Naphtha					x
Natural Brine				x	
Natural Gas					x
Octene					x



Phenol			X	
Polystyrene		X		X
Propane	X			X
Propylene (1)	X	X	X	X
Pygas				X
Salt			X	
Styrene	X	X	X	
Wood Pulp	X			

(1) Produced by the Company and procured from external sources for internal consumption.

(2) Produced by the Company for internal consumption.

(3) Primarily produced and procured by a consolidated variable interest entity.

Table of Contents**RESEARCH AND DEVELOPMENT**

The Company is engaged in a continuous program of basic and applied research to develop new products and processes, to improve and refine existing products and processes, and to develop new applications for existing products. Research and development expenses were \$1,647 million in 2014, \$1,747 million in 2013 and \$1,708 million in 2012. At December 31, 2014, the Company employed approximately 6,200 people in various research and development activities.

**PATENTS, LICENSES AND TRADEMARKS**

The Company continually applies for and obtains U.S. and foreign patents and has a substantial number of pending patent applications throughout the world. At December 31, 2014, the Company owned 4,210 active U.S. patents and 17,311 active foreign patents as follows:

**Patents Owned at December 31, 2014**

	United States	Foreign
Agricultural Sciences	855	3,485
Consumer Solutions	1,070	3,167
Infrastructure Solutions	859	4,764
Performance Materials & Chemicals	490	2,328
Performance Plastics	807	3,276
Corporate	129	291
Total	4,210	17,311

**Remaining Life of Patents Owned at December 31, 2014**

	United States	Foreign
Within 5 years	937	2,962
6 to 10 years	1,000	4,786
11 to 15 years	1,199	7,031
16 to 20 years	1,074	2,532
Total	4,210	17,311

Dow's primary purpose in obtaining patents is to protect the results of its research for use in operations and licensing. Dow is also party to a substantial number of patent licenses and other technology agreements. The Company had revenue related to patent and technology royalties totaling \$388 million in 2014, \$327 million in 2013 and \$448 million in 2012. The Company incurred royalties to others of \$170 million in 2014, \$198 million in 2013 and \$185 million in 2012. Dow also has a substantial number of trademarks and trademark registrations in the United States and in other countries, including the "Dow in Diamond" trademark. Although the Company considers that its patents, licenses and trademarks in the aggregate constitute a valuable asset, it does not regard its business as being materially dependent on any single or group of related patents, licenses or trademarks.

Table of Contents**PRINCIPAL PARTLY OWNED COMPANIES**

Dow's principal nonconsolidated affiliates at December 31, 2014, including direct or indirect ownership interest for each, are listed below:

Principal Nonconsolidated Affiliate	Ownership Interest	Business Description
Dow Corning Corporation	50.00%	A U.S. company that manufactures silicone and silicone products
EQUATE Petrochemical Company K.S.C. (1)	42.50%	A Kuwait-based company that manufactures ethylene, polyethylene and ethylene glycol
The Kuwait Olefins Company K.S.C. (1)	42.50%	A Kuwait-based company that manufactures ethylene and ethylene glycol
The Kuwait Styrene Company K.S.C. (1)	42.50%	A Kuwait-based company that manufactures styrene monomer
Map Ta Phut Olefins Company Limited (2)	32.77%	A Thailand-based company that manufactures propylene and ethylene
MEGlobal (1)	50.00%	A company, headquartered in Dubai, United Arab Emirates, that manufactures and markets monoethylene glycol, diethylene glycol and polyethylene terephthalate resins
Sadara Chemical Company	35.00%	A development-stage Saudi Arabian company that will manufacture chlorine, ethylene and propylene for internal consumption and will produce and sell high-value added chemical products and performance plastics
The SCG-Dow Group:		
Siam Polyethylene Company Limited	50.00%	A Thailand-based company that manufactures polyethylene
Siam Polystyrene Company Limited	50.00%	A Thailand-based company that manufactures polystyrene
Siam Styrene Monomer Co., Ltd.	50.00%	A Thailand-based company that manufactures styrene
Siam Synthetic Latex Company Limited	50.00%	A Thailand-based company that manufactures latex
Univation Technologies, LLC (3)	50.00%	A United States-based company that develops, markets and licenses the UNIPOL™ polyethylene process technology and sells related catalysts, including metallocene catalysts

(1) In the fourth quarter of 2014, the Company announced it will reconfigure and reduce its equity base in EQUATE Petrochemical Company K.S.C., The Kuwait Olefins Company K.S.C., The Kuwait Styrene Company K.S.C. and MEGlobal through a divestment of a portion of the Company's interests. Dow expects such transaction(s) to be completed by mid-2016.

(2) The Company's effective ownership of Map Ta Phut Olefins Company Limited is 32.77 percent, of which the Company directly owns 20.27 percent and indirectly owns 12.5 percent through its equity interest in Siam Polyethylene Company Limited and Siam Synthetic Latex Company Limited.

(3) On October 2, 2014, the Company reached a definitive agreement with ExxonMobil Chemical Company to acquire the remaining 50 percent ownership interest in Univation Technologies, LLC ("Univation"), which will result in Univation becoming a wholly owned subsidiary of Dow. The transaction is expected to close in the first half of 2015, pending regulatory approvals.

See Note 8 to the Consolidated Financial Statements for additional information regarding nonconsolidated affiliates.

**FINANCIAL INFORMATION ABOUT FOREIGN AND DOMESTIC OPERATIONS AND EXPORT SALES**

In 2014, the Company derived 67 percent of its sales and had 41 percent of its property investment outside the United States. While the Company's international operations may be subject to a number of additional risks, such as changes in currency exchange rates and geopolitical risks in emerging geographies, the Company does not regard its foreign

operations, on the whole, as carrying any greater risk than its operations in the United States. Information on sales and long-lived assets by geographic area for each of the last three years appears in Note 25 to the Consolidated Financial Statements, and discussions of the Company's risk management program for foreign exchange and interest rate risk management appear in Part I, Item 1A. Risk Factors; Part II, Item 7A. Quantitative and Qualitative Disclosures About Market Risk; and Note 10 to the Consolidated Financial Statements.

#### PROTECTION OF THE ENVIRONMENT

Matters pertaining to the environment are discussed in Part I, Item 1A. Risk Factors; Part II, Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations; and Notes 1 and 14 to the Consolidated Financial Statements. In addition, detailed information on Dow's performance regarding environmental matters and goals can be found online on Dow's Sustainability webpage at [www.dow.com](http://www.dow.com). The Company's website and its content are not deemed incorporated by reference into this report.

Table of Contents**EMPLOYEES**

As of December 31, 2014, the Company employed approximately 53,000 people on a full-time basis, with approximately 50 percent located in North America, 25 percent located in Europe, Middle East, Africa and India, and 25 percent located in other locations.

**OTHER ACTIVITIES**

Dow engages in the property and casualty insurance and reinsurance business primarily through its Liana Limited subsidiaries.

**EXECUTIVE OFFICERS OF THE REGISTRANT**

Set forth below is information related to the Company's executive officers as of February 13, 2015.

Name - Age	Present Position with Registrant	Year Elected to be an Officer	Other Business Experience since January 1, 2010
Ronald C. Edmonds, 57	Vice President and Controller	2009	Vice President and Controller 2009 to date.  Vice President Corporate Development 2009 to August 2010. Dow Executive Vice President and President, Plastics and Hydrocarbons August 2010 to September 2011. Executive Vice President and President, Feedstocks & Energy and Corporate Development September 2011 to September 2012. Executive Vice President, Feedstocks, Performance Plastics, Asia and Latin America September 2012 to December 2013. Executive Vice President, Feedstocks, Performance Plastics and Supply Chain December 2013 to October 2014. Present position held since October 2014.
James R. Fitterling, 53	Vice Chairman, Business Operations	2010	Executive Vice President, Performance Systems May 2009 to August 2010. Executive Vice President and Chief Commercial Officer August 2010 to September 2012. Present position held since September 2012.
Heinz Haller, 59	Executive Vice President and President of Dow Europe, Middle East, Africa and India	2006	Executive Vice President of Consumer & Office Business, 3M Company 2009 to August 2011. Executive Vice President, Performance Materials September 2011 to September 2012. Executive Vice President, Chemicals, Energy and Performance Materials September 2012 to October 2014. Present position held since October 2014.
Joe E. Harlan, 55	Chief Commercial Officer and Vice Chairman, Market Businesses	2011	Global Manufacturing Vice President, Hydrocarbons May 2009 to October 2012. Vice President for Manufacturing and Engineering Europe, Middle East and Africa May 2009 to October 2012. Vice President of Operations for Europe, Middle East and Africa and the Ethylene Envelope October 2012 to December 2013. Emergency Services and Security Expertise September 2014 to present. Present position held since 2014.
Peter Holicki, 54	Corporate Vice President, Manufacturing and Engineering, and Environment, Health & Safety Operations	2014	

Edgar Filing: DOW CHEMICAL CO /DE/ - Form 10-K

Charles J. Kalil, 63	General Counsel and Executive Vice President	2004	General Counsel 2004 to date. Executive Vice President 2008 to date. Corporate Secretary 2005 to January 2015.
Andrew N. Liveris, 60	President, Chief Executive Officer and Chairman of the Board	2003	President and Chief Executive Officer 2004 to date and Chairman 2006 to date.
Fernando Ruiz, 59	Corporate Vice President and Treasurer	2001	Corporate Vice President and Treasurer 2001 to date.
Johanna Söderström, 43	Corporate Vice President, Human Resources and Aviation	2015	HR Director, Europe, Middle East and Africa July 2009 to January 2011. Global HR Director, Performance Materials Division January 2011 to October 2012. Vice President, HR Center of Expertise October 2012 to January 2015. Present position held since January 2015.
A. N. Sreeram, 47	Corporate Vice President, Research & Development	2013	Vice President, Research & Development, Dow Advanced Materials 2009 to October 2013. Present position held since October 2013.
Howard I. Ungerleider, 46	Chief Financial Officer and Executive Vice President	2011	Vice President, Investor Relations 2008 to March 2011. Senior Vice President and President, Performance Plastics March 2011 to September 2012. Executive Vice President, Advanced Materials September 2012 to October 2014. Present position held since October 2014.

Table of Contents

The Dow Chemical Company and Subsidiaries

PART I, Item 1A. Risk Factors.

**RISK FACTORS**

The factors described below represent the Company's principal risks.

**Global Economic Conditions:** The Company operates in a global, competitive environment which gives rise to operating and market risk exposure.

The Company sells its broad range of products and services in a competitive, global environment, and competes worldwide for sales on the basis of product quality, price, technology and customer service. Increased levels of competition could result in lower prices or lower sales volume, which could have a negative impact on the Company's results of operations.

Economic conditions around the world, and in certain industries in which the Company does business also impact sales prices and volume. As a result, market uncertainty or an economic downturn in the geographic areas or industries in which Dow sells its products could reduce demand for these products and result in decreased sales volume, which could have a negative impact on Dow's results of operations.

In addition, volatility and disruption of financial markets could limit customers' ability to obtain adequate financing to maintain operations, which could result in a decrease in sales volume and have a negative impact on Dow's results of operations. The Company's global business operations also give rise to market risk exposure related to changes in foreign exchange rates, interest rates, commodity prices and other market factors such as equity prices. To manage such risks, Dow enters into hedging transactions pursuant to established guidelines and policies. If Dow fails to effectively manage such risks, it could have a negative impact on the Company's results of operations.

**Financial Commitments and Credit Markets:** Market conditions could reduce the Company's flexibility to respond to changing business conditions or fund capital needs.

Adverse economic conditions could reduce the Company's flexibility to respond to changing business and economic conditions or to fund capital expenditures or working capital needs. The economic environment could result in a contraction in the availability of credit in the marketplace and reduce sources of liquidity for the Company. This could result in higher borrowing costs.

**Raw Materials:** Availability of purchased feedstocks and energy, and the volatility of these costs, impact Dow's operating costs and add variability to earnings.

Purchased feedstock and energy costs account for a substantial portion of the Company's total production costs and operating expenses. The Company purchases hydrocarbon raw materials including ethane, propane, butane, naphtha and condensate as feedstocks. The Company also purchases certain monomers, primarily ethylene and propylene, to supplement internal production, as well as other raw materials. The Company purchases natural gas, primarily to generate electricity, and purchases electric power to supplement internal generation.

Feedstock and energy costs generally follow price trends in crude oil and natural gas, which are sometimes volatile. While the Company uses its feedstock flexibility and financial and physical hedging programs to help mitigate feedstock cost increases, the Company is not always able to immediately raise selling prices. Ultimately, the ability to pass on underlying cost increases is dependent on market conditions. Conversely, when feedstock and energy costs decline, selling prices generally decline as well. As a result, volatility in these costs could impact the Company's results of operations.

The Company has a number of investments in the U.S. Gulf Coast to take advantage of increasing supplies of low-cost natural gas and natural gas liquids ("NGLs") from shale gas including the restart of an ethylene production facility in

Louisiana, which was completed in December 2012; a new on-purpose propylene facility in Freeport, Texas, with start-up expected in mid-2015; and a new, world-scale ethylene production facility in Freeport, Texas, with start-up expected in the first half of 2017. As a result of these investments, the Company's exposure to purchased ethylene and propylene is expected to decline, offset by increased exposure to ethane and propane feedstocks.

While the Company expects abundant and cost-advantaged supplies of NGLs in the United States to persist for the foreseeable future, if NGLs were to become significantly less advantaged than crude oil-based feedstocks, it could have a negative impact on the Company's results of operations and future investments.



## Table of Contents

Also, if the Company's key suppliers of feedstocks and energy are unable to provide the raw materials required for production, it could have a negative impact on the Company's results of operations.

**Supply/Demand Balance:** Earnings generated by the Company's chemical and plastic products vary based in part on the balance of supply relative to demand within the industry.

The balance of supply relative to demand within the industry may be significantly impacted by the addition of new capacity, especially for basic commodities where capacity is generally added in large increments as world-scale facilities are built. This may disrupt industry balances and result in downward pressure on prices due to the increase in supply, which could negatively impact the Company's results of operations.

**Litigation:** The Company is party to a number of claims and lawsuits arising out of the normal course of business with respect to commercial matters including product liability, governmental regulation and other actions.

Certain of the claims and lawsuits facing the Company purport to be class actions and seek damages in very large amounts. All such claims are contested. With the exception of the possible effect of the asbestos-related liability of Union Carbide Corporation ("Union Carbide") and certain urethane matters, described below, it is the opinion of the Company's management that the possibility is remote that the aggregate of all such claims and lawsuits will have a material adverse impact on the Company's consolidated financial statements.

Union Carbide is and has been involved in a large number of asbestos-related suits filed primarily in state courts during the past four decades. At December 31, 2014, Union Carbide's asbestos-related liability for pending and future claims was \$513 million (\$501 million at December 31, 2013) and its receivable for insurance recoveries related to the asbestos liability was \$10 million (\$25 million at December 31, 2013). At December 31, 2014, Union Carbide also had receivables of \$69 million (\$66 million at December 31, 2013) for insurance recoveries for defense and resolution costs. It is the opinion of the Company's management that it is reasonably possible that the cost of Union Carbide disposing of its asbestos-related claims, including future defense costs, could have a material impact on the Company's results of operations and cash flows for a particular period and on the consolidated financial position of the Company.

The Company, among others, was named as a defendant in multiple civil class action lawsuits alleging a conspiracy to fix the price of various urethane chemical products, namely polyurethane chemicals, including methylene diphenyl diisocyanate, toluene diisocyanate, polyether polyols and system house products. These lawsuits were consolidated or have been tolled. In January 2013, the class action lawsuit went to trial in the U.S. District Court for the District of Kansas ("District Court") with the Company as the sole remaining defendant. On February 20, 2013, the jury in the matter returned a damages verdict of approximately \$400 million against the Company, which ultimately was trebled by the District Court under applicable antitrust laws - less offsets from other settling defendants - resulting in a judgment entered in July 2013 in the amount of \$1.06 billion. The Company appealed this judgment to the U.S. Tenth Circuit Court of Appeals ("Court of Appeals"). On September 29, 2014, the Court of Appeals issued an opinion affirming the District Court judgment. On October 14, 2014, the Company filed a petition for Rehearing or Rehearing En Banc (collectively the "Rehearing Petition") with the Court of Appeals. The Court of Appeals denied Dow's Rehearing Petition on November 7, 2014. The Company will file a petition for writ of certiorari ("Writ Petition") with the U.S. Supreme Court in March 2015, seeking judicial review by the U.S. Supreme Court and requesting that the Supreme Court ultimately correct fundamental errors in the Circuit Court opinion. While it is unknowable whether or not the U.S. Supreme Court will accept the Writ Petition for review, there are several compelling reasons why the U.S. Supreme Court should grant the petition for writ of certiorari, and if the petition for writ of certiorari is accepted, the Company believes it is likely that the District Court judgment would be vacated. The Company has concluded it is not probable that a loss will occur and, therefore, a liability has not been recorded with respect to these matters. While the Company believes it is not probable a loss will occur, the existence of the jury verdict, the Court of Appeals' opinion, and subsequent denial of Dow's Rehearing Petition indicate that it is reasonably possible that a loss could occur.

**Environmental Compliance:** The costs of complying with evolving regulatory requirements could negatively impact the Company's financial results. Actual or alleged violations of environmental laws or permit requirements could result in restrictions or prohibitions on plant operations, substantial civil or criminal sanctions, as well as the assessment of strict liability and/or joint and several liability.

The Company is subject to extensive federal, state, local and foreign laws, regulations, rules and ordinances relating to pollution, protection of the environment, greenhouse gas emissions, and the generation, storage, handling, transportation, treatment, disposal and remediation of hazardous substances and waste materials. At December 31, 2014, the Company had accrued obligations of \$706 million (\$722 million at December 31, 2013) for probable environmental remediation and restoration costs, including \$78 million (\$73 million at December 31, 2013) for the remediation of Superfund sites. This is management's best estimate of the costs for remediation and restoration with respect to environmental matters for which the Company has accrued liabilities, although it is reasonably possible that the ultimate cost with respect to these particular matters could range up to approximately two and a half times that amount. Costs and capital expenditures relating to environmental,

## Table of Contents

health or safety matters are subject to evolving regulatory requirements and depend on the timing of the promulgation and enforcement of specific standards which impose the requirements. Moreover, changes in environmental regulations could inhibit or interrupt the Company's operations, or require modifications to its facilities. Accordingly, environmental, health or safety regulatory matters could result in significant unanticipated costs or liabilities.

**Chemical Safety:** Increased concerns regarding the safe use of chemicals in commerce and their potential impact on the environment have resulted in more restrictive regulations from local, state and federal governments and could lead to new regulations.

Concerns regarding the safe use of chemicals in commerce and their potential impact on health and the environment reflect a growing trend in societal demands for increasing levels of product safety and environmental protection. These concerns could manifest themselves in stockholder proposals, preferred purchasing and continued pressure for more stringent regulatory intervention. These concerns could also influence public perceptions, the viability of the Company's products, the Company's reputation and the cost to comply with regulations. In addition, terrorist attacks and natural disasters have increased concerns about the security and safety of chemical production and distribution. These concerns could have a negative impact on the Company's results of operations.

Local, state and federal governments continue to propose new regulations related to the security of chemical plant locations and the transportation of hazardous chemicals, which could result in higher operating costs.

**Operational Event:** A significant operational event could negatively impact the Company's results of operations. As a diversified chemical manufacturing company, the Company's operations, the transportation of products, cyber attacks, or severe weather conditions and other natural phenomena (such as drought, hurricanes, earthquakes, tsunamis, floods, etc.) could result in an unplanned event that could be significant in scale and could negatively impact operations, neighbors or the public at large, which could have a negative impact on the Company's results of operations.

Major hurricanes have caused significant disruption in Dow's operations on the U.S. Gulf Coast, logistics across the region, and the supply of certain raw materials, which had an adverse impact on volume and cost for some of Dow's products. Due to the Company's substantial presence on the U.S. Gulf Coast, similar severe weather conditions or other natural phenomena in the future could negatively affect Dow's results of operations.

**Cyber Vulnerability:** The risk of loss of the Company's intellectual property, trade secrets or other sensitive business information or disruption of operations could negatively impact the Company's financial results.

Cyber attacks or security breaches could compromise confidential, business critical information, cause a disruption in the Company's operations or harm the Company's reputation. The Company has attractive information assets, including intellectual property, trade secrets and other sensitive, business critical information. While the Company has a comprehensive cyber security program that is continuously reviewed, maintained and upgraded, a significant cyber attack could result in the loss of critical business information and/or could negatively impact operations, which could have a negative impact on the Company's financial results.

**Company Strategy:** Implementing certain elements of the Company's strategy could negatively impact the Company's financial results.

The Company currently has manufacturing operations, sales and marketing activities, joint ventures, as well as proposed and existing projects of varying size in emerging geographies. Activities in these geographies are accompanied by uncertainty and risks including: navigating different government regulatory environments; relationships with new, local partners; project funding commitments and guarantees; expropriation, military actions, war, terrorism and political instability; sabotage; uninsurable risks; suppliers not performing as expected resulting in increased risk of extended project timelines; and determining raw material supply and other details regarding product movement. If the manufacturing operations, sales and marketing activities, and/or implementation of these projects is

not successful, it could adversely affect the Company's financial condition, cash flows and results of operations.

The Company has also announced a number of portfolio management actions, including the potential divestiture of global businesses and potential reduction of the Company's equity interest in certain joint ventures. If the execution or implementation of these transactions is not successful, it could adversely impact the Company's financial condition, cash flows and results of operations.

Goodwill: An impairment of goodwill could negatively impact the Company's financial results.

At least annually, the Company assesses goodwill for impairment. If an initial qualitative assessment identifies that it is more likely than not that the carrying value of a reporting unit exceeds its estimated fair value, additional quantitative testing is performed. The Company may also elect to skip the qualitative testing and proceed directly to quantitative testing. If the

Table of Contents

quantitative testing indicates that goodwill is impaired, the carrying value of goodwill is written down to fair value with a charge against earnings. Since the Company utilizes a discounted cash flow methodology to calculate the fair value of its reporting units, continued weak demand for a specific product line or business could result in an impairment. Accordingly, any determination requiring the write-off of a significant portion of goodwill could negatively impact the Company's results of operations.

**Pension and Other Postretirement Benefits:** Increased obligations and expenses related to the Company's defined benefit pension plans and other postretirement benefit plans could negatively affect Dow's financial condition and results of operations.

The Company has defined benefit pension plans and other postretirement benefit plans (the "plans") in the United States and a number of other countries. The assets of the Company's funded plans are primarily invested in fixed income and equity securities of U.S. and foreign issuers. Changes in the market value of plan assets, investment returns, discount rates, mortality rates, regulations and the rate of increase in compensation levels may affect the funded status of the Company's plans and could cause volatility in the net periodic benefit cost, future funding requirements of the plans and the funded status of the plans. A significant increase in the Company's obligations or future funding requirements could have a negative impact on the Company's results of operations and cash flows for a particular period and on the Company's financial condition.

Table of Contents

The Dow Chemical Company and Subsidiaries

PART I, Item 1B. Unresolved Staff Comments.

UNRESOLVED STAFF COMMENTS

None.

Table of Contents

The Dow Chemical Company and Subsidiaries

PART I, Item 2. Properties.

**PROPERTIES**

The Company operates 201 manufacturing sites in 35 countries. Properties of Dow include facilities which, in the opinion of management, are suitable and adequate for the manufacture and distribution of Dow's products. During 2014, the Company's production facilities and plants operated at 85 percent of capacity. The Company's major production sites, including consolidated variable interest entities, are as follows:

Location	Agricultural Sciences	Consumer Solutions	Infrastructure Solutions	Performance Materials & Chemicals	Performance Plastics
Bahia Blanca, Argentina					x
Candeias, Brazil				x	
Canada:					
Fort Saskatchewan, Alberta					x
Joffre, Alberta					x
Germany:					
Boehlen			x	x	x
Bomlitz		x	x		
Leuna					x
Schkopau		x	x	x	x
Stade	x	x	x	x	x
Terneuzen, The Netherlands		x	x	x	x
Tarragona, Spain				x	x
Map Ta Phut, Thailand			x	x	x
United States:					
Louisville, Kentucky			x		
Hahnville (St. Charles), Louisiana			x	x	x
Plaquemine, Louisiana		x	x	x	x
Midland, Michigan	x	x	x	x	x
Deer Park, Texas			x	x	
Freeport, Texas	x	x	x	x	x
Seadrift, Texas		x	x	x	x
Texas City, Texas			x	x	

Including the major production sites, the Company has plants and holdings in the following geographic areas:

Asia Pacific:	40 manufacturing locations in 11 countries.
Canada:	6 manufacturing locations in 3 provinces.
Europe, Middle East, Africa and India:	54 manufacturing locations in 18 countries.
Latin America:	28 manufacturing locations in 4 countries.
United States:	73 manufacturing locations in 25 states.

All of Dow's plants are owned or leased, subject to certain easements of other persons which, in the opinion of management, do not substantially interfere with the continued use of such properties or materially affect their value. A summary of properties, classified by type, is provided in Note 7 to the Consolidated Financial Statements. Additional information regarding leased properties can be found in Note 18 to the Consolidated Financial Statements.





Table of Contents

The Dow Chemical Company and Subsidiaries

PART I, Item 3. Legal Proceedings.

LEGAL PROCEEDINGS

Asbestos-Related Matters of Union Carbide Corporation

Union Carbide Corporation ("Union Carbide"), a wholly owned subsidiary of the Company, is and has been involved in a large number of asbestos-related suits filed primarily in state courts during the past four decades. These suits principally allege personal injury resulting from exposure to asbestos-containing products and frequently seek both actual and punitive damages. The alleged claims primarily relate to products that Union Carbide sold in the past, alleged exposure to asbestos-containing products located on Union Carbide's premises, and Union Carbide's responsibility for asbestos suits filed against a former Union Carbide subsidiary, Amchem Products, Inc.

It is the opinion of Dow's management that it is reasonably possible that the cost of Union Carbide disposing of its asbestos-related claims, including future defense costs, could have a material impact on the Company's results of operations and cash flows for a particular period and on the consolidated financial position of the Company.

For additional information, see Part II, Item 7. Other Matters, Asbestos-Related Matters of Union Carbide Corporation in Management's Discussion and Analysis of Financial Condition and Results of Operations, and Note 14 to the Consolidated Financial Statements.

Environmental Matters

The Company received an Administrative Complaint dated May 23, 2013 from the Texas Council of Environmental Quality ("TCEQ") alleging violations of various environmental requirements regulating air emissions from operations at its Freeport, Texas, manufacturing facility. The TCEQ sought a fine in excess of \$100,000 for a number of independent violations of air permits and regulations. This Administrative Complaint was combined with other alleged violations of environmental requirements at the Freeport, Texas, manufacturing facility, including allegations of violations related to the operation of the Company's wastewater treatment plant. The combined Administrative Complaint was settled on October 8, 2014 with the Company agreeing to pay a total of \$67,060, half of which provided funding for a Supplemental Environmental Project entitled Houston-Galveston AERCO's Clean Cities/Clean Vehicles.

Dow AgroSciences LLC ("DAS"), a wholly owned subsidiary of the Company, received two separate notices from the U.S. Environmental Protection Agency ("EPA"), the first dated April 16, 2014 and the second dated May 27, 2014, seeking civil penalties for alleged violations by supplemental distributors of certain DAS products of various requirements under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) regulating production and labeling of pesticides. In each matter, the EPA is seeking to collect a civil penalty from DAS, as the primary registrant, in excess of \$100,000. DAS resolved the first matter with the EPA in December 2014 and agreed to pay a \$137,280 civil penalty as part of the settlement. Discussions between DAS and the applicable EPA Regional Office handling the second matter remain ongoing.

Dow Benelux B.V. ("Dow Benelux"), a Netherlands-based wholly owned subsidiary of the Company, received a summons dated July 20, 2012 from the Public Prosecutor in The Netherlands to appear before the criminal section of the District Court in Breda, The Netherlands (which venue was subsequently changed to the District Court of Middelburg) (the "Court"). The allegations contained in the summons relate to seven process safety incidents and environmental spills that occurred between 2005 and 2008 at Dow Benelux's Terneuzen manufacturing facility. The Public Prosecutor alleges that each of the incidents constitutes a violation of certain Netherlands safety procedures and environmental regulations, notably Section 5 of the Major Accidents Decree 1999 and/or Section 18.18 of the Environmental Act. In addition, five of the incidents allegedly also constitute a violation of Section 173a of the Dutch

Criminal Code. The trial in the first instance on this matter was held from January 14, 2014 through February 7, 2014. On March 24, 2014, the Court issued a guilty verdict and imposed a Euro 1.8 million fine against Dow Benelux. The Court's judgment is subject to an appeal with the Court of Appeal in Den Bosch, and Dow Benelux has filed a notice of appeal. A new and independent trial will be held by the Court of Appeal. No date has been set for this new trial.

Table of Contents

Derivative Litigation

On March 6, 2013, Jeffrey Kaufman ("Kaufman"), purportedly in the name of and on behalf of the Company, commenced an action in the United States District Court for the District of Delaware (the "Court") against the Company and certain officers and directors of the Company (the "Defendants") alleging, among other things, that between 2007-2012, Defendants violated federal securities and state law surrounding equity awards and disclosures involving the 1988 Award and Option Plan and the 2012 Stock Incentive Plan ("2012 Plan") (collectively, the "Plans") with respect to the tax-deductible nature of certain awards under the Plans. The relief sought in this litigation includes the recovery of certain equity awards and injunctive relief, as well as attorneys' fees. The Company first moved to dismiss the complaint on May 14, 2013 and, in response to the subsequent filing by Kaufman of an amended complaint, the Company filed an amended motion to dismiss on August 30, 2013. On September 30, 2014, the Court entered an order in favor of the Defendants dismissing the complaint in its entirety. On November 18, 2014, the Court granted Plaintiff's motion for reargument on one count, alleging that the 2012 proxy failed to include the approximate number of persons eligible to receive awards under the 2012 Plan. The Company believes the lawsuit to be without merit, has filed an answer on the remaining count, and will continue to vigorously defend the lawsuit.

Table of Contents

The Dow Chemical Company and Subsidiaries

PART I, Item 4. Mine Safety Disclosures.

MINE SAFETY DISCLOSURES

Not applicable.

27

---

Table of Contents

The Dow Chemical Company and Subsidiaries

PART II, Item 5. Market for Registrant's Common Equity,  
Related Stockholder Matters and Issuer Purchases of Equity Securities.

**MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER  
PURCHASES OF EQUITY SECURITIES**

The principal market for the Company's common stock is the New York Stock Exchange, traded under the symbol "DOW."

Quarterly market and dividend information can be found in Quarterly Statistics at the end of Part II, Item 8. Financial Statements and Supplementary Data.

At December 31, 2014, there were 65,500 registered common stockholders. The Company estimates that there were an additional 653,636 stockholders whose shares were held in nominee names at December 31, 2014. At January 31, 2015, there were 65,319 registered common stockholders.

On November 12, 2014, the Board of Directors declared a quarterly dividend of \$0.42 per share, payable January 30, 2015, to stockholders of record on December 31, 2014. On February 12, 2015, the Board of Directors announced the declaration of a quarterly dividend of \$0.42 per share, payable April 30, 2015, to stockholders of record on March 31, 2015. Since 1912, the Company has maintained or increased the amount of the quarterly dividend, adjusted for stock splits, with the exception of February 12, 2009. During this 103-year period, Dow has increased the amount of the quarterly dividend 51 times (approximately 12 percent of the time), reduced the dividend once and maintained the amount of the quarterly dividend approximately 88 percent of the time.

See Part III, Item 11. Executive Compensation for information relating to the Company's equity compensation plans.

**Issuer Purchases of Equity Securities**

The following table provides information regarding purchases of the Company's common stock by the Company during the three months ended December 31, 2014:

**Issuer Purchases of Equity Securities**

Period	Total number of shares purchased	Average price paid per share	Total number of shares purchased as part of the Company's publicly announced share repurchase program (1)	Approximate dollar value of shares that may yet be purchased under the Company's publicly announced share repurchase program (1) (In millions)
October 2014	6,210,326	\$47.06	6,210,326	\$801
November 2014	9,814,627	\$48.90	9,814,627	\$5,321
December 2014	6,506,047	\$49.37	6,506,047	\$5,000
Fourth quarter 2014	22,531,000	\$48.53	22,531,000	\$5,000

(1) On February 13, 2013, the Board of Directors approved a share buy-back program, authorizing up to \$1.5 billion to be spent on the repurchase of the Company's common stock. Purchases under this program began in May 2013. On January 29, 2014, the Board of Directors announced an expansion of the Company's share buy-back authorization, authorizing an additional amount not to exceed \$3 billion. On November 12, 2014, the Board of Directors announced a new \$5 billion tranche to its share buy-back program, with the repurchase of the Company's common

stock timed to proceeds received from portfolio management actions and increases in operating cash flows. As a result of these actions, the total authorized amount of the share repurchase program is \$9.5 billion.

Table of Contents

The Dow Chemical Company and Subsidiaries  
PART II, Item 6. Selected Financial Data.

## SELECTED FINANCIAL DATA

In millions, except as noted (Unaudited)	2014	2013	2012	2011	2010	
Summary of Operations						
Net sales	\$58,167	\$57,080	\$56,786	\$59,985	\$53,674	
Net income	\$3,839	\$4,816	\$1,100	\$2,784	\$2,321	
Per share of common stock (in dollars):						
Net income per common share - basic	\$2.91	\$3.72	\$0.71	\$2.06	\$1.75	
Net income per common share - diluted	\$2.87	\$3.68	\$0.70	\$2.05	\$1.72	
Cash dividends declared per share of common stock	\$1.53	\$1.28	\$1.21	\$0.90	\$0.60	
Book value per share of common stock	\$19.71	\$22.59	\$17.73	\$19.28	\$19.23	
Year-end Financial Position						
Total assets	\$68,796	\$69,501	\$69,605	\$69,224	\$69,588	
Long-term debt	\$18,838	\$16,820	\$19,919	\$18,310	\$20,605	
Financial Ratios						
Research and development expenses as percent of net sales	2.8	% 3.1	% 3.0	% 2.7	% 3.1	%
Income before income taxes as percent of net sales	9.1	% 11.9	% 2.9	% 6.0	% 5.2	%
Return on stockholders' equity	18.6	% 19.4	% 5.0	% 13.1	% 11.0	%
Debt as a percent of total capitalization	45.6	% 39.0	% 48.8	% 48.0	% 51.3	%

Table of Contents

The Dow Chemical Company and Subsidiaries  
PART II, Item 7. Management's Discussion and  
(Unaudited) Analysis of Financial Condition and Results of Operations.

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

	Page
Table of Contents	
<u>2014 Overview</u>	<u>31</u>
<u>Results of Operations</u>	<u>33</u>
<u>Segment Results</u>	<u>40</u>
<u>Sales Volume and Price Charts</u>	<u>42</u>
<u>Agricultural Sciences</u>	<u>43</u>
<u>Consumer Solutions</u>	<u>44</u>
<u>Infrastructure Solutions</u>	<u>45</u>
<u>Performance Materials &amp; Chemicals</u>	<u>46</u>
<u>Performance Plastics</u>	<u>48</u>
<u>Corporate</u>	<u>50</u>
<u>Liquidity and Capital Resources</u>	<u>51</u>
<u>Other Matters</u>	<u>56</u>
<u>Critical Accounting Policies</u>	<u>56</u>
<u>Environmental Matters</u>	<u>61</u>
<u>Asbestos-Related Matters of Union Carbide Corporation</u>	<u>65</u>
<u>K-Dow Arbitration</u>	<u>65</u>

ABOUT DOW

Dow combines the power of science and technology to passionately innovate what is essential to human progress. The Company is driving innovations that extract value from the intersection of chemical, physical and biological sciences to help address many of the world's most challenging problems such as the need for clean water, clean energy generation and conservation, and increasing agricultural productivity. Dow's integrated, market-driven, industry-leading portfolio of specialty chemical, advanced materials, agrosiences and plastics businesses delivers a broad range of technology-based products and solutions to customers in approximately 180 countries and in high growth sectors such as packaging, electronics, water, coatings and agricultural. In 2014, Dow had annual sales of more than \$58 billion and employed approximately 53,000 people worldwide. The Company's more than 6,000 products are manufactured at 201 sites in 35 countries across the globe. The Company conducts its worldwide operations through global businesses, which are reported in five operating segments: Agricultural Sciences, Consumer Solutions, Infrastructure Solutions, Performance Materials & Chemicals and Performance Plastics.

In 2014, 37 percent of the Company's sales were to customers in North America; 34 percent were in Europe, Middle East, Africa and India ("EMEAI")<sup>(1)</sup>; while the remaining 29 percent were to customers in Asia Pacific and Latin America.



- (1) Sales to customers in the Indian subcontinent, previously reported with Asia Pacific, are now aligned with Europe, Middle East, Africa and India; prior period sales have been adjusted to reflect this realignment.

## Table of Contents

### 2014 OVERVIEW

Dow had a strong year in 2014 as financial discipline, increasing demand and execution against strategic initiatives created value for shareholders. The Company is driving proactive portfolio management and productivity actions, efficiently managing capital and investing for long-term growth.

Net sales for 2014 were \$58.2 billion, up 2 percent from \$57.1 billion in 2013, with volume up 2 percent and price flat. Sales increased in all operating segments. Excluding the impact of recent divestitures<sup>(1)</sup>, sales increased in all geographic areas.

Volume increased 2 percent in 2014 compared with 2013, with gains in all operating segments, except Performance Plastics which remained flat, with notable increases in Agricultural Sciences and Consumer Solutions (both up 3 percent). Excluding the impact of recent divestitures, Performance Plastics volume was up 1 percent. Volume increased in all geographic areas, led by EMEAI (up 4 percent).

Price was flat in 2014 compared with 2013, as increased selling prices were offset by the unfavorable impact of currency. Price increases in Performance Plastics (up 2 percent) were offset by price declines in Agricultural Sciences and Consumer Solutions (both down 1 percent). Infrastructure Solutions and Performance Materials & Chemicals price remained flat. Price increased in North America (up 2 percent) and Latin America (up 1 percent), which was offset by a decline in EMEAI (down 1 percent). Price in Asia Pacific remained flat.

In 2014, the Company recognized a pretax charge of \$50 million related to the impairment of intangible assets in the Dow Electronic Materials business, part of Consumer Solutions.

In 2014, the Company recorded a pretax charge of \$78 million related to an increase in the asbestos-related liability for pending and future claims, reflected in Corporate.

Dow's earnings from nonconsolidated affiliates totaled \$835 million, down from \$1,034 million in 2013. In 2014, equity earnings decreased primarily due to lower earnings at EQUATE Petrochemical Company K.S.C. ("EQUATE"), The Kuwait Styrene Company K.S.C. ("TKSC") and MEGlobal and increased losses at Sadara Chemical Company ("Sadara"), which were partially offset by increased earnings at Dow Corning Corporation ("Dow Corning"). Equity earnings were also impacted by a \$407 million gain related to Dow Corning's adjustment of its implant liability and a loss of \$500 million related to Dow Corning's abandonment of a polycrystalline silicon plant expansion.

The Company delivered \$6.5 billion of cash flows from operating activities in 2014 and ended the year with \$5.7 billion of cash and cash equivalents. Interest expense and amortization of debt discount declined \$118 million from 2013, reflecting the impact of the Company's 2013 deleveraging activities and lower debt financing costs.

On September 16, 2014, the Company issued \$2 billion of debt with 10-, 20- and 30-year maturities at low coupons.

On January 29, 2014, the Board of Directors announced an expansion of the Company's share buy-back authorization, authorizing an additional amount not to exceed \$3 billion to be spent on the repurchase of the Company's common stock over a period of time. As a result of this action, the share buy-back authorization increased to \$4.5 billion. On November 12, 2014, the Board of Directors announced a new \$5 billion tranche to its share buy-back program, with the repurchase of the Company's common stock timed to proceeds received from portfolio management actions and increases in operating cash flows. As a result of this action, the total authorized amount of the share repurchase program is \$9.5 billion. During 2014, the Company repurchased \$4.2 billion of common stock under the share buy-back program.

On January 29, 2014, the Board of Directors announced the declaration of a quarterly dividend of \$0.37 per share, a 15 percent increase in the quarterly dividend. On November 12, 2014, the Board of Directors declared a 14 percent

increase in the Company's dividend, from \$0.37 per share to \$0.42 per share. These actions demonstrate the Company's commitment to consistently and increasingly reward shareholders.

(1) Excludes sales of the Polypropylene Licensing and Catalysts business, divested on December 2, 2013 and sales related to Nippon Unicar Company Limited, divested on July 1, 2013.

## Table of Contents

Other notable events and highlights from 2014 include:

In the first quarter of 2014, the Company's joint venture membrane chlor-alkali manufacturing facility with Mitsui & Co., Ltd., Dow-Mitsui Chlor-Alkali LLC, successfully initiated full-scale, commercial production. The new facility has a nameplate capacity of approximately 800 kilotons per annum (KTA) of chlorine. This new, world-scale manufacturing facility will replace 800 KTA of older capacity at Dow's Freeport site. The joint venture is a variable interest entity and is included in Dow's consolidated financial statements.

During the week of April 20, 2014, the Company's Plaquemine, Louisiana, manufacturing site experienced two separate process incidents that resulted in the disruption of ethylene production at the Company's LA-2 and LA-3 ethylene production facilities. The LA-3 facility resumed production of ethylene on May 8, 2014 and the LA-2 facility resumed production of ethylene on May 16, 2014.

On May 2, 2014, Idemitsu Kosan Co., Ltd. and Mitsui & Co., Ltd. of Tokyo, Japan, announced their decision to not move forward with a proposed joint venture to construct a linear alpha olefins facility on the U.S. Gulf Coast. Accordingly, the Company terminated its initial agreement for a long-term ethylene off-take arrangement with the proposed joint venture. The Company is evaluating several high-return, alternative uses for the ethylene that was included in this arrangement. Further, Dow will continue to access its existing supply network of linear alpha olefins.

On June 30, 2014, the Company started construction of its world-scale ethylene production facility at Texas Operations in Freeport, Texas. The facility will have a nameplate capacity of approximately 1,500 KTA and will support market growth and expansions in Dow's industry-leading Performance Plastics franchise. The facility is expected to start up in the first half of 2017.

On July 22, 2014, the Company's Fort Saskatchewan manufacturing site in Alberta, Canada, experienced an unplanned outage of its ethylene production facility. On July 29, 2014, the facility resumed ethylene production at a significantly reduced rate. The facility returned to normal operations in September.

On September 17, 2014, the U.S. Department of Agriculture issued deregulation decisions for Dow AgroSciences LLC's ENLIST™ Corn and Soybean events. On October 15, 2014, the Company announced it received registration from the U.S. Environmental Protection Agency for ENLIST DUO™, the companion herbicide for use with ENLIST™ Corn and Soybeans, in six key states.

On September 24, 2014, the Company announced it commenced construction of the world's first, large-scale, cadmium-free quantum dot manufacturing facility at Dow's Cheonan, South Korea, manufacturing site. Production at the new facility is expected in the first half of 2015.

On October 2, 2014, the Company announced it signed a definitive agreement with ExxonMobil Chemical Company for an ownership restructure of Univation Technologies, LLC ("Univation"), which will result in Univation becoming a wholly owned subsidiary of Dow. The transaction is expected to close in the first half of 2015, pending regulatory approvals.

On October 2, 2014, the Company announced the AgroFresh business is being marketed for divestment, in line with the Company's plans to divest non-strategic businesses and assets.

On November 12, 2014, the Company announced new reportable segments which reflect Dow's strategy to be low-cost and fully integrated across key value chains.

•

On November 12, 2014, the Company announced it signed a definitive agreement to sell ANGUS Chemical Company to Golden Gate Capital for \$1.215 billion. The transaction closed on February 2, 2015.

On November 12, 2014, the Company announced it will reconfigure and reduce its equity base in EQUATE, The Kuwait Olefins Company K.S.C. ("TKOC"), TKSC and MEGlobal through a divestment of a portion of the Company's interests. Dow expects such transaction(s) to be completed by mid-2016.

On November 12, 2014, the Company announced its new divestiture target of \$7 billion to \$8.5 billion, to be completed by mid-2016.

## Table of Contents

On November 21, 2014, Dow announced it will add four new independent directors to its Board with three of the appointments effective January 1, 2015 and the fourth appointment effective in May 2015. All four independent directors will be included in the Company's nominations for elections at the 2015 Annual Meeting of Stockholders.

On December 5, 2014, the Company announced it signed a definitive agreement to sell its global Sodium Borohydride business to Vertellus Specialty Materials LLC. The transaction closed on January 30, 2015.

Dow was named by Chief Executive Magazine as one of the top 10 best companies for leaders - the third consecutive year the Company has made the final top 40 ranking.

Dow Packaging and Specialty Plastics launched Pack Studios Shanghai, the second of four regional innovation centers that are designed to help customers turn packaging ideas into innovative solutions.

Dow's BETAMATE™ 1630 Structural Adhesives, TEQUATIC™ PLUS Fine Particle Filter, NEPTUNE™ Subsea Insulation System, Garnet 2.0/TERAFORCE™ Resin Coated Sand Technology and Dow AgroSciences' TRANSFORM® WG Insecticide and CLOSER™ SC Insecticide with ISOCLAST™ Active were honored by R&D Magazine as part of its R&D 100 Awards.

Dow was named one of the top 50 innovation companies in the United States by CNBC.

- Dow's BETAMATE™ 1630 Structural Adhesives was named Dow's third "Breakthrough to World Challenges," meeting a milestone set by the Company as part of its 2015 Sustainability Goals.

Dow was named to the Dow Jones Sustainability World Index - the 14th time the Company has received this recognition since the index was launched and tying for the longest-standing representation in the chemical category since the list's inception.

Rio 2016 named Dow the Official Carbon Partner of the next Olympic Games, with the goal of creating climate benefits to mitigate direct greenhouse gas emissions from the organization and hosting of the Games.

On September 8, 2014, William H. Weideman, Chief Financial Officer and Executive Vice President; and David E. Kepler, Executive Vice President, Chief Sustainability Officer and Chief Information Officer announced their intention to retire from Dow, which was effective January 2, 2015.

The Board of Directors elected Howard I. Ungerleider Chief Financial Officer, effective October 1, 2014.

James R. Fitterling was named Vice Chairman, Business Operations, and Joe E. Harlan was named Chief Commercial Officer and Vice Chairman, Market Businesses, effective October 1, 2014.

On December 12, 2014, the Company announced that Gregory Freiwald, Chief Human Resources Officer, Aviation and Corporate Affairs, had elected to retire from the Company at the end of March 2015. The Company also announced that Johanna Söderström was named Corporate Vice President of Human Resources and Aviation.

Dow's results of operations and financial condition for the year ended December 31, 2014 are described in further detail in the following discussion and analysis.

## RESULTS OF OPERATIONS

### Net Sales

Net sales for 2014 were \$58.2 billion, up 2 percent from \$57.1 billion in 2013, with volume up 2 percent and price flat. Volume increased in all operating segments, except Performance Plastics which remained flat, with notable increases in Agricultural Sciences and Consumer Solutions (both up 3 percent). Excluding the impact of recent divestitures, Performance Plastics volume was up 1 percent. Volume increased in all geographic areas, led by EMEAI (up 4 percent). Price was flat as increased selling prices were offset by the unfavorable impact of currency. Price increases in Performance Plastics (up 2 percent) were offset by price declines in Agricultural Sciences and Consumer Solutions (both down 1 percent). Infrastructure Solutions and Performance Materials & Chemicals price remained flat. Price increased in North America (up 2 percent) and Latin America (up 1 percent), which was offset by a decline in EMEAI (down 1 percent). Price in Asia Pacific remained flat.

## Table of Contents

Net sales for 2013 were \$57.1 billion, up 1 percent from \$56.8 billion in 2012, with price up 1 percent and volume flat. Price increases in Agricultural Sciences, Performance Materials & Chemicals and Performance Plastics (each up 1 percent) more than offset price declines in Consumer Solutions (down 2 percent) and Infrastructure Solutions (down 1 percent). Price increased in North America and Latin America (both up 2 percent), which more than offset a decline in Asia Pacific (down 2 percent). Price in EMEAI remained flat. Volume was mixed by operating segment with increases in Agricultural Sciences (up 11 percent), Infrastructure Solutions (up 4 percent) and Consumer Solutions (up 3 percent) offset by volume declines in Performance Plastics (down 4 percent) and Performance Materials & Chemicals (down 2 percent). Excluding the impact of recent divestitures, Performance Plastics volume was down 3 percent. Volume increased in Latin America (up 8 percent), Asia Pacific (up 3 percent) and North America (up 1 percent), which was offset by a decline in EMEAI (down 4 percent).

Sales in the United States accounted for 33 percent of total sales in 2014, 33 percent of total sales in 2013 and 32 percent of total sales in 2012. See the Sales Volume and Price tables at the beginning of the section titled “Segment Results” for details regarding the change in sales by operating segment and geographic area. In addition, sales and other information by operating segment and geographic area are provided in Note 25 to the Consolidated Financial Statements.

### Gross Margin

Gross margin was \$10.7 billion in 2014, \$9.5 billion in 2013 and \$9.0 billion in 2012. Gross margin in 2014 was positively impacted by increased sales volume, a \$392 million decrease in purchased feedstock and energy costs, lower other raw material costs and increased operating rates. Gross margin in 2014 was reduced by a \$100 million warranty accrual adjustment related to an exited business (reflected in Infrastructure Solutions) and by \$23 million for asset impairments related to the Dow Electronic Materials business (reflected in Consumer Solutions). See Notes 11 and 14 to the Consolidated Financial Statements for additional information regarding these items.

Gross margin was \$9.5 billion in 2013 and \$9.0 billion in 2012. Gross margin in 2013 was positively impacted by higher selling prices, lower maintenance turnaround costs, and lower expenses resulting from the 2012 Restructuring activities which more than offset a \$319 million increase in purchased feedstock and energy costs and increased performance-based compensation costs. Gross margin in 2013 was reduced by \$181 million for asset impairments and related costs, including the shutdown of manufacturing facilities in the Chlor-Alkali and Vinyl business, Energy & Water Solutions business, Polyurethanes business, Performance Monomers business, Epoxy business and Corporate. The asset impairments and related costs were reflected in the following segments: Infrastructure Solutions (\$95 million), Performance Materials & Chemicals (\$70 million) and Corporate (\$16 million). Gross margin in 2013 was also reduced by \$40 million in implementation costs related to the Company's 2012 Restructuring programs (reflected in Corporate). See Note 11 to the Consolidated Financial Statements for additional information regarding these asset impairments.

Gross margin in 2012 was flat compared with the prior year as a decline in selling prices and decreased volume was offset by a \$2.5 billion decrease in purchased feedstock and energy costs and the favorable impact of currency on costs. Gross margin was also positively impacted by the recovery of previously expensed product liability claims, pursuant to an Insurance Allocation Agreement with Dow Corning.

### Operating Rate

Dow's global plant operating rate was 85 percent of capacity in 2014, compared with 81 percent in 2013 and 2012. Operating rates improved in 2014 primarily due to increased demand and actions taken by management to increase asset utilization. Operating rates remained flat in 2013 compared with the prior year.

### Personnel Count



Personnel count was 53,216 at December 31, 2014, up from 52,731 at December 31, 2013. Headcount increased in 2014 as hiring to support the Company's growth initiatives more than offset declines due to the Company's 2012 Restructuring programs. Personnel count at December 31, 2013, decreased from 54,353 at December 31, 2012, due primarily to the 2012 Restructuring programs.

#### Research and Development Expenses

Research and development ("R&D") expenses were \$1,647 million in 2014, compared with \$1,747 million in 2013 and \$1,708 million in 2012. R&D expenses decreased 6 percent in 2014 primarily due to cost reduction initiatives, notably in Performance Materials & Chemicals. In 2013, R&D expense increased largely due to higher spending on strategic growth initiatives in Agricultural Sciences. In 2013, R&D expenses were also impacted by increased performance-based compensation costs and \$2 million of implementation costs related to the Company's Restructuring programs (reflected in Corporate).

Table of Contents**Selling, General and Administrative Expenses**

Selling, general and administrative (“SG&A”) expenses were \$3,106 million in 2014, compared with \$3,024 million in 2013 and \$2,861 million in 2012. In 2014, SG&A expenses increased 3 percent from 2013, due to increased spending on growth initiatives, primarily in Agricultural Sciences, and increased spending on Company branding initiatives. In 2013, SG&A expenses increased 6 percent from 2012, primarily due to increased performance-based compensation costs and increased spending on growth initiatives in Agricultural Sciences. In addition, SG&A expenses were impacted by \$2 million of implementation costs related to the Company's Restructuring programs in 2013 and \$21 million of Restructuring program implementation costs in 2012 (reflected in Corporate).

**Production Costs and Operating Expenses**

The following table illustrates the relative size of the primary components of total production costs and operating expenses of Dow. More information about each of these components can be found in other sections of Management's Discussion and Analysis of Financial Condition and Results of Operations, and Notes to the Consolidated Financial Statements.

**Production Costs and Operating Expenses**

Cost components as a percent of total	2014		2013		2012	
Hydrocarbon feedstocks and energy	38	%	38	%	37	%
Salaries, wages and employee benefits	15		15		13	
Maintenance	4		4		4	
Depreciation	4		4		4	
Restructuring charges	—		—		3	
Supplies, services and other raw materials	39		39		39	
Total	100	%	100	%	100	%

**Amortization of Intangibles**

Amortization of intangibles was \$436 million in 2014, \$461 million in 2013 and \$478 million in 2012. In 2013, amortization of intangibles was impacted by a \$3 million asset impairment charge (reflected in Corporate). See Notes 9 and 11 to the Consolidated Financial Statements for additional information on this impairment.

**Goodwill and Other Intangible Asset Impairment Losses**

In the fourth quarter of 2014, the Company recognized a pretax charge of \$50 million related to the impairment of intangible assets in the Dow Electronic Materials business, which is included in "Goodwill and other intangible asset impairment losses" in the consolidated statements of income and reflected in Consumer Solutions. See Notes 9 and 11 to the Consolidated Financial Statements for additional information on this impairment.

The Company performs annual goodwill impairment tests during the fourth quarter of the year. In 2014, the Company performed qualitative testing for 9 of the 14 reporting units carrying goodwill and quantitative testing for the remaining five reporting units. As a result of this testing, no goodwill impairments were identified.

In 2013, the Company performed qualitative testing for 14 of the 19 reporting units carrying goodwill and quantitative testing for the remaining five reporting units. As a result of this testing, no goodwill impairments were identified.

During the fourth quarter of 2012, the Company performed qualitative testing for 11 of the 20 reporting units carrying goodwill. The qualitative assessment indicated that it was more likely than not that the fair value exceeded carrying value for those reporting units. The Company performed the first step of the quantitative testing for the remaining nine reporting units. The Company utilized a discounted cash flow methodology to calculate the fair value of the reporting units. Based on the fair value analysis, management concluded that fair value exceeded carrying value for all reporting units except the reporting unit previously known as Dow Formulated Systems. Management completed the second

step of the quantitative test for Dow Formulated Systems which compared the implied fair value of the reporting unit's goodwill to the carrying value. As a result of this test, the Company recorded an impairment loss of \$220 million in the fourth quarter of 2012, which is included in "Goodwill and other intangible asset impairment losses" in the consolidated statements of income and reflected in Performance Materials & Chemicals. The goodwill impairment loss represented the total amount of goodwill carried by the Dow Formulated Systems reporting unit. See Critical Accounting Policies in Other Matters in Management's Discussion and Analysis of Financial Condition and Results of Operations and Note 9 to the Consolidated Financial Statements for additional information regarding goodwill and the impairment tests conducted in each year.

## Table of Contents

### Restructuring Charges (Credits)

On March 27, 2012, the Company's Board of Directors approved a restructuring plan ("1Q12 Restructuring"). The 1Q12 Restructuring plan included the shutdown of a number of facilities and a global workforce reduction. These actions were substantially completed at December 31, 2013. As a result of the 1Q12 Restructuring activities, the Company recorded pretax restructuring charges of \$357 million in the first quarter of 2012 consisting of costs associated with exit and disposal activities of \$150 million, severance costs of \$113 million and asset write-downs and write-offs of \$94 million. The impact of these charges is shown as "Restructuring charges (credits)" in the consolidated statements of income and reflected in the Company's segment results as follows: \$41 million in Infrastructure Solutions, \$203 million in Performance Materials & Chemicals and \$113 million in Corporate. During the fourth quarter of 2012, the Company recorded a favorable adjustment to the 1Q12 Restructuring charge related to the impairment of long-lived assets and other assets of \$4 million, impacting the Infrastructure Solutions segment.

On October 23, 2012, the Company's Board of Directors approved a second restructuring plan ("4Q12 Restructuring"). The restructuring plan included the shutdown of a number of facilities, an impairment charge related to the write-down of Dow Kokam LLC's ("Dow Kokam") long-lived assets and a global workforce reduction. These actions were substantially completed at December 31, 2014. As a result of the 4Q12 Restructuring activities, the Company recorded pretax restructuring charges of \$990 million in the fourth quarter of 2012 consisting of costs associated with exit or disposal activities of \$39 million, severance costs of \$375 million and asset write-downs and write-offs of \$576 million. The impact of these charges is shown as "Restructuring charges (credits)" in the consolidated statements of income and reflected in the Company's segments results as follows: \$136 million in Consumer Solutions, \$24 million in Infrastructure Solutions, \$96 million in Performance Materials & Chemicals, \$33 million in Performance Plastics and \$701 million in Corporate.

During the fourth quarter of 2013, the Company recognized a pretax gain of \$16 million for adjustments to asbestos abatement costs and contract cancellation fees related to the 1Q12 Restructuring plan and a \$6 million pretax gain for adjustments to contract cancellation fees related to the 4Q12 Restructuring plan. These gains were included in "Restructuring charges (credits)" in the consolidated statements of income and reflected in Performance Materials & Chemicals (\$15 million), Performance Plastics (\$6 million) and Infrastructure Solutions (\$1 million).

During the fourth quarter of 2014, the Company recognized a pretax gain of \$3 million for adjustments to contract cancellation fees related to the 4Q12 Restructuring plan. The gain was included in "Restructuring charges (credits)" in the consolidated statements of income and reflected in Performance Materials & Chemicals. See Note 3 to the Consolidated Financial Statements for details on the 2012 Restructuring programs.

### Asbestos-related Charge

The Company recorded a pretax charge of \$78 million (reflected in Corporate) for an increase in the asbestos-related liability for pending and future claims (excluding defense and processing costs). Union Carbide Corporation, a wholly owned subsidiary of the Company, determined that an adjustment to the asbestos accrual was required due to an increase in mesothelioma claim activity compared with what had been previously forecasted. See Note 14 to the Consolidated Financial Statements for details on the asbestos-related charge.

### Equity in Earnings of Nonconsolidated Affiliates

Dow's share of the earnings of nonconsolidated affiliates in 2014 was \$835 million, compared with \$1,034 million in 2013 and \$536 million in 2012. In 2014, equity earnings decreased primarily due to lower earnings at EQUATE, TKSC and MEGlobal and increased losses at Sadara which were partially offset by increased earnings at Dow Corning. In 2013, equity earnings increased compared with 2012 primarily due to increased earnings at Dow Corning, EQUATE, TKSC and MEGlobal as well as improved results from The SCG-Dow Group, Sadara and Map Ta Phut Olefins Company Limited. Equity earnings for 2013 also included a \$10 million loss related to asset impairment charges at a formulated electrolytes manufacturing joint venture (reflected in Corporate). In 2012, equity earnings

decreased primarily due to lower earnings at Dow Corning, MEGlobal and The SCG-Dow Group as well as equity losses from Sadara equal to the Company's share of development expenses. Equity earnings for 2012 also included a \$73 million loss related to project development and other costs associated with the contribution of development costs to Sadara (reflected in Corporate).

During 2012, Dow Corning's sales of solar-grade polycrystalline silicon products declined, driven by depressed prices and declining sales volume that resulted from the July 2012 Chinese Ministry of Commerce ("MOFCOM") antidumping and countervailing duty investigations of U.S. and Korean-based solar-grade polycrystalline silicon products. In response to these market conditions, Dow Corning recorded an impairment charge in the fourth quarter of 2012 related to the abandonment of a partially constructed polycrystalline silicon plant expansion. The Company's share of this charge was \$59 million. Dow Corning also delayed the start-up of another polycrystalline silicon plant expansion, pending market condition improvements.

## Table of Contents

Furthermore, Dow Corning initiated restructuring actions in the fourth quarter of 2012, including workforce reductions and asset impairments, of which Dow's share of the charge was approximately \$30 million.

In January 2014, MOFCOM issued a final determination that China's solar-grade polycrystalline silicon industry suffered material damage because of dumping, which resulted in antidumping duties of 53.3 percent and countervailing duties of 2.1 percent on future imports from Dow Corning into China. During the fourth quarter of 2014, Dow Corning determined its polycrystalline silicon plant expansion in Clarksville, Tennessee, which was delayed in 2012, would not be economically viable and made the decision to permanently abandon the assets. This decision was made after review of sustained adverse market conditions and continued oversupply, the cost of operating the facility and the ongoing impact of tariffs on polycrystalline silicon imported into China. Dow's share of the charge related to this asset abandonment was \$500 million (reflected in Infrastructure Solutions). As a result of the significant change in the use of this asset, Dow Corning assessed whether the carrying value of all remaining polycrystalline silicon assets might be impaired. Dow Corning's estimates of future undiscounted cash flows indicated the polycrystalline silicon asset group was recoverable.

In May 1995, Dow Corning filed for protection under Chapter 11 of the U.S Bankruptcy Code to address pending and claimed liabilities arising from breast implant product lawsuits. On June 1, 2004, Dow Corning's Joint Plan of Reorganization (the "Plan") became effective and Dow Corning emerged from bankruptcy. Under the Plan, Dow Corning established and agreed to fund a products liability settlement program (the "Settlement Facility"). The Plan contains a cap on the amount of payments required from Dow Corning to fund the Settlement Facility. During the fourth quarter of 2014, Dow Corning, with the assistance of a third-party advisor, developed an estimate of the future Implant Liability based on evidence that the actual funding required for the Settlement Facility is expected to be lower than the full funding cap set forth in the Plan. As a result, Dow Corning reduced its Implant Liability by approximately \$1.3 billion. The revised Implant Liability reflects Dow Corning's best estimate of its remaining obligations under the Plan. Dow's share of the Implant Liability reduction was \$407 million (\$155 million reflected in Consumer Solutions and \$252 million reflected in Infrastructure Solutions). See Note 8 to the Consolidated Financial Statements for additional information on nonconsolidated affiliates.

### Sundry Income (Expense) - Net

Sundry income (expense) - net includes a variety of income and expense items such as the gain or loss on foreign currency exchange, dividends from investments, and gains and losses on sales of investments and assets. Sundry income (expense) - net for 2014 was net expense of \$27 million, compared with net income of \$2,554 million in 2013 and net expense of \$27 million in 2012.

In 2014, sundry income (expense) - net included a gain related to the termination of an off-take agreement and gains on asset sales which were more than offset by foreign currency exchange losses, venture capital investment losses and \$49 million of transaction expenses related to the planned separation of the Company's chlorine value chain (reflected in Corporate).

In 2013, sundry income (expense) - net included a gain of \$2.161 billion related to damages awarded to the Company in the K-Dow arbitration proceeding (reflected in Corporate), a \$451 million gain on the sale of the Polypropylene Licensing and Catalysts business (reflected in Performance Plastics), an \$87 million gain on the sale of a 7.5 percent ownership interest in Freeport LNG Development, L.P. (reflected in Performance Plastics), a \$26 million gain on the sale of the Company's ownership interest in Dow Kokam (reflected in Corporate), gains on asset sales and equity method investments and a \$326 million loss on the early extinguishment of debt (reflected in Corporate).

In 2012, sundry income (expense) - net included a \$123 million loss on the early extinguishment of debt (reflected in Corporate), foreign currency exchange losses and non-income tax related expenses which were partially offset by gains related to small divestitures and asset sales and a gain related to post-closing adjustments on the sale of a

contract manufacturing business (reflected in Performance Materials & Chemicals). See Liquidity and Capital Resources in Management's Discussion and Analysis of Financial Condition and Results of Operations, and Note 16 to the Consolidated Financial Statements for additional information related to the early extinguishment of debt; Note 5 to the Consolidated Financial Statements for additional information concerning the Company's divestitures; and Note 14 to the Consolidated Financial Statements for additional information related to the K-Dow arbitration proceeding.

#### Net Interest Expense

Net interest expense (interest expense less capitalized interest and interest income) was \$932 million in 2014, down from \$1,060 million in 2013 and \$1,228 million in 2012, reflecting the impact of the Company's 2013 deleveraging activities and lower debt financing costs. Interest income was \$51 million in 2014 and \$41 million in 2013 and 2012. Interest expense (net of capitalized interest) and amortization of debt discount totaled \$983 million in 2014, \$1,101 million in 2013 and \$1,269 million in 2012. See Liquidity and Capital Resources in Management's Discussion and Analysis of Financial Condition and Results of Operations and Note 16 to the Consolidated Financial Statements for additional information related to debt financing activity.

## Table of Contents

### Provision for Income Taxes

The provision for income taxes was \$1,426 million in 2014, compared with \$1,988 million in 2013 and \$565 million in 2012. The Company's effective tax rate fluctuates based on, among other factors, where income is earned, reinvestment assertions regarding earned income and the level of income relative to tax credits available. For example, as the percentage of foreign sourced income increases, the Company's effective tax rate declines. The Company's tax rate is also influenced by the level of equity earnings, since most of the earnings from the Company's equity method investments are taxed at the joint venture level. The underlying factors affecting the Company's overall tax rate are summarized in Note 22 to the Consolidated Financial Statements.

The tax rate for 2014 was positively impacted by the geographic mix of earnings, with the most notable components being improved profitability in Europe and Asia Pacific. Equity earnings have remained strong, providing additional favorable impact on the tax rate. The tax rate was also favorably impacted by a reduction in the tax impact on remittances by foreign subsidiaries to the United States. The tax rate was negatively impacted by a continued increase in statutory income in Latin America due to local currency devaluations, and increases in valuation allowances, primarily in Asia Pacific. These factors resulted in an effective tax rate of 27.1 percent for 2014.

The tax rate for 2013 was favorably impacted by increased equity earnings; the K-Dow arbitration award, due to favorable tax treatment of certain components of the award; and changes in valuation allowances in the United States on state income tax attributes and capital loss carryforwards. The tax rate was unfavorably impacted by adjustments to uncertain tax positions related to court rulings on two separate tax matters and the establishment of valuation allowances outside the United States. Additionally, the tax rate was unfavorably impacted by an increase in statutory taxable income in Latin America, primarily due to local currency devaluation. These factors resulted in an effective tax rate of 29.2 percent for 2013.

The tax rate for 2012 was negatively impacted by a change in the geographic mix of earnings, notably a decrease in earnings in Europe and an increase in earnings in the United States, as well as reductions in equity earnings. Equity earnings were further impacted by asset impairment and restructuring charges at Dow Corning. Additionally, the Company's impairment of the Dow Formulated Systems reporting unit goodwill and the impairment of the long-lived assets of Dow Kokam received minimal tax relief. The tax rate was favorably impacted by a change in the permanent reinvestment assertions of certain affiliates in Europe and Asia Pacific; however, this was primarily offset by unfavorable adjustments to uncertain tax positions and valuation allowances. These factors resulted in an effective tax rate of 33.9 percent for 2012.

### Net Income (Loss) Attributable to Noncontrolling Interests

Net income (loss) attributable to noncontrolling interests was net income of \$67 million in 2014, net income of \$29 million in 2013 and net loss of \$82 million in 2012. Net income (loss) attributable to noncontrolling interests increased in 2014 compared with 2013, primarily due to increased earnings at certain Performance Materials & Chemicals joint ventures and the 2013 divestiture of Dow Kokam. Net income (loss) attributable to noncontrolling interests increased in 2013 compared with 2012, primarily due to reduced losses at Dow Kokam, which was impacted by a significant restructuring charge related to the write-down of long-lived assets in the fourth quarter of 2012. On November 22, 2013, the Company sold its ownership interest in Dow Kokam. See Notes 3 and 5 to the Consolidated Financial Statements for details on the Dow Kokam impairment charge and divestiture. See Note 24 to the Consolidated Financial Statements for additional information concerning noncontrolling interests.

### Preferred Stock Dividends

Preferred stock dividends of \$340 million were recognized in 2014, 2013 and 2012. These dividends related to the Company's Cumulative Convertible Perpetual Preferred Stock, Series A. See Note 21 to the Consolidated Financial Statements for additional information.



#### Net Income Available for Common Stockholders

Net income available for common stockholders was \$3,432 million (\$2.87 per share) in 2014, compared with \$4,447 million (\$3.68 per share) in 2013 and \$842 million (\$0.70 per share) in 2012.

#### Certain Items Impacting Results

The Company's management believes that measures of income adjusted to exclude certain items ("non-GAAP" financial measures) provide relevant and meaningful information to investors about the ongoing operating results of the Company. Such financial measures are not recognized in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP") and should not be viewed as an alternative to U.S. GAAP financial measures of performance.

Table of Contents

The following table summarizes the impact of certain items recorded in 2014, 2013 and 2012:

Certain Items Impacting Results In millions, except per share amounts	Pretax Impact (1)			Impact on Net Income (2)			Impact on EPS (3) (4)		
	2014	2013	2012	2014	2013	2012	2014	2013	2012
Adjusted to exclude certain items (non-GAAP measures)				\$3,709	\$2,981	\$2,249	\$3.11	\$2.48	\$1.90
Certain items:									
Cost of sales:									
Asset impairments and related costs	\$(23 )	\$(181 )	\$—	(14 )	(124 )	—	(0.01 )	(0.10 )	—
Warranty accrual adjustment of exited business	(100 )	—	—	(63 )	—	—	(0.05 )	—	—
Restructuring plan implementation costs	—	(40 )	(1 )	—	(29 )	(1 )	—	(0.03 )	—
Research and development expenses:									
Restructuring plan implementation costs	—	(2 )	—	—	(1 )	—	—	—	—
Selling, general and administrative expenses:									
Restructuring plan implementation costs	—	(2 )	(21 )	—	(2 )	(13 )	—	—	(0.01 )
Amortization of intangibles:									
Asset impairments and related costs	—	(3 )	—	—	(2 )	—	—	—	—
Goodwill and other intangible asset impairment losses	(50 )	—	(220 )	(33 )	—	(220 )	(0.03 )	—	(0.19 )
Restructuring (charges) credits (5)	—	22	(1,343 )	—	21	(951 )	—	0.02	(0.82 )
Asbestos-related charge	(78 )	—	—	(49 )	—	—	(0.04 )	—	—
Equity in earnings of nonconsolidated affiliates:									
Dow Corning implant liability adjustment	407	—	—	378	—	—	0.32	—	—
Dow Corning Clarksville site abandonment	(500 )	—	—	(465 )	—	—	(0.40 )	—	—
Dow Corning restructuring and asset abandonment	—	—	(89 )	—	—	(82 )	—	—	(0.07 )
Sadara development and other costs	—	—	(73 )	—	—	(70 )	—	—	(0.06 )
Asset impairments at a formulated electrolytes joint venture	—	(10 )	—	—	(6 )	—	—	(0.01 )	—
Sundry income (expense) - net:									
Gain from K-Dow settlement	—	2,161	—	—	1,647	—	—	1.37	—
Gain on sale of contract manufacturing business	—	—	8	—	—	8	—	—	0.01
	—	451	—	—	356	—	—	0.29	—

Gain on sale of Polypropylene  
Licensing and Catalysts  
business

Gain on sale of a 7.5 percent  
interest in Freeport LNG  
Development, L.P.

Gain on sale of ownership  
interest in Dow Kokam

Loss on early extinguishment  
of debt

Chlorine value chain  
separation costs

Provision for income taxes:

Uncertain tax position  
adjustments

Total certain items

Dilutive effect of assumed  
preferred stock conversion into  
shares of common stock

Reported U.S. GAAP Amounts

(6) (7)

(1) Impact on "Income Before Income Taxes."

(2) Impact on "Net Income Available for The Dow Chemical Company Common Stockholders."

(3) Impact on "Earnings per common share - diluted."

(4) For the year ended December 31, 2013, conversion of the Company's Cumulative Convertible Perpetual Preferred Stock, Series A into shares of the Company's common stock was excluded from the calculation of "Diluted earnings per share adjusted to exclude certain items" as well as the earnings per share impact of certain items because the effect of including them would have been antidilutive.

"Restructuring (charges) credits" in 2012 include \$304 million of asset impairments and severance costs related to Dow Kokam LLC which, at the time of the charge, was owned 63.6 percent by Dow. The Dow Kokam restructuring impact on "Net Income Available for The Dow Chemical Company Common Stockholders" was reduced by \$7 million of tax credits and \$108 million of net loss attributable to noncontrolling interests. The Company's share of the Dow Kokam charge, after tax and noncontrolling interests, was \$189 million.

(6) For the year ended December 31, 2013, an assumed conversion of the Company's Cumulative Convertible Perpetual Preferred Shares, Series A into shares of the Company's common stock was included in the calculation of diluted earnings per share (reported U.S. GAAP amount).

(7) The Company used "Net Income Attributable to The Dow Chemical Company" when calculating diluted earnings per share (reported U.S. GAAP amount) for the twelve-month period ended December 31, 2013, as it excludes preferred dividends of \$340 million.

## Table of Contents

### SEGMENT RESULTS

Beginning in the fourth quarter of 2014, the Company changed its reportable segments as a result of changes in the Company's organization. Following are the new segments along with key changes:

#### AGRICULTURAL SCIENCES

No changes

#### CONSUMER SOLUTIONS

Previously part of the Electronic and Functional Materials segment and includes:

Consumer Care, formerly named Functional Materials, which consists of:

- Dow Home, Institutional & Personal Care Solutions, previously part of the Dow Consumer and Industrial Solutions global business
- Dow Pharma and Food Solutions
- SAFECHEM, previously aligned with the Chlorinated Organics global business
- Dow Automotive Systems, previously aligned with the Performance Materials segment
- Dow Electronic Materials

#### INFRASTRUCTURE SOLUTIONS

Formerly named Coatings and Infrastructure Solutions and includes:

-Dow Building & Construction

-Dow Coating Materials

-Energy & Water Solutions which consists of:

- Dow Microbial Control, previously part of the Functional Materials global business
- Dow Oil, Gas & Mining, formerly a global business aligned with the Performance Materials segment
- Dow Solar, previously part of the Dow Building & Construction global business
- Dow Water and Process Solutions, formerly a global business

-Performance Monomers, includes Acrolein, previously part of the Functional Materials global business and Dow  
-Plastics Additives, formerly a global business aligned with the Performance Materials segment

#### PERFORMANCE MATERIALS & CHEMICALS

-Chlor-Alkali and Vinyl, previously part of the Feedstocks and Energy segment

-Chlorinated Organics

-Epoxy, includes Epoxy Coatings which was previously part of the Dow Coating Materials global business and Epoxy  
Systems, previously part of the Dow Formulated Systems global business

-Industrial Solutions

-Amines, formerly a global business; includes Organic Specialties and Quaternaries, previously part of the Functional  
Materials global business

-Ethylene Oxide/Ethylene Glycol ("EO/EG"), formerly a global business aligned with the Feedstocks and Energy  
segment

-Other Industrial Solutions, includes ANGUS Chemical and Sodium Borohydride, previously part of the Functional  
Materials global business

-Oxygenated Solvents, formerly a global business

-Polyglycols, Surfactants & Fluids, formerly a global business

-Polyurethanes

-Isocyanates

-Polyols

-Polyurethane Systems, previously part of the Dow Formulated Systems global business

-Propylene Oxide/Propylene Glycol ("PO/PG"), formerly a global  
business

PERFORMANCE PLASTICS

•Dow Elastomers

•Dow Electrical and Telecommunications

•Dow Packaging and Specialty Plastics

•Energy, previously aligned with the Feedstocks and Energy segment

•Hydrocarbons, previously aligned with the Feedstocks and Energy segment

Table of Contents

In addition to the segment and business changes, the Company also changed the assignment of certain expenses previously aligned with the Corporate segment to better reflect operating segment results and profitability. All leveraged functional costs (i.e., information systems, finance, human resources, legal, supply chain, etc.) are now fully allocated to the segments. In addition, long-term performance-based compensation expense, including the Employee Stock Purchase Plan, stock options, deferred stock and performance deferred stock, are now allocated to the segments based primarily on employee alignment.

The reporting changes are retrospectively reflected in the following discussion of segment results for all periods presented.

The Company uses EBITDA (which Dow defines as earnings (i.e., "Net Income") before interest, income taxes, depreciation and amortization) as its measure of profit/loss for segment reporting purposes. EBITDA by operating segment includes all operating items relating to the businesses; items that principally apply to the Company as a whole are assigned to Corporate. Additional information regarding the Company's operating segments and a reconciliation of EBITDA to "Income Before Income Taxes" can be found in Note 25 to the Consolidated Financial Statements.

Due to the completion of several divestitures (see Note 5 to the Consolidated Financial Statements), the change in sales volume from 2013 to 2014, 2012 to 2013 and 2011 to 2012 excluding divestitures is also provided by operating segment, where applicable. Sales excluding divestitures exclude sales of the Polypropylene Licensing and Catalysts business, divested on December 2, 2013 (part of the Performance Plastics segment); sales related to Nippon Unicar Company Limited, divested on July 1, 2013 (part of the Performance Plastics segment); sales of the Polypropylene business, divested on September 30, 2011 (part of the Performance Plastics segment); and sales of Dow Haltermann, divested during 2011 (part of Performance Materials & Chemicals segment).

Table of Contents

## SALES VOLUME AND PRICE BY OPERATING SEGMENT AND GEOGRAPHIC AREA

## Sales Volume and Price by Operating Segment and Geographic Area

	2014			2013			2012			
Percent change from prior year	Volume	Price	Total	Volume	Price	Total	Volume	Price	Total	
Operating Segments:										
Agricultural Sciences	3	% (1 )	% 2	% 11	% 1	% 12	% 10	% 3	% 13	%
Consumer Solutions	3	(1 )	2	3	(2 )	1	(4 )	(1 )	(5 )	)
Infrastructure Solutions	1	—	1	4	(1 )	3	1	(5 )	(4 )	)
Performance Materials & Chemicals	2	—	2	(2 )	1	(1 )	(2 )	(6 )	(8 )	)
Performance Plastics	—	2	2	(4 )	1	(3 )	(5 )	(3 )	(8 )	)
Total	2	% —	% 2	% —	% 1	% 1	% (2 )	%) (3 )	%) (5 )	%)
Geographic Areas:										
(1)										
United States	2	% 2	% 4	% —	% 2	% 2	% (2 )	%) (3 )	%) (5 )	%)
Europe, Middle East, Africa and India	3	(1 )	2	(4 )	—	(4 )	(3 )	(5 )	(8 )	)
Rest of World	(1 )	—	(1 )	4	—	4	—	(3 )	(3 )	)
Total	2	% —	% 2	% —	% 1	% 1	% (2 )	%) (3 )	%) (5 )	%)

## Sales Volume and Price by Operating Segment and Geographic Area

## Excluding Divestitures (2)

	2014			2013			2012			
Percent change from prior year	Volume	Price	Total	Volume	Price	Total	Volume	Price	Total	
Operating Segments:										
Agricultural Sciences	3	% (1 )	% 2	% 11	% 1	% 12	% 10	% 3	% 13	%
Consumer Solutions	3	(1 )	2	3	(2 )	1	(4 )	(1 )	(5 )	)
Infrastructure Solutions	1	—	1	4	(1 )	3	1	(5 )	(4 )	)
Performance Materials & Chemicals	2	—	2	(2 )	1	(1 )	(1 )	(6 )	(7 )	)
Performance Plastics	1	2	3	(3 )	1	(2 )	1	(3 )	(2 )	)
Total	2	% —	% 2	% —	% 1	% 1	% 1	% (4 )	%) (3 )	%)
Geographic Areas:										
(1)										
United States	2	% 2	% 4	% —	% 2	% 2	% —	% (2 )	%) (2 )	%)
Europe, Middle East, Africa and India	4	(1 )	3	(4 )	—	(4 )	1	(5 )	(4 )	)
Rest of World	—	—	—	6	—	6	1	(3 )	(2 )	)
Total	2	% —	% 2	% —	% 1	% 1	% 1	% (4 )	%) (3 )	%)
(1)										

Sales to customers in the Indian subcontinent, previously reported with Rest of World, are now aligned with Europe, Middle East, Africa and India; prior period sales have been adjusted to reflect this realignment.

Excludes sales of the Polypropylene Licensing and Catalysts business, divested on December 2, 2013; sales related (2) to Nippon Unicar Company Limited, divested on July 1, 2013; sales of the Polypropylene business, divested on September 30, 2011; and sales of Dow Haltermann, divested during 2011.



Table of Contents**AGRICULTURAL SCIENCES**

The Agricultural Sciences segment is a global leader in providing crop protection and seed/plant biotechnology products and technologies, urban pest management solutions and healthy oils. The business invents, develops, manufactures and markets products for use in agricultural, industrial and commercial pest management, and food service. Agricultural Sciences consists of two businesses - Crop Protection and Seeds.

Agricultural Sciences	2014	2013	2012	
In millions				
Sales	\$7,290	\$7,137	\$6,382	
Price change from comparative period	(1	)% 1	% 3	%
Volume change from comparative period	3	% 11	% 10	%
Equity earnings	\$4	\$5	\$1	
EBITDA	\$962	\$894	\$923	

**2014 Versus 2013**

Agricultural Sciences sales were \$7,290 million in 2014, up 2 percent from \$7,137 million in 2013, a record for the segment and both businesses. Compared with last year, volume was up 3 percent and price was down 1 percent due to the unfavorable impact of currency. Sales gains were reported in both businesses, driven by the introduction and ramp up of new products and technologies, and in all geographic areas, except North America. Crop Protection sales were up 3 percent due to increased demand for new products, which increased 20 percent, and continued strong demand for rice and cereal herbicides. Seeds sales increased 1 percent as volume gains in soybeans and cotton seeds and the favorable impact of a one-time gain related to the end of a licensing agreement were partially offset by volume declines in corn, canola and sunflower seeds.

EBITDA for 2014 was \$962 million, a record for the segment and the Crop Protection business, compared with \$894 million in 2013. EBITDA increased as volume growth in Crop Protection and Seeds more than offset a decline in selling prices (driven almost entirely by the unfavorable impact of currency) and increased investment in SG&A to support continuing growth initiatives.

**2013 Versus 2012**

Agricultural Sciences sales were \$7,137 million in 2013, up 12 percent from \$6,382 million in 2012. Compared with 2012, volume increased 11 percent and price increased 1 percent. Latin America reported 21 percent sales growth and North America sales increased 13 percent. Crop Protection sales were up 10 percent driven by new product sales, which increased 14 percent, while strong sales growth was also reported for the spinosyns and the corn and cereal herbicide portfolios. Seeds sales increased 19 percent with strong growth across most major crop portfolios. SmartStax® Corn Hybrids posted record sales growth driven by the ramp up of POWERCORE™ Insect Trait Technology in Latin America and REFUGE ADVANCED® Seed in North America.

EBITDA for 2013 was \$894 million, compared with \$923 million in 2012. EBITDA declined primarily due to higher operating expenses and increased spending on growth investments which offset strong sales growth in the Americas led by favorable global agricultural and food industry conditions, new product sales and new seed technologies.

**Agricultural Sciences Outlook for 2015**

Agricultural Sciences sales for 2015 are expected to grow above the levels achieved in 2014, with growth expected in all geographic areas. A continuation of the market dynamics experienced in the second half of 2014 is expected to sustain lower than historical average crop commodity prices and flat industry growth rates in the short-term. The Crop Protection business expects continued sales growth from spinetoram and ISOCLAST™ Insecticides, N-SERVE™ Nitrogen Stabilizer and aminopyralid and ARYLEX™ Herbicides. Strong demand for corn and canola seeds is expected to drive sales growth in the Seeds business.

On September 17, 2014, the U.S. Department of Agriculture issued deregulation decisions for Dow AgroSciences LLC's ENLIST™ Corn and Soybean events. On October 15, 2014, the Company announced it received registration from the U.S. Environmental Protection Agency for ENLIST DUO™, the companion herbicide for use with ENLIST™ Corn and Soybeans, in six key states. The Company expects a limited, stewarded launch of ENLIST™ Corn Seeds in the United States in 2015, with harvested seeds strictly controlled and limited sales.

On July 2, 2014, Dow AgroSciences LLC ("DAS") signed a binding agreement to purchase Cooperativa Central de Pesquisa Agrícola's ("Coodetec") seed business, pending regulatory approval by the Brazilian Antitrust Authority ("CADE"). CADE approved the transaction on December 12, 2014. On January 30, 2015, DAS acquired Coodetec's seed business for

Table of Contents

approximately \$145 million, with approximately half of the purchase price to be paid in the first quarter of 2015 and the remaining portion to be paid in two equal installments in February 2016 and February 2017. The acquisition of Coodetec's seed business is expected to advance the development of Dow AgroSciences' soybean program and strengthen the Company's position in the corn market segment.

On October 2, 2014, the Company announced the AgroFresh business is being marketed for divestment, in line with the Company's plans to divest non-strategic businesses and assets.

**CONSUMER SOLUTIONS**

The Consumer Solutions segment consists of three global businesses – Consumer Care, Dow Automotive Systems and Dow Electronic Materials – and includes a portion of the Company's share of the results of Dow Corning, a joint venture of the Company. Consumer Care includes Dow Home, Institutional & Personal Care Solutions; Dow Pharma and Food Solutions; and SAFECHEM. Dow Automotive Systems includes Adhesives and Performance Solutions. Dow Electronic Materials includes Semiconductor Technologies, Interconnect Technologies, Display Technologies and Growth Technologies.

Consumer Solutions	2014	2013	2012	
In millions				
Sales	\$4,639	\$4,562	\$4,518	
Price change from comparative period	(1	)% (2	)% (1	)%
Volume change from comparative period	3	% 3	% (4	)%
Equity earnings	\$281	\$107	\$87	
EBITDA	\$1,130	\$933	\$773	
Certain items impacting EBITDA	\$82	\$—	\$(144	)

**2014 Versus 2013**

Consumer Solutions sales were \$4,639 million in 2014, up from \$4,562 million in 2013. Sales increased 2 percent from 2013, with volume up 3 percent and price down 1 percent (with more than one-third of the price decline due to currency). Volume increased in all businesses and all geographic areas, except Latin America. Volume gains in Dow Automotive Systems were driven by continued recovery in the North America transportation sector and modest recovery in Europe. Dow Electronic Materials volume increased primarily due to higher demand for photolithography materials and chemical mechanical planarization pads, which more than offset lower demand for films and filters and organic light-emitting diode ("OLED") materials. Volume increased in Consumer Care due to strong demand for cellulose used in food and pharmaceutical applications. Price declines were driven by Dow Electronic Materials, primarily in Asia Pacific due to continued competitive pricing pressure and the weakening Japanese yen. Price remained flat in Consumer Care and Dow Automotive Systems. Price gains in North America were more than offset by declines in EMEA and Asia Pacific.

EBITDA for 2014 was \$1,130 million, up from \$933 million in 2013. Compared with 2013, EBITDA increased as higher sales volume, increased equity earnings from Dow Corning and lower R&D expenses more than offset lower selling prices. EBITDA in 2014 was impacted by a \$155 million gain related to Dow Corning's adjustment of its implant liability and a \$73 million charge related to asset impairments in Dow Electronic Materials. See Notes 8, 9 and 11 to the Consolidated Financial Statements for additional information on these items.

**2013 Versus 2012**

Consumer Solutions sales were \$4,562 million for 2013, up from \$4,518 million in 2012. Sales increased 1 percent from 2012, with volume up 3 percent and price down 2 percent (with more than one-third of the price decline due to currency). Volume increased in all businesses. Volume gains in Asia Pacific and North America more than offset

small declines in EMEAI and Latin America. Dow Electronic Materials volume increased primarily due to higher demand for OLED materials used in consumer electronics. Dow Automotive Systems volume increased as a result of stronger demand in the North American transportation sector. Volume increased in Consumer Care due to strong demand for cellulose used in food and pharmaceutical applications. Price declines in Asia Pacific, primarily due to the weakening Japanese yen, and Latin America more than offset increases in North America and EMEAI. Price decreased in all businesses, except Dow Automotive Systems. The decrease in price was driven by continued competitive pressure in Dow Electronic Materials and price/volume optimization efforts in Consumer Care, notably cellulose.

EBITDA for 2013 was \$933 million, up from \$773 million in 2012. Compared with 2012, EBITDA increased as higher sales volume, higher equity earnings from Dow Corning and lower R&D and SG&A expenses more than offset lower selling prices and higher feedstock and energy costs. EBITDA in 2012 was negatively impacted by \$136 million of 4Q12 Restructuring

Table of Contents

charges, primarily related to the shutdown of certain assets in Dow Automotive Systems, and an \$8 million charge related to Dow Corning's restructuring and asset abandonment. See Notes 3 and 8 to the Consolidated Financial Statements for additional information on these charges.

## Consumer Solutions Outlook for 2015

Consumer Solutions sales are expected to grow in 2015. Consumer Care sales are expected to increase driven by higher demand for cellulose used in food and pharmaceutical applications and in home and personal care products. Dow Automotive Systems sales volume is expected to achieve modest growth driven by new products, including BETAMATE™ Structural Adhesives, and continued recovery in the transportation sector in North America and China while expected growth in Europe may be hindered by Eurozone economic concerns. Dow Electronic Materials expects sales growth driven by increased demand for portable electronics and mobile devices as a result of low global oil prices, which is expected to outweigh weakening demand for films and filters.

## INFRASTRUCTURE SOLUTIONS

The Infrastructure Solutions segment consists of the following businesses: Dow Building & Construction, Dow Coating Materials, Energy & Water Solutions, and Performance Monomers; and includes a portion of the Company's share of the results of Dow Corning, a joint venture of the Company.

Infrastructure Solutions In millions	2014	2013	2012
Sales	\$8,429	\$8,339	\$8,071
Price change from comparative period	—	% (1	)% (5
Volume change from comparative period	1	% 4	% 1
Equity earnings (losses)	\$(6	) \$126	\$58
EBITDA	\$817	\$941	\$963
Certain items impacting EBITDA	\$(348	) \$(94	) \$(142

## 2014 Versus 2013

Infrastructure Solutions sales were \$8,429 million in 2014, up from \$8,339 million in 2013. Sales increased 1 percent, entirely due to volume. Volume was higher in all geographic areas, except EMEAI which was impacted by weakened demand. Dow Building & Construction volume increased due to higher demand for insulation products in North America. Dow Coating Materials volume increased in all geographic areas due to higher demand for architectural and industrial coatings. Energy & Water Solutions volume increased across most geographic areas due to strong demand fundamentals in the oil and gas industry as well as higher demand for specialty materials used in energy and industrial water applications. Performance Monomers volume decreased due to long acrylate market conditions, extended planned and unplanned maintenance turnarounds in vinyl acetate monomers, and a plastic additives plant closure which reduced market participation. Price was flat as selling price gains were offset by the unfavorable impact of currency. Price was mixed by geographic area as gains in Latin America and North America were offset by declines in EMEAI and Asia Pacific. Price was down in all businesses, except Performance Monomers.

EBITDA for 2014 was \$817 million, compared with \$941 million in 2013. EBITDA in 2014 included a \$500 million loss related to Dow Corning's abandonment of a polycrystalline silicon plant expansion in Clarksville, Tennessee, and a \$252 million gain related to Dow Corning's adjustment of its implant liability, with both items impacting equity earnings. EBITDA in 2014 was also impacted by a \$100 million charge for a warranty accrual adjustment related to an exited business. EBITDA in 2013 included \$95 million of asset impairments and related costs in the Energy & Water Solutions and Performance Monomers businesses and a \$1 million gain in Dow Building & Construction for an adjustment to asbestos abatement costs related to the 1Q12 Restructuring program. See Notes 3, 8, 11 and 14 to the Consolidated Financial Statements for additional information on these certain items. Excluding these certain items,

EBITDA increased in 2014 as higher equity earnings from Dow Corning and higher sales volume more than offset increased propylene costs and higher freight expenses.

#### 2013 Versus 2012

Infrastructure Solutions sales were \$8,339 million in 2013, up from \$8,071 million in 2012. Sales increased 3 percent, with volume up 4 percent and price down 1 percent. Volume was higher in all businesses and all geographic areas. Energy & Water Solutions volume increased due to higher demand for specialty materials used in energy and industrial water applications as well as strong demand fundamentals in the oil and gas industry. Dow Coating Materials volume increased due to higher demand for architectural and industrial coatings, primarily in North America driven by improved end-use market conditions. Performance Monomers volume increased in all geographic areas, primarily driven by higher demand for acrylic acid used in coating and adhesives applications. Dow Building & Construction volume increased due to higher demand for insulation

Table of Contents

products in all geographic areas, except North America. Price decreased in most geographic areas, most notably in Asia Pacific due to the unfavorable impact of currency. Price increased in North America driven by higher feedstocks and energy costs. Modest price gains in Performance Monomers and Dow Coating Materials were more than offset by declines in Dow Building & Construction and Energy & Water Solutions.

EBITDA for 2013 was \$941 million, down from \$963 million in 2012. EBITDA in 2013 was negatively impacted by \$94 million of certain items, as previously discussed. EBITDA in 2012 included \$37 million of restructuring charges related to the 1Q12 Restructuring plan consisting of asset write-downs and write-offs of \$33 million and costs associated with exit or disposal activities of \$4 million. The 4Q12 Restructuring plan included \$24 million for asset write-downs and write-offs. In addition, EBITDA in 2012 included an \$81 million charge related to Dow Corning's restructuring and asset abandonment. See Notes 3 and 8 to the Consolidated Financial Statements for additional information on these charges. Excluding these certain items, EBITDA decreased in 2013 as lower selling prices and higher feedstock and energy and other raw material costs more than offset higher sales volume and the favorable impact of currency on costs.

**Infrastructure Solutions Outlook for 2015**

Infrastructure Solutions sales are likely to be lower in 2015, primarily due to pressure on selling prices as a result of declining feedstock prices and unfavorable currency impacts due to the strengthening U.S. dollar, partially offset by higher demand. Dow Building & Construction sales are expected to increase, primarily driven by higher demand for insulation products in North America. Dow Coating Materials sales demand is expected to increase due to global economic conditions and innovative products. Energy & Water Solutions expects strong demand for differentiated products utilized in energy and water applications offset by lower demand in the oil and gas exploration industry due to the impact of lower oil prices. Performance Monomers volume is expected to be flat to slightly higher as improved plant operating rates and global economic conditions are expected to improve supply and demand balances for vinyl acetate monomers while volume for acrylates is expected to be flat due to capacity additions within the industry.

**PERFORMANCE MATERIALS & CHEMICALS**

The Performance Materials & Chemicals segment consists of the following businesses: Chlor-Alkali and Vinyl, Chlorinated Organics, Epoxy, Industrial Solutions and Polyurethanes. The segment also includes the results of MEGlobal and a portion of the results of EQUATE, TKOC, Map Ta Phut Olefins Company Limited and Sadara, all joint ventures of the Company.

The segment included Dow Haltermann until it was fully divested at December 31, 2011.

Performance Materials & Chemicals	2014	2013	2012
In millions			
Sales	\$ 15,114	\$ 14,824	\$ 14,981
Price change from comparative period	—	% 1	% (6)
Volume change from comparative period	2	% (2)	% (2)
Volume change, excluding divestitures	2	% (2)	% (1)
Equity earnings	\$322	\$480	\$362
EBITDA	\$2,193	\$1,913	\$1,603
Certain items impacting EBITDA	\$—	\$(55)	\$(511)

**2014 Versus 2013**

Performance Materials & Chemicals sales were \$15,114 million in 2014, up 2 percent from \$14,824 million in 2013, with volume up 2 percent and price flat. Compared with 2013, volume was higher primarily due to increases in EMEAI and Latin America, which were partially offset by a decrease in Asia Pacific. Improved economic conditions

and favorable supply and demand fundamentals for polyols and PO/PG drove volume increases in Polyurethanes across all geographic areas. Industrial Solutions reported lower volume, primarily due to the expiration of a low margin marketing agreement in Asia Pacific in 2013. Chlor-Alkali and Vinyl volume increased in all geographic areas, except North America, driven by higher downstream demand in the chlorine chain. Epoxy reported volume increases across all geographic areas, except Latin America. Chlorinated Organics reported lower volume primarily driven by the shutdown of a chloromethanes plant in North America at the end of 2013. Price was flat as increases in North America and Asia Pacific were offset by decreases in EMEAI and Latin America. Polyurethanes reported higher prices in Asia Pacific, North America and EMEAI due to tight supply as a result of planned and unplanned events across the industry. Favorable supply and demand balances drove price gains in Industrial Solutions in North America and Latin America. Price decreases were reported by Chlor-Alkali and Vinyl due to lower caustic soda prices. Excess industry capacity and lower raw material costs drove price down in Epoxy across all geographic areas.



## Table of Contents

EBITDA for 2014 was \$2,193 million, compared with \$1,913 million in 2013. EBITDA increased in 2014 driven by higher sales volume, lower other raw material costs and improved operating rates which more than offset reduced equity earnings from MEGlobal and EQUATE and higher equity losses from Sadara. EBITDA in 2013 included \$70 million of asset impairment charges and costs related primarily to the shutdown of certain assets in the Chlor-Alkali and Vinyl, Epoxy and Polyurethanes businesses, and a \$15 million gain for the adjustment of contract cancellation fees related to the 1Q12 Restructuring program. See Notes 3 and 11 to the Consolidated Financial Statements for additional information on these charges.

### 2013 Versus 2012

Performance Materials & Chemicals sales were \$14,824 million in 2013, down 1 percent from \$14,981 million in 2012. Compared with 2012, volume declined 2 percent primarily due to a decrease in North America. Epoxy reported lower volume across all geographic areas, except Latin America, due to poor supply and demand fundamentals. Chlor-Alkali and Vinyl volume declined primarily due to lower sales of vinyl chloride monomer. In addition, caustic soda volume decreased due to a planned maintenance turnaround and lower demand in the chlorine chain. Volume increased in Polyurethanes driven by growth in Asia Pacific and North America, which reflected additional propylene glycol capacity in Thailand and increased demand for energy efficient applications. Volume declined in Industrial Solutions in Asia Pacific due to the expiration of a low margin marketing agreement. Price increased 1 percent as increases in North America and EMEAI were partially offset by decreases in Latin America and Asia Pacific. Improved economic conditions drove price gains in Industrial Solutions in North America and EMEAI. Polyurethanes price increases in North America and EMEAI were partially offset by declines in Latin America and Asia Pacific. Price increases were also reported by Chlor-Alkali and Vinyl, driven by ethylene dichloride in EMEAI, which was partially offset by lower caustic soda prices in North America and Latin America due to improved chlorine demand and new capacity nearing start up. Price declined most notably in Chlorinated Organics, where aggressive competitors, coupled with global industry oversupply, lowered prices.

EBITDA for 2013 was \$1,913 million, compared with \$1,603 million in 2012. EBITDA in 2013 was negatively impacted by \$55 million of certain items, as previously discussed. EBITDA in 2012 was negatively impacted by a goodwill impairment loss of \$220 million in the Dow Formulated Systems reporting unit (now part of the Polyurethanes business); \$203 million of 1Q12 Restructuring charges related to the cancellation of a project and the shutdown/consolidation of assets in the Industrial Solutions, Polyurethanes and Epoxy businesses; and \$96 million of 4Q12 Restructuring charges related primarily to the shutdown/consolidation of certain assets in the Industrial Solutions business. EBITDA in 2012 was also impacted by an \$8 million gain related to post-closing adjustments on the sale of a contract manufacturing business. See Notes 3, 5, 9 and 11 to the Consolidated Financial Statements for additional information on these items. Excluding these certain items, EBITDA decreased in 2013 as higher propylene and energy costs, decreased sales volume and increased SG&A costs partially offset higher equity earnings, higher selling prices, decreased spending on planned maintenance turnarounds and improved operating rates.

### Performance Materials & Chemicals Outlook for 2015

Performance Materials & Chemicals volume is expected to grow at or slightly above GDP for most businesses. Price for most of the businesses is expected to be lower due to declining feedstock prices. Modest volume growth is expected in Polyurethanes. Volume is expected to grow in line with GDP in Industrial Solutions as most of the products produced are for industrial applications. Volume is expected to improve in Chlor-Alkali and Vinyl due to lower maintenance turnaround activity and higher operating rates. Increased demand in the industrial coatings, electrical laminates, infrastructure and adhesives market sectors is expected to drive volume gains in Epoxy. Demand for most of the products in Chlorinated Organics is expected to show slight improvement, in-line with global economic growth, while excess industry capacity is expected to lower pricing. Equity earnings are expected to be lower due to increased start-up expenses at Sadara and declining monoethylene glycol prices.

On January 30, 2015, the Company sold its global Sodium Borohydride business to Vertellus Specialty Materials LLC for approximately \$190 million.

On February 2, 2015, the Company sold ANGUS Chemical Company to Golden Gate Capital for \$1.215 billion. The Company expects to record a pretax gain of approximately \$700 million on the transaction.

On November 12, 2014, the Company announced it will reconfigure and reduce its equity base in EQUATE , TKOC and MEGlobal through a divestment of a portion of the Company's interests. Dow expects such transaction(s) to be completed by mid-2016.

On December 2, 2013, the Company announced the planned carve-out of a portion of its chlorine chain, including the Company's global Chlorinated Organics business, Epoxy business and the Company's U.S Gulf Coast Chlor-Alkali and Vinyl business.

Table of Contents**PERFORMANCE PLASTICS**

The Performance Plastics segment is a market-oriented portfolio comprised of Dow Elastomers, Dow Electrical and Telecommunications, Dow Packaging and Specialty Plastics, Energy and Hydrocarbons. The segment also includes the results of TKSC, The SCG-Dow Group and Univation as well as a portion of the results of EQUATE, TKOC, Map Ta Phut Olefins Company Limited and Sadara, all joint ventures of the Company.

Sales for the Energy business are primarily opportunistic merchant sales driven by market conditions and sales to customers located on Dow manufacturing sites. Sales for the Hydrocarbons business are comprised primarily of sales of monomers and ethylene by-products that are not required for internal use. Hydrocarbons sales can fluctuate significantly based on ethylene production facility feedslates and operating rates, derivative demand and market prices for monomers and by-products. The Hydrocarbons business transfers materials to Dow's derivative businesses and the Energy business supplies utilities to Dow's businesses at net cost, resulting in EBITDA that is at or near break-even for both businesses.

On December 2, 2013, the Company sold its global Polypropylene Licensing and Catalysts business to W. R. Grace & Co. On September 30, 2011, the Company sold its global Polypropylene business to Braskem SA. These businesses were reported in the Performance Plastics segment through the date of divestiture. See Note 5 to the Consolidated Financial Statements for additional information on these divestitures.

Performance Plastics	2014	2013	2012
In millions			
Sales	\$22,386	\$21,910	\$22,588
Price change from comparative period	2	% 1	% (3) )%
Volume change from comparative period	—	% (4	)% (5) )%
Volume change, excluding divestitures	1	% (3	)% 1 )%
Equity earnings	\$257	\$355	\$130
EBITDA	\$4,422	\$4,503	\$2,924
Certain items impacting EBITDA	\$—	\$544	\$(33 )

Performance Plastics, Excluding Hydrocarbons and Energy	2014	2013	2012
Price change from comparative period	4	% 4	% (4) )%
Volume change from comparative period	(1	)% (3	)% (6) )%
Volume change, excluding divestitures	1	% (1	)% 2 )%

**2014 Versus 2013**

Performance Plastics sales for 2014 were \$22,386 million, up 2 percent from \$21,910 million in 2013 with price up 2 percent and volume unchanged. Price increased in all geographic areas, except EMEAI, and in all businesses, except Hydrocarbons. Price declined in Hydrocarbons primarily due to a significant drop in crude oil prices which drove monomers and other by-products' prices down, primarily in Europe. Dow Packaging and Specialty Plastics prices were higher in most geographic areas, notably North America, due to continued strong demand and tight supply conditions. Volume was mixed by geographic area as increases in North America and EMEAI were offset by decreases in Asia Pacific and Latin America. Volume increased in Hydrocarbons due to opportunistic sales of ethylene in North America and Asia Pacific and increased monomer sales in Europe due to higher operating rates and the use of heavier feedslates. Volume declined in the Energy business due to reduced sales in North America. Volume in Dow Packaging and Specialty Plastics and in Dow Electrical and Telecommunications was impacted by the divestiture of the Polypropylene Licensing and Catalysts business and the Company's 50 percent ownership interest in Nippon Unicar Company Limited ("NUC"). Excluding the impact of these divestitures and Hydrocarbons and Energy sales, price increased 4 percent and volume increased 1 percent. Despite production outages in North America in the second and third quarters of 2014, Dow Packaging and Specialty Plastics volume improved due to price/volume

management, most notably in Europe where declining feedstock costs helped increase export sales. Dow Electrical and Telecommunications volume declined slightly due to tight supply resulting from production outages in the first half of 2014 and weaker demand in the telecommunications industry, which was partially offset by increased demand in the power industry.

The Company uses derivatives of crude oil and natural gas as feedstock in its ethylene facilities. In addition, the Company purchases electric power, ethylene and propylene to supplement internal production, as well as other raw materials. The Company's cost of purchased feedstock and energy decreased \$392 million in 2014, a 2 percent decrease from 2013, primarily due to decreased naphtha, condensate and propane costs in Europe.

## Table of Contents

EBITDA for 2014 was \$4,422 million, down from \$4,503 million in 2013. EBITDA in 2013 was favorably impacted by a pretax gain of \$451 million on the sale of the Polypropylene Licensing and Catalysts business, an \$87 million pretax gain on the sale of a 7.5 percent ownership interest in Freeport LNG Development, L.P. and a \$6 million gain for adjustments to contract cancellation fees related to the 4Q12 Restructuring plan. See Notes 3, 5 and 12 to the Consolidated Financial Statements for additional information on these items. Excluding these certain items, EBITDA improved as the impact of higher selling prices and lower feedstock costs more than offset lower equity earnings. Equity earnings were \$257 million in 2014, down from \$355 million in 2013, as a result of significantly lower earnings from EQUATE, TKSC and higher equity losses from Sadara.

### 2013 Versus 2012

Performance Plastics sales for 2013 were \$21,910 million, down 3 percent from \$22,588 million in 2012, with volume down 4 percent and price up 1 percent. Volume declined in Hydrocarbons primarily from the expiration of propylene supply contracts related to the divestiture of Dow's Polypropylene business as well as lower by-product sales resulting from lower production and the use of lighter feedstocks in Europe. Dow Packaging and Specialty Plastics volume declined due to the impact of the Company's shutdown of a polyethylene manufacturing facility in Tessenderlo, Belgium, which more than offset volume growth due to increased demand in all other geographic areas. Volume declined in Dow Electrical and Telecommunications reflecting weaker demand in the telecommunications and power industries and significantly lower supply in Asia Pacific due to the Company's divestiture of its 50 percent ownership interest in NUC. Price declined in Hydrocarbons primarily due to lower butadiene prices in the United States and Europe as well as lower prices for other by-products in Europe. Dow Packaging and Specialty Plastics prices were significantly higher in all geographic areas due to low industry inventories and the Company's focus on higher margin products and customers. Excluding the impact of the NUC divestiture and Hydrocarbons and Energy sales, price increased 5 percent and volume declined 2 percent.

The Company's cost of purchased feedstock and energy increased \$319 million in 2013, a 2 percent increase from 2012, primarily due to increased propylene and natural gas costs.

EBITDA for 2013 was \$4,503 million, up significantly from \$2,924 million in 2012. EBITDA improved as the impact of higher selling prices, lower feedstock costs, and improved equity earnings more than offset the decline in sales volume. Equity earnings were \$355 million in 2013, up from \$130 million in 2012, as a result of significantly improved earnings from EQUATE, TKSC and Univation and lower equity losses from The SCG-Dow Group. EBITDA in 2013 was also positively impacted by \$544 million of certain items, as previously discussed. EBITDA in 2012 was negatively impacted by \$33 million of restructuring charges consisting of asset write-offs of \$9 million, costs associated with exit or disposal activities of \$8 million related to the shutdown of the Company's polyethylene manufacturing facility in Tessenderlo, Belgium, a \$9 million charge related to the impairment of the Company's investment in NUC and a \$7 million charge for the write-off of certain capital projects. See Note 3 to the Consolidated Financial Statements for additional information on these charges.

### Performance Plastics Outlook for 2015

In 2015, crude oil and feedstock prices are expected to remain volatile and sensitive to external factors such as economic activity and geopolitical tensions. The Company expects crude oil and naphtha prices, on average, to be significantly lower than 2014, resulting in lower feedstock and energy costs. Natural gas prices in the United States are also expected to decline compared with 2014 levels. Global ethylene margins are expected to be compressed and gas-based producers in the United States are expected to continue to benefit from shale gas dynamics. Ethylene margins could vary materially from these expectations depending on crude oil and naphtha prices, global GDP growth and global operating rates. Volume is expected to increase in Dow Packaging and Specialty Plastics due to continued strong supply and demand fundamentals and increasing global operating rates. In addition, Sadara's polyethylene and olefins production facilities are expected to start up in the second half of 2015, providing additional polyethylene volume. Dow Elastomers is expected to experience moderate volume growth in most market segments despite new

global industry capacity coming on-line in 2015. Dow Electrical and Telecommunications volume is expected to be slightly higher driven by increased use of fiber optic applications used in telecommunications and increased demand in power industries, partially offset by new industry capacity in EMEA and Asia Pacific. Sales for both Dow Elastomers and Dow Electrical and Telecommunications are expected to decrease slightly due to downward pressure on price from lower global crude oil prices.

The Company has a number of investments in the U.S. Gulf Coast to take advantage of increasing supplies of low-cost natural gas and natural gas liquids derived from shale gas including a new on-purpose propylene production facility (expected start-up in mid-2015) and a new world-scale ethylene production facility (expected start-up in the first half of 2017), both located in Freeport, Texas. As a result of these investments, the Company's exposure to purchased ethylene and propylene is expected to decline, offset by increased exposure to ethane and propane feedstocks. Dow's ethylene production capabilities are expected to increase by as much as 20 percent. In addition, the Company is building four new production facilities on the U.S. Gulf Coast to leverage an advantaged feedstock position to support profitable growth of the Company's high value Performance Plastics

Table of Contents

franchise which include an ELITE™ Polymer production facility, a Low Density Polyethylene (LDPE) production facility, a NORDEL™ Metallocene EPDM production facility and a High Melt Index (HMI) AFFINITY™ Polymer production facility. These production facilities are expected to come on-line in 2017.

Construction continues on phase one of the new biopolymers manufacturing facility in Santa Vitória, Minas Gerais, Brazil. This project, which is a consolidated joint venture with Mitsui & Co. Ltd., was announced during the fourth quarter of 2011. The joint venture's ethanol mill is expected to process its first full harvest of sugarcane in early 2015. The joint venture's original plans for expansion into downstream derivative products have been postponed. The joint venture is a variable interest entity and included in Dow's consolidated financial statements. See Note 19 to the Consolidated Financial Statements for additional information.

On October 2, 2014, the Company announced it signed a definitive agreement with ExxonMobil Chemical Company for an ownership restructure of Univation, which will result in Univation becoming a wholly owned subsidiary of Dow. The transaction is expected to close in the first half of 2015, pending regulatory approvals.

On November 12, 2014, the Company announced it will reconfigure and reduce its equity base in EQUATE, TKOC, TKSC and MEGlobal through a divestment of a portion of the Company's interests. Dow expects such transaction(s) to be completed by mid-2016.

**CORPORATE**

Corporate includes certain enterprise and governance activities (including insurance operations, geographic management, risk management such as foreign currency hedging activities, audit fees, donations, Company branding initiatives, etc.); the results of Ventures (including business incubation platforms, non-business aligned joint ventures, and venture capital); environmental operations; gains and losses on the sales of financial assets; severance costs; non-business aligned litigation expenses (including asbestos-related defense costs and reserve adjustments); and, foreign exchange results.

Corporate	2014	2013	2012
In millions			
Sales	\$309	\$308	\$246
Equity losses	\$(23)	) \$(39)	) \$(102)
EBITDA	\$(580)	) \$1,361	) \$(1,595)
Certain items impacting EBITDA	\$(127)	) \$1,788	) \$(1,032)

**2014 Versus 2013**

Sales for Corporate, which primarily relate to insurance operations, were \$309 million in 2014, essentially flat from \$308 million in 2013.

EBITDA for 2014 was a loss of \$580 million, compared with a gain of \$1,361 million in 2013. EBITDA was negatively impacted by higher severance costs, losses related to Ventures and higher foreign exchange losses which more than offset lower performance-based compensation costs. EBITDA for 2014 was also negatively impacted by \$49 million of nonrecurring transaction costs associated with the planned separation of a significant portion of the Company's chlorine value chain and a \$78 million charge related to an increase in the asbestos-related liability. See Note 14 to Consolidated Financial Statements for additional information on asbestos-related matters.

EBITDA for 2013 was favorably impacted by a \$2.161 billion gain from the K-Dow arbitration and a gain of \$26 million on the sale of the Company's ownership interest in Dow Kokam LLC. EBITDA for 2013 was negatively impacted by a \$326 million loss related to the early extinguishment of debt; \$44 million of implementation costs

related to the Company's Restructuring programs; and \$29 million of asset impairments and related costs, including a \$10 million loss related to asset impairment charges at a formulated electrolytes manufacturing joint venture. See Notes 5, 11, 14 and 16 to the Consolidated Financial Statements for additional information on these matters.

#### 2013 Versus 2012

Sales for Corporate were \$308 million in 2013, up from \$246 million in 2012.

EBITDA for 2013 was a gain of \$1,361 million, compared with a loss of \$1,595 million in 2012. Compared with the same period last year, EBITDA was favorably impacted by a decrease in performance-based compensation costs, lower litigation



Table of Contents

costs, lower foreign exchange losses and improved results from Ventures. EBITDA in 2013 was favorably impacted by \$1,788 million of certain items, as previously discussed.

EBITDA for 2012 was negatively impacted by \$113 million of severance costs related to the workforce reduction component of the Company's 1Q12 Restructuring plan and \$701 million in restructuring charges as part of the 4Q12 Restructuring plan, including impairments of long-lived and other assets of \$313 million, severance costs of \$375 million and costs associated with exit or disposal activities of \$13 million. EBITDA was also impacted by \$22 million of implementation costs related to the Company's 2012 Restructuring programs, a \$123 million loss related to the early extinguishment of debt and a \$73 million loss included in equity earnings related to project development and other costs associated with Sadara. See Notes 3, 8, 11 and 16 to the Consolidated Financial Statements for additional information on these charges.

**LIQUIDITY AND CAPITAL RESOURCES**

The Company had cash and cash equivalents of \$5,654 million at December 31, 2014 and \$5,940 million at December 31, 2013, of which \$3,633 million at December 31, 2014 and \$2,030 million at December 31, 2013 was held by subsidiaries in foreign countries, including United States territories. For each of its foreign subsidiaries, the Company makes an assertion regarding the amount of earnings intended for permanent reinvestment, with the balance available to be repatriated to the United States. The cash held by foreign subsidiaries for permanent reinvestment is generally used to finance the subsidiaries' operational activities and future foreign investments. A deferred tax liability has been accrued for the funds that are available to be repatriated to the United States. At December 31, 2014, management believed that sufficient liquidity was available in the United States. However, in the unusual event that additional foreign funds are needed in the United States, the Company has the ability to repatriate additional funds. The repatriation could result in an adjustment to the tax liability after considering available foreign tax credits and other tax attributes. It is not practicable to calculate the unrecognized deferred tax liability on undistributed foreign earnings.

The Company's cash flows from operating, investing and financing activities, as reflected in the consolidated statements of cash flows, are summarized in the following table:

Cash Flow Summary	2014	2013	2012
In millions			
Cash provided by (used in):			
Operating activities	\$6,502	\$7,823	\$4,075
Investing activities	(3,105)	(1,469)	(2,687)
Financing activities	(3,583)	(4,731)	(2,530)
Effect of exchange rate changes on cash	(100)	(1)	16
Summary			
Increase (decrease) in cash and cash equivalents	\$(286)	\$1,622	\$(1,126)
Cash and cash equivalents at beginning of year	5,940	4,318	5,444
Cash and cash equivalents at end of year	\$5,654	\$5,940	\$4,318

**Cash Flows from Operating Activities**

Cash provided by operating activities decreased in 2014 compared with 2013, which reflected the absence of the K-Dow arbitration award. Cash provided by operating activities increased significantly in 2013 compared with 2012, primarily due to increased earnings which were positively impacted by the K-Dow arbitration award and a reduction in working capital.

Net Working Capital at December 31	2014	2013
------------------------------------	------	------

In millions

Current assets	\$24,267		\$24,977	
Current liabilities	11,593		11,971	
Net working capital	\$12,674		\$13,006	
Current ratio	2.09	:1	2.09	:1
Days-sales-outstanding-in-receivables	46		46	
Days-sales-in-inventory	69		70	

Net working capital decreased from December 31, 2013 to December 31, 2014 principally due to a decrease in cash and cash equivalents, accounts and notes receivable, and inventories. At December 31, 2014, trade receivables were \$4.7 billion, down from \$4.9 billion at December 31, 2013. Days-sales-outstanding-in-receivables (excluding the impact of sales of receivables)

51

Table of Contents

was 46 days at December 31, 2014, flat compared with December 31, 2013. At December 31, 2014, total inventories were \$8.1 billion, down from \$8.3 billion at December 31, 2013, principally due to a decline in feedstock costs which more than offset the impact of higher operating rates. Days-sales-in-inventory at December 31, 2014 was 69 days compared with 70 days at December 31, 2013.

**Cash Flows from Investing Activities**

Cash used in investing activities in 2014 was primarily for capital expenditures which was partially offset by proceeds received on the sale-leaseback of assets, including a significant portion of the Company's North American railcar fleet. Cash used in investing activities in 2013 was primarily for capital expenditures which was partially offset by proceeds received from the sale of businesses and assets, including the sale of the Polypropylene Licensing and Catalysts business in the fourth quarter of 2013. Cash used in investing activities in 2012 was primarily due to capital expenditures. Capital spending in 2013 and 2014 includes spending related to certain U.S. Gulf Coast investment projects including an on-purpose propylene production facility, a world-scale ethylene production facility, an ELITE™ Polymer production facility, a NORDEL™ Metallocene EPDM production facility, and a Low Density Polyethylene (LDPE) production facility, all aligned with the Company's Performance Plastics segment.

The following table summarizes the Company's capital expenditures, which includes capital expenditures of consolidated variable interest entities, along with the approximate percentage of spending by project type. The Company expects capital spending in 2015 to be approximately \$3.9 billion.

**Capital Expenditures Summary**

In millions	2014	2013	2012	
Capital expenditures	\$3,572	\$2,302	\$2,614	
Spending by project type:				
Projects related to additional capacity for new and existing products	68	% 55	% 43	%
Projects related to environmental protection, safety, loss prevention and industrial hygiene	10	% 14	% 20	%
Other (primarily shared infrastructure and plant maintenance/health)	22	% 31	% 37	%

See Note 25 to the Consolidated Financial Statements for capital expenditures by operating segment.

**Cash Flows from Financing Activities**

Cash used in financing activities in 2014 included purchases of treasury stock, which totaled \$4.2 billion and resulted in the completion of the Company's initial \$4.5 billion share repurchase program, and increased dividends paid to stockholders which was partially offset by proceeds received from the issuance of new debt, including \$2 billion issued in the third quarter of 2014. Cash used in financing activities in 2013 included dividends paid to stockholders; purchases of treasury stock; payments on short- and long-term debt, including the early redemption of more than \$3 billion in notes and InterNotes; partially offset by proceeds received from the issuance of new debt. Cash used in financing activities in 2012 included payments on short- and long-term debt, including \$2.25 billion of early redemptions; higher dividends paid to stockholders, including the acceleration of the fourth quarter of 2012 dividend payment; partially offset by proceeds from the issuance of \$2.5 billion of long-term debt in the fourth quarter of 2012. See Notes 16 and 21 to the Consolidated Financial Statements for additional information related to the issuance or retirement of debt and the Company's share repurchase program.

**Liquidity & Financial Flexibility**

The Company's primary source of incremental liquidity is cash provided by operating activities. The generation of cash from operations and the Company's ability to access capital markets is expected to meet the Company's cash requirements for working capital, capital expenditures, debt maturities, dividend payments, share repurchases (with the future repurchases of the Company's common stock timed to proceeds received from portfolio management

actions and increases in operating cash flows), contributions to pension plans and other needs. In addition to cash provided by operating activities, the Company's liquidity sources also include U.S. and Euromarket commercial paper, committed credit facilities, U.S. retail medium-term note program ("InterNotes"), accounts receivable securitization facilities and long-term debt and capital markets. Additional details on these sources of liquidity are as follows:

#### Commercial Paper

Dow issues promissory notes under its U.S. and Euromarket commercial paper programs. At December 31, 2014, the Company had no commercial paper outstanding. The Company maintains access to the commercial paper market at competitive rates.

Table of Contents

## Committed Credit Facilities

In the event Dow has short-term liquidity needs and is unable to issue commercial paper for any reason, Dow has the ability to access liquidity through its committed and available credit facilities, as summarized below:

## Committed and Available Credit Facilities at December 31, 2014

In millions	Effective Date	Committed Credit	Credit Available	Maturity Date	Interest
Five Year Competitive Advance and Revolving Credit Facility	October 2011	\$ 5,000	\$ 5,000	October 2016	Floating rate
Bilateral Revolving Credit Facility	October 2012	170	170	October 2016	Floating rate
Bilateral Revolving Credit Facility	March 2013	100	100	March 2015	Floating rate
Bilateral Revolving Credit Facility	March 2013	300	300	October 2016	Floating rate
Term Loan Facility	March 2013	300	—	March 2016	Floating rate
Bilateral Revolving Credit Facility	April 2013	200	200	April 2016	Floating rate
Bilateral Revolving Credit Facility	October 2013	200	200	October 2016	Floating rate
Bilateral Revolving Credit Facility	October 2013	100	100	October 2016	Floating rate
Bilateral Revolving Credit Facility	January 2014	100	100	October 2016	Floating rate
Total Committed and Available Credit Facilities		\$ 6,470	\$ 6,170		

## Shelf Registration - U.S.

The Company renewed an automatic shelf registration for an unspecified amount of mixed securities with the SEC on February 19, 2013. Under this shelf registration, the Company may offer common stock, preferred stock, depositary shares, debt securities, warrants, stock purchase contracts and stock purchase units with pricing and availability dependent on market conditions. The Company also filed a new prospectus supplement to register an unlimited amount of securities for issuance under the Company's U.S. retail medium-term note program ("InterNotes") on February 19, 2013.

## Shelf Registration - Japan

At December 31, 2014, the Company had Japanese yen 50 billion (approximately \$420 million) of securities available for issuance under a shelf registration renewed with the Kanto Local Finance Bureau of the Ministry of Finance of Japan effective December 13, 2014, which will expire on December 12, 2016.

## Accounts Receivable Securitization Facilities

The Company has access to committed accounts receivable securitization facilities in the United States, Europe and Asia Pacific, from which amounts available for funding are based upon available and eligible accounts receivable within each of the facilities. The Asia Pacific facilities are renewed annually. The Europe facility was renewed in July 2013 for a term that extends to July 2015. The Company intends to renew the Europe facility in July 2015. The Company renewed the United States facility in February 2014 for a term that extends to March 2015. The Company intends to renew the United States facility in March 2015. See Note 15 to the Consolidated Financial Statements for further information.

As Dow continues to maintain its strong balance sheet and financial flexibility, management is focused on net debt, as Dow believes this is the best representation of the Company's financial leverage. As shown in the following table, net debt is equal to total gross debt minus "Cash and cash equivalents." At December 31, 2014, net debt as a percent of total capitalization increased to 37.5 percent. This increase was primarily due to an increase in gross debt from the issuance of \$2 billion of senior unsecured notes and a reduction in equity that resulted from \$4.2 billion of treasury stock purchases, unfavorable adjustments to the Company's defined benefit pension plans, primarily due to lower discount rates, and unfavorable translation adjustments.

Total Debt at December 31	2014	2013	
In millions			
Notes payable	\$551	\$443	
Long-term debt due within one year	394	697	
Long-term debt	18,838	16,820	
Gross debt	\$19,783	\$17,960	
Cash and cash equivalents	\$5,654	\$5,940	
Net debt	\$14,129	\$12,020	
Gross debt as a percent of total capitalization	45.6	% 39.0	%
Net debt as a percent of total capitalization	37.5	% 30.0	%

Table of Contents

See Note 16 to the Consolidated Financial Statements for information related to the Company's notes payable and long-term debt activity, including debt retired and issued during the year ended December 31, 2014.

Dow's public debt instruments and primary, private credit agreements contain, among other provisions, certain customary restrictive covenant and default provisions. The Company's most significant debt covenant with regard to its financial position is the obligation to maintain the ratio of the Company's consolidated indebtedness to consolidated capitalization at no greater than 0.65 to 1.00 at any time the aggregate outstanding amount of loans under the Five Year Competitive Advance and Revolving Credit Facility Agreement ("Revolving Credit Facility") equals or exceeds \$500 million. The ratio of the Company's consolidated indebtedness to consolidated capitalization as defined in the Revolving Credit Facility was 0.44 to 1.00 at December 31, 2014. At December 31, 2014, management believes the Company was in compliance with all of its covenants and default provisions. For information on Dow's covenants and default provisions, see Note 16 to the Consolidated Financial Statements.

Management expects that the Company will continue to have sufficient liquidity and financial flexibility to meet all of its business obligations.

**Credit Ratings**

As of February 13, 2015, the Company's credit ratings were as follows:

Credit Ratings	Long-Term	Short-Term	
Rating Agency	Rating	Rating	Outlook
Standard & Poor's	BBB	A-2	Stable
Moody's Investors Service	Baa2	P-2	Stable
Fitch Ratings	BBB	F2	Stable

Downgrades in the Company's credit ratings will increase borrowing costs on certain indentures and could have a negative impact on the Company's ability to access credit markets.

**Dividends**

For the years ended December 31, 2014, 2013, and 2012, the Company paid dividends to common and preferred shareholders as noted below:

Dividends Paid at December 31	2014	2013	2012
In millions, except per share amounts			
Dividends paid, per common share	\$1.43	\$0.96	\$1.46
Dividends paid to common shareholders	\$1,680	\$1,139	\$1,710
Dividends paid to preferred shareholders	\$340	\$340	\$340

On November 11, 2014, the Board of Directors declared a quarterly dividend of \$0.42 per share, payable January 30, 2015, to stockholders of record on December 31, 2014. On February 12, 2015, the Board of Directors announced the declaration of a quarterly dividend of \$0.42 per share, payable April 30, 2015, to stockholders of record on March 31, 2015. Since 1912, the Company has maintained or increased the amount of the quarterly dividend, adjusted for stock splits, with the exception of February 12, 2009. During this 103-year period, Dow has increased the amount of the quarterly dividend 51 times (approximately 12 percent of the time), reduced the dividend once and maintained the amount of the quarterly dividend approximately 88 percent of the time.

On December 10, 2014, the Board of Directors declared a quarterly dividend of \$85 million to Cumulative Convertible Perpetual Preferred Stock, Series A shareholders of record on December 15, 2014, which was paid on January 2, 2015. On February 12, 2015, the Board of Directors declared a quarterly dividend of \$85 million to these shareholders, payable on April 1, 2015. Ongoing dividends related to Cumulative Convertible Perpetual Preferred Stock, Series A will accrue at the rate of \$85 million per quarter, and are payable quarterly subject to Board of

Directors' approval.

#### Share Repurchase Program

On February 13, 2013, the Board of Directors approved a share buy-back program, authorizing up to \$1.5 billion to be spent on the repurchase of the Company's common stock over a period of time. On January 29, 2014, the Board of Directors announced an expansion of the Company's share buy-back authorization, authorizing an additional amount not to exceed \$3 billion to be spent on the repurchase of the Company's common stock over a period of time. On November 12, 2014, the Board of Directors announced a new \$5 billion tranche to its share buy-back program, with the repurchase of the Company's common stock timed



Table of Contents

to proceeds received from portfolio management actions and increases in operating cash flows. As a result of these actions, the total authorized amount of the share repurchase program is \$9.5 billion. As of December 31, 2014, the Company has spent \$4.5 billion on repurchases of common stock under the share buy-back program.

For additional information related to the share repurchase program, see Part II. Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities and Note 21 to the Consolidated Financial Statements.

**Pension Plans**

The Company has defined benefit pension plans in the United States and a number of other countries. The Company's funding policy is to contribute to plans when pension laws and/or economics either require or encourage funding. During 2014, 2013 and 2012, the Company contributed \$815 million, \$865 million and \$903 million to its pension plans, including contributions to fund benefit payments for its non-qualified supplemental plans. Dow expects to contribute approximately \$750 million to its pension plans in 2015. See Note 17 to the Consolidated Financial Statements for additional information concerning the Company's pension plans.

**Contractual Obligations**

The following table summarizes the Company's contractual obligations, commercial commitments and expected cash requirements for interest at December 31, 2014. Additional information related to these obligations can be found in Notes 14, 16, 17, 18 and 22 to the Consolidated Financial Statements.

Contractual Obligations at December 31, 2014	Payments Due by Year						
In millions	2015	2016	2017	2018	2019	2020 and beyond	Total
Long-term debt – current and noncurrent (1)	\$394	\$1,375	\$778	\$932	\$2,578	\$13,525	\$19,582
Deferred income tax liabilities – noncurrent (2)	—	—	—	—	—	622	622
Pension and other postretirement benefits	888	385	587	670	884	6,907	10,321
Other noncurrent obligations (3)	15	354	397	203	260	2,254	3,483
Uncertain tax positions, including interest and penalties (4)	1	—	—	—	—	245	246
Other contractual obligations:							
Minimum lease commitments	294	275	241	199	188	1,837	3,034
Purchase commitments – take-or-pay and throughput obligations	2,930	2,688	2,222	1,981	1,385	7,305	18,511
Purchase commitments – other (5)	105	72	60	41	38	30	346
Expected cash requirements for interest (6)	1,002	980	959	909	791	7,815	12,456
Total	\$5,629	\$6,129	\$5,244	\$4,935	\$6,124	\$40,540	\$68,601

(1) Excludes unamortized debt discount of \$350 million. Includes \$85 million of capital lease obligations.

Deferred income tax liabilities may vary according to changes in tax laws, tax rates and the operating results of the Company. As a result, it is impractical to determine whether there will be a cash impact to an individual year. All noncurrent deferred income tax liabilities have been reflected in “2020 and beyond.”

Annual payments to resolve asbestos litigation will vary based on changes in defense strategies, changes in state and national law, and claims filing and resolution rates. As a result, it is impractical to determine the anticipated payments in any given year. Therefore, the majority of the noncurrent asbestos-related liability of \$438 million has been reflected in “2020 and beyond.”

- Due to uncertainties in the timing of the effective settlement of tax positions with the respective taxing authorities,
- (4) the Company is unable to determine the timing of payments related to its uncertain tax positions, including interest and penalties. Amounts beyond the current year are therefore reflected in “2020 and beyond.”
  - (5) Includes outstanding purchase orders and other commitments greater than \$1 million, obtained through a survey conducted within the Company.
  - (6) Cash requirements for interest was calculated using current interest rates at December 31, 2014, and includes approximately \$1.76 billion of various floating rate notes.

#### Off-Balance Sheet Arrangements

Off-balance sheet arrangements are obligations the Company has with nonconsolidated entities related to transactions, agreements or other contractual arrangements. The Company holds a variable interest in a joint venture accounted for under the equity method of accounting. The Company is not the primary beneficiary of the joint venture and therefore is not required to consolidate the entity (see Note 19 to the Consolidated Financial Statements). See Note 15 to the Consolidated Financial Statements for information regarding the transfer of financial assets.

## Table of Contents

Guarantees arise during the ordinary course of business from relationships with customers and nonconsolidated affiliates when the Company undertakes an obligation to guarantee the performance of others if specific triggering events occur. The Company had outstanding guarantees at December 31, 2014 of \$5,993 million, compared with \$5,782 million at December 31, 2013. Additional information related to these guarantees can be found in the “Guarantees” section of Note 14 to the Consolidated Financial Statements.

### Fair Value Measurements

See Note 10 to the Consolidated Financial Statements for information related to other-than-temporary impairments; see Note 11 for additional information concerning fair value measurements, including the Company’s interests held in trade receivable conduits; and, see Note 17 for information related to fair value measurements of pension and other postretirement benefit plan assets.

## OUTLOOK

Dow enters 2015 against the backdrop of ongoing macroeconomic, currency and energy market uncertainty. In this environment, the Company will exercise a strong command over the factors within its control - demanding operational and commercial excellence, driving proactive portfolio management and productivity actions, executing financial discipline, efficiently managing cash, and investing in people, markets and assets for long-term growth.

The Company expects to benefit from achieving key strategic milestones during 2015. The first production units at Sadara, Dow’s strategic joint venture in the Middle East, are expected to come on-line. Dow’s on-purpose propylene production facility in Freeport, Texas, is expected to start up in mid-2015. The Company will also initiate a controlled launch of ENLIST™ during the year. These strategic investments, coupled with the Company’s integrated strategy and operational discipline, are expected to deliver higher cash flows, more consistent earnings and increased shareholder remuneration over the long-term.

## OTHER MATTERS

### Recent Accounting Guidance

See Note 2 to the Consolidated Financial Statements for a summary of recent accounting guidance.

### Critical Accounting Policies

The preparation of financial statements and related disclosures in accordance with accounting principles generally accepted in the United States of America (“U.S. GAAP”) requires management to make judgments, assumptions and estimates that affect the amounts reported in the consolidated financial statements and accompanying notes. Note 1 to the Consolidated Financial Statements describes the significant accounting policies and methods used in the preparation of the consolidated financial statements. Following are the Company’s critical accounting policies impacted by judgments, assumptions and estimates:

### Litigation

The Company is subject to legal proceedings and claims arising out of the normal course of business including product liability, patent infringement, governmental regulations, contract and commercial litigation, and other actions. The Company routinely assesses the legal and factual circumstances of each matter, the likelihood of any adverse outcomes to these matters, as well as ranges of probable losses. A determination of the amount of the reserves required, if any, for these contingencies is made after thoughtful analysis of each known claim. Dow has an active risk management program consisting of numerous insurance policies secured from many carriers covering various timeframes. These policies often provide coverage that is utilized to minimize the financial impact, if any, of the legal proceedings. The required reserves may change in the future due to new developments in each matter. For further discussion, see Note 14 to the Consolidated Financial Statements.

#### Asbestos-Related Matters of Union Carbide Corporation

Union Carbide Corporation ("Union Carbide"), a wholly owned subsidiary of the Company, is and has been involved in a large number of asbestos-related suits filed primarily in state courts during the past four decades. These suits principally allege personal injury resulting from exposure to asbestos-containing products and frequently seek both actual and punitive damages. The alleged claims primarily relate to products that Union Carbide sold in the past, alleged exposure to asbestos-containing products located on Union Carbide's premises, and Union Carbide's responsibility for asbestos suits filed against a former Union Carbide subsidiary, Amchem Products, Inc. Each year, Analysis, Research and Planning Corporation ("ARPC") performs a review for Union Carbide based upon historical asbestos claims and resolution activity. Union Carbide compares current asbestos claim and resolution activity to the

## Table of Contents

results of the most recent ARPC study at each balance sheet date to determine whether the asbestos-related liability continues to be appropriate.

It is the opinion of Dow's management that it is reasonably possible that the cost of Union Carbide disposing of its asbestos-related claims, including future defense costs, could have a material impact on the Company's results of operations and cash flows for a particular period and on the consolidated financial position of the Company.

For additional information, see Part I, Item 3. Legal Proceedings; Asbestos-Related Matters of Union Carbide Corporation in Management's Discussion and Analysis of Financial Condition and Results of Operations; and Note 14 to the Consolidated Financial Statements.

### Environmental Matters

The Company determines the costs of environmental remediation of its facilities and formerly owned facilities based on evaluations of current law and existing technologies. Inherent uncertainties exist in such evaluations primarily due to unknown environmental conditions, changing governmental regulations and legal standards regarding liability, and emerging remediation technologies. The recorded liabilities are adjusted periodically as remediation efforts progress, or as additional technical or legal information becomes available. In the case of landfills and other active waste management facilities, Dow recognizes the costs over the useful life of the facility. At December 31, 2014, the Company had accrued obligations of \$706 million for probable environmental remediation and restoration costs, including \$78 million for the remediation of Superfund sites. This is management's best estimate of the costs for remediation and restoration with respect to environmental matters for which the Company has accrued liabilities, although it is reasonably possible that the ultimate cost with respect to these particular matters could range up to approximately two and a half times that amount. For further discussion, see Environmental Matters in Management's Discussion and Analysis of Financial Condition and Results of Operations and Notes 1 and 14 to the Consolidated Financial Statements.

### Goodwill

The Company assesses goodwill recoverability through business financial performance reviews, enterprise valuation analysis and impairment tests. Annual goodwill impairment tests are completed by the Company during the fourth quarter of the year in accordance with the measurement provisions of the accounting guidance for goodwill. The tests are performed at the reporting unit level which is defined as one level below operating segment with the exception of Agricultural Sciences, which is both an operating segment and a reporting unit. Reporting units are the level at which discrete financial information is available and reviewed by business management on a regular basis. At December 31, 2014, the Company has defined five operating segments and 18 reporting units; goodwill is carried by 14 of these reporting units.

In addition to the annual goodwill impairment tests, the Company reviews the financial performance of its reporting units over the course of the year to assess whether circumstances have changed that would indicate it is more likely than not that the fair value of a reporting unit has declined below its carrying value. In cases where an indication of impairment is determined to exist, the Company completes an interim goodwill impairment test specifically for that reporting unit.

As part of its annual goodwill impairment testing, the Company has the option to first assess qualitative factors to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying value. The qualitative assessment is also used as a basis for determining whether it is necessary to perform the quantitative test. Qualitative factors assessed at the Company level include, but are not limited to, GDP growth rates, long-term hydrocarbon and energy prices, equity and credit market activity, discount rates, foreign exchange rates and overall financial performance. Qualitative factors assessed at the reporting unit level include, but are not limited to, changes in industry and market structure, competitive environments, planned capacity and new product launches, cost factors such as raw material prices, and financial performance of the reporting unit. If the Company chooses to not complete a qualitative assessment for a given reporting unit or if the initial assessment indicates that it is more likely than not that

the carrying value of a reporting unit exceeds its estimated fair value, additional quantitative testing is required. The first step of the quantitative test requires the fair value of the reporting unit to be compared with its carrying value. The Company utilizes a discounted cash flow methodology to calculate the fair value of its reporting units. This valuation technique has been selected by management as the most meaningful valuation method due to the limited number of market comparables for the Company's reporting units. However, where market comparables are available, the Company includes EBIT/EBITDA multiples as part of the reporting unit valuation analysis. The discounted cash flow valuations are completed using the following key assumptions (including certain ranges used for the 2014

## Table of Contents

testing): projected revenue growth rates, or compounded annual growth rates, over a ten-year cash flow forecast period, which ranged from 6.2 percent to 7.6 percent and varied by reporting unit based on underlying business fundamentals and future expectations; discount rates, which ranged from 8.6 percent to 11.4 percent; tax rates; terminal values, differentiated based on the cash flow projection of each reporting unit and the projected net operating profit after tax ("NOPAT") growth rate, which ranged from 2 percent to 3.5 percent; currency exchange rates for 79 currencies; and forecasted long-term hydrocarbon and energy prices, by geographic area and by year, which included the Company's key feedstocks as well as natural gas and crude oil (due to its correlation to naphtha). Currency exchange rates and long-term hydrocarbon and energy prices are established for the Company as a whole and applied consistently to all reporting units, while revenue growth rates, discount rates and tax rates are established by reporting unit to account for differences in business fundamentals and industry risk.

The second step of the quantitative test is required if the first step of the quantitative test indicates a potential impairment. The second step requires the Company to compare the implied fair value of a reporting unit's goodwill with the carrying amount of goodwill. If the carrying amount of goodwill is greater than its implied fair value, an impairment loss is recorded.

The Company also monitors and evaluates its market capitalization relative to book value. When the market capitalization of the Company falls below book value, management undertakes a process to evaluate whether a change in circumstances has occurred that would indicate it is more likely than not that the fair value of any of its reporting units has declined below carrying value. This evaluation process includes the use of third-party market-based valuations and internal discounted cash flow analysis. As part of the annual goodwill impairment test, the Company also compares market capitalization with the most recent total estimated fair value of its reporting units to ensure that significant differences are understood. At December 31, 2014 and 2013, Dow's market capitalization exceeded book value.

### 2014 Goodwill Impairment Test

During 2014, there were no events or changes in circumstances identified that warranted interim goodwill impairment testing. During the fourth quarter of 2014, qualitative testing was performed for all but five of the Company's reporting units that carry goodwill. The results of the qualitative testing did not indicate any reporting units where it was more likely than not that the carrying value of the reporting unit was greater than its fair value. As a result, no additional quantitative testing was required for those reporting units.

The Company chose to proceed directly to the first step of the quantitative testing for five reporting units due to a change in business structure as well as to re-evaluate the reasonableness of the differences between fair value and carrying value under current market conditions. Quantitative testing was conducted for the following reporting units, using key assumptions for the discounted cash flow analysis: Dow Coating Materials, Energy & Water Solutions, Performance Monomers, Dow Electronic Materials and Polyurethanes.

Changes in key assumptions can affect the results of goodwill impairment tests. The changes made to key assumptions in 2014 did not result in a significant change in the impairment analysis conclusion. The key assumptions with the most significant impact on reporting unit fair value calculations include the discount rate and terminal value NOPAT growth rate. For the 2014 impairment testing, management completed sensitivity analysis on both of these key assumptions using a 100 basis point increase in the discount rate and a 100 basis point decrease in the terminal value NOPAT growth rate for reporting units where a quantitative fair value analysis was completed. In both cases the resulting fair values, based on discounted cash flows, exceeded the carrying values for all reporting units tested. Additional sensitivity analysis was completed on the combined impact of a 100 basis point increase in the discount rate and a 100 basis point decrease in the terminal value NOPAT growth rate. This analysis resulted in fair values, based on discounted cash flows, that exceeded carrying values for all reporting units tested, except for Dow Coating Materials. The fair value for Dow Coating Materials, which carries approximately \$2,275 million of goodwill, was approximately \$70 million below the carrying value.

In completing the fair value analysis for the 2014 impairment test, management evaluated the reasonableness of differences noted between the fair value and carrying value of each reporting unit. All differences were determined to be reasonable.

Based on the fair value analysis completed by the Company in the fourth quarter of 2014, using the key assumptions defined for the Company as well as the key assumptions defined specifically for each reporting unit, management concluded that fair value exceeded carrying value for all reporting units.



## Table of Contents

### 2013 Goodwill Impairment Test

During 2013, there were no events or changes in circumstances identified that warranted interim goodwill impairment testing. During the fourth quarter of 2013, qualitative testing was performed for all but five of the Company's reporting units that carry goodwill. The results of the qualitative testing did not indicate any reporting units where it was more likely than not that the carrying value of the reporting unit was greater than its fair value. As a result, no additional quantitative testing was required for those reporting units.

The Company chose to proceed directly to the first step of the quantitative testing for five reporting units due to changes in business structures as well as to re-evaluate the reasonableness of the differences between fair value and carrying value under current market conditions. Quantitative testing was conducted for the following reporting units, using key assumptions for the discounted cash flow analysis: Dow Coating Materials, Dow Plastics Additives, Epoxy, Performance Monomers and Polyurethanes.

In completing the fair value analysis for the 2013 impairment test, management evaluated the reasonableness of differences noted between the fair value and carrying value of each reporting unit. All differences were determined to be reasonable. For Performance Monomers, fair value did not exceed carrying value by a significant margin. The fair value for Performance Monomers, which carried approximately \$150 million of goodwill, exceeded the carrying value by a margin of 11 percent.

Based on the fair value analysis completed by the Company in the fourth quarter of 2013, using the key assumptions defined for the Company as well as the key assumptions defined specifically for each reporting unit, management concluded that fair value exceeded carrying value for all reporting units.

### Pension and Other Postretirement Benefits

The amounts recognized in the consolidated financial statements related to pension and other postretirement benefits are determined from actuarial valuations. Inherent in these valuations are assumptions including expected return on plan assets, discount rates at which the liabilities could have been settled at December 31, 2014, rate of increase in future compensation levels, mortality rates and health care cost trend rates. These assumptions are updated annually and are disclosed in Note 17 to the Consolidated Financial Statements. In accordance with U.S. GAAP, actual results that differ from the assumptions are accumulated and amortized over future periods and, therefore, affect expense recognized and obligations recorded in future periods. The U.S. pension plans represent 71 percent of the Company's pension plan assets and 70 percent of the pension obligations.

The following information relates to the U.S. plans only; a similar approach is used for the Company's non-U.S. plans.

The Company determines the expected long-term rate of return on assets by performing a detailed analysis of historical and expected returns based on the strategic asset allocation approved by the Company's Investment Committee and the underlying return fundamentals of each asset class. The Company's historical experience with the pension fund asset performance is also considered. The expected return of each asset class is derived from a forecasted future return confirmed by historical experience. The expected long-term rate of return is an assumption and not what is expected to be earned in any one particular year. The weighted-average long-term rate of return assumption used for determining net periodic pension expense for 2014 was 7.82 percent. This assumption increased to 7.85 percent for determining 2015 net periodic pension expense. Future actual pension expense will depend on future investment performance, changes in future discount rates and various other factors related to the population of participants in the Company's pension plans.

The discount rates utilized to measure the pension and other postretirement obligations of the U.S. qualified plans are based on the yield on high-quality fixed income instruments at the measurement date. Future expected actuarially determined cash flows of Dow's major U.S. plans are matched against the Towers Watson RATE:Link yield curve (based on 60th to 90th percentile bond yields) to arrive at a single discount rate by plan. The weighted average discount rate decreased to 4.04 percent at December 31, 2014, from 4.92 percent at December 31, 2013.

At December 31, 2014, the U.S. qualified plans were underfunded on a projected benefit obligation basis by \$4.7 billion. The underfunded amount increased by approximately \$1.7 billion compared with December 31, 2013. The increase was primarily due to lower discount rates and updated mortality tables. The Company contributed \$554 million to the U.S. qualified plans in 2014.

The assumption for the long-term rate of increase in compensation levels for the principal U.S. qualified plans was 4.5 percent. Since 2002, the Company has used a generational mortality table to determine the duration of its pension

Table of Contents

and other postretirement obligations. On October 27, 2014, the Society of Actuaries ("SOA") published updated mortality tables and mortality improvement scales (generational mortality tables), which reflect increased life expectancy. Based on an evaluation of the mortality experience of the Company's U.S. pension plans and the SOA's tables, the Company adopted updated generational mortality tables for purposes of measuring U.S. pension and other postretirement obligations at year-end.

The following discussion relates to the Company's significant pension plans.

The Company bases the determination of pension expense on a market-related valuation of plan assets that reduces year-to-year volatility. This market-related valuation recognizes investment gains or losses over a five-year period from the year in which they occur. Investment gains or losses for this purpose represent the difference between the expected return calculated using the market-related value of plan assets and the actual return based on the market value of plan assets. Since the market-related value of plan assets recognizes gains or losses over a five-year period, the future value of plan assets will be impacted when previously deferred gains or losses are recorded. Over the life of the plans, both gains and losses have been recognized and amortized. At December 31, 2014, net gains of \$762 million remain to be recognized in the calculation of the market-related value of plan assets. These net gains will result in decreases in future pension expense as they are recognized in the market-related value of assets.

The increase in the market-related value of assets due to the recognition of prior gains is presented in the following table:

**Increase in Market-Related Asset Value Due to Recognition of Prior Gains**

In millions

2015	\$207
2016	291
2017	159
2018	105
Total	\$762

Based on the 2015 pension assumptions, the Company expects net periodic benefit costs to increase in 2015 by approximately \$100 million for all pension and other postretirement benefits. The increase in net periodic benefit costs is primarily due to the impact of lower discount rates, which was partially offset by a favorable impact from plan amendments in the U.S. and The Netherlands.

A 25 basis point increase or decrease in the long-term return on assets assumption would change the Company's total pension expense for 2015 by \$47 million. A 25 basis point increase in the discount rate assumption would lower the Company's total pension expense for 2015 by \$65 million. A 25 basis point decrease in the discount rate assumption would increase the Company's total pension expense for 2015 by \$68 million. A 25 basis point change in the long-term return and discount rate assumptions would have an immaterial impact on the other postretirement benefit expense for 2015.

**Income Taxes**

Deferred tax assets and liabilities are determined 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. Based on the evaluation of available evidence, both positive and negative, the Company recognizes future tax benefits, such as net operating loss carryforwards and tax credit carryforwards, to the extent that realizing these benefits is considered to be more likely than not.

At December 31, 2014, the Company had a net deferred tax asset balance of \$2,220 million, after valuation allowances of \$1,106 million.

In evaluating the ability to realize the deferred tax assets, the Company relies on, in order of increasing subjectivity, taxable income in prior carryback years, the future reversals of existing taxable temporary differences, tax planning strategies and forecasted taxable income using historical and projected future operating results.

At December 31, 2014, the Company had deferred tax assets for tax loss and tax credit carryforwards of \$1,843 million, \$177 million of which is subject to expiration in the years 2015-2019. In order to realize these deferred

## Table of Contents

tax assets for tax loss and tax credit carryforwards, the Company needs taxable income of approximately \$18,402 million across multiple jurisdictions. The taxable income needed to realize the deferred tax assets for tax loss and tax credit carryforwards that are subject to expiration between 2015-2019 is approximately \$1,991 million.

The Company recognizes the financial statement effects of an uncertain income tax position when it is more likely than not, based on technical merits, that the position will be sustained upon examination. At December 31, 2014, the Company had uncertain tax positions for both domestic and foreign issues of \$240 million.

The Company accrues for non-income tax contingencies when it is probable that a liability to a taxing authority has been incurred and the amount of the contingency can be reasonably estimated. At December 31, 2014, the Company had a non-income tax contingency reserve for both domestic and foreign issues of \$93 million.

For additional information, see Notes 1 and 22 to the Consolidated Financial Statements.

### Environmental Matters

#### Environmental Policies

Dow is committed to world-class environmental, health and safety (“EH&S”) performance, as demonstrated by industry-leading performance, a long-standing commitment to Responsible Care®, and a strong commitment to achieve the Company’s 2015 Sustainability Goals – goals that set the standard for sustainability in the chemical industry by focusing on improvements in Dow’s local corporate citizenship and product stewardship, and by actively pursuing methods to reduce the Company’s environmental impact.

To meet the Company’s public commitments, as well as the stringent laws and government regulations related to environmental protection and remediation to which its global operations are subject, Dow has well-defined policies, requirements and management systems. Dow’s EH&S Management System (“EMS”) defines the “who, what, when and how” needed for the businesses to achieve the Company’s policies, requirements, performance objectives, leadership expectations and public commitments. To ensure effective utilization, the EMS is integrated into a company-wide management system for EH&S, Operations, Quality and Human Resources.

It is Dow’s policy to adhere to a waste management hierarchy that minimizes the impact of wastes and emissions on the environment. First, Dow works to eliminate or minimize the generation of waste and emissions at the source through research, process design, plant operations and maintenance. Second, Dow finds ways to reuse and recycle materials. Finally, unusable or non-recyclable hazardous waste is treated before disposal to eliminate or reduce the hazardous nature and volume of the waste. Treatment may include destruction by chemical, physical, biological or thermal means. Disposal of waste materials in landfills is considered only after all other options have been thoroughly evaluated. Dow has specific requirements for waste that is transferred to non-Dow facilities, including the periodic auditing of these facilities.

Dow believes third-party verification and transparent public reporting are cornerstones of world-class EH&S performance and building public trust. Numerous Dow sites in Europe, Latin America, Asia Pacific and North America have received third-party verification of Dow’s compliance with Responsible Care® and with outside specifications such as ISO-14001. Dow continues to be a global champion of Responsible Care® and has worked to broaden the application and impact of Responsible Care® around the world through engagement with suppliers, customers and joint venture partners.

Dow’s EH&S policies helped the Company achieve excellent EH&S performance in 2014. Dow’s injury/illness rates and process safety performance were excellent in 2014, and the Company is favorably positioned to achieve its 2015 Sustainability Goals in these key areas. Further improvement in these areas, as well as environmental compliance, remains a top management priority, with initiatives underway to further improve performance and compliance in

2015.

Detailed information on Dow's performance regarding environmental matters and goals can be found online on Dow's Sustainability webpage at [www.dow.com](http://www.dow.com). The Company's website and its content are not deemed incorporated by reference into this report.

#### Chemical Security

Public and political attention continues to be placed on the protection of critical infrastructure, including the chemical industry, from security threats. Terrorist attacks, natural disasters and cyber incidents have increased concern about the security and safety of chemical production and distribution. Many, including Dow and the American Chemistry Council, have called for uniform risk-based and performance-based national standards for securing the U.S. chemical industry. The Maritime Transportation Security Act ("MTSA") of 2002 and its regulations further set forth risk-based and performance-based standards that must be met at U.S. Coast Guard-regulated facilities. U.S. Chemical Plant Security legislation was passed in 2006 and the

61

---

## Table of Contents

Department of Homeland Security (“DHS”) is now implementing the regulations known as the Chemical Facility Anti-Terrorism Standards. The Company is complying with the requirements of the Rail Transportation Security Rule issued by the U.S. Transportation Security Administration (“TSA”). Dow continues to support uniform risk-based national standards for securing the chemical industry.

The focus on security, emergency planning, preparedness and response is not new to Dow. A comprehensive, multi-level security plan for the Company has been maintained since 1988. This plan, which has been activated in response to significant world and national events since then, is reviewed on an annual basis. Dow continues to improve its security plans, placing emphasis on the safety of Dow communities and people by being prepared to meet risks at any level and to address both internal and external identifiable risks. The security plan includes regular vulnerability assessments, security audits, mitigation efforts and physical security upgrades designed to reduce vulnerability. Dow’s security plans also are developed to avert interruptions of normal business operations that could materially and adversely affect the Company’s results of operations, liquidity and financial condition.

Dow implemented the Community Awareness and Emergency Responses (“CAER”) initiative at its manufacturing sites around the world and the communities near those sites. The CAER initiative includes open communication, integrated planning and community drills between industry and surrounding communities. The CAER initiative continues to be a critical part of Dow’s global implementation of Responsible Care®.

Dow played a key role in the development and implementation of the American Chemistry Council’s Responsible Care® Security Code, which requires that all aspects of security – including facility, transportation and cyberspace – be assessed and gaps addressed. Through the Company’s global implementation of the Security Code, Dow has permanently heightened the level of security – not just in the United States, but worldwide. Dow employs several hundred employees and contractors in its Emergency Services and Security department worldwide.

Through the implementation of the Security Code, including voluntary security enhancements and upgrades made since 2002, Dow is well-positioned to comply with U.S. chemical facility regulations and other regulatory security frameworks. In addition, Dow was the first chemical company to receive coverage under the Support Anti-terrorism by Fostering Effective Technologies Act (“SAFETY Act”) from the DHS in 2007 for the Company’s MTSA regulated sites, and the first to receive coverage under the SAFETY Act in 2008 for the Company’s Rail Transportation Security Services. This unprecedented certification helps validate Dow’s efforts and provides additional liability coverage in the event of a terrorist attack.

Dow continues to work collaboratively across the supply chain on Responsible Care®, Supply Chain Design, Emergency Preparedness, Shipment Visibility and transportation of hazardous materials. Dow is cooperating with public and private entities to lead the implementation of advanced tank car design, and track and trace technologies. Further, Dow’s Distribution Risk Review process that has been in place for decades was expanded to address potential threats in all modes of transportation across the Company’s supply chain. To reduce vulnerabilities, Dow maintains security measures that meet or exceed regulatory and industry security standards in all areas in which the Company operates.

Dow continually works to strengthen partnerships with local responders, law enforcement and security agencies, and to enhance confidence in the integrity of the Company’s security and risk management program, as well as strengthen its preparedness and response capabilities. Dow also works closely with its supply chain partners and strives to educate lawmakers, regulators and communities about the Company’s resolve and actions to date that mitigate security and crisis threats.

## Climate Change

Climate change matters for Dow are likely to be driven by changes in regulations, public policy and physical climate parameters.

#### Regulatory Matters

Regulatory matters include cap and trade schemes; increased greenhouse gas (“GHG”) limits; and taxes on GHG emissions, fuel and energy. The potential implications of each of these matters are all very similar, including increased cost of purchased energy, additional capital costs for installation or modification of GHG emitting equipment, and additional costs associated directly with GHG emissions (such as cap and trade systems or carbon taxes), which are primarily related to energy use. It is difficult to estimate the potential impact of these regulatory matters on energy prices.

Reducing Dow's overall energy usage and GHG emissions through new and unfolding projects will decrease the potential impact of these regulatory matters. Dow also has a dedicated commercial group to handle energy contracts and purchases,



## Table of Contents

including managing emissions trading. The Company has not experienced any material impact related to regulated GHG emissions. The Company continues to evaluate and monitor this area for future developments.

### Physical Climate Parameters

Many scientific academies throughout the world have concluded that it is very likely that human activities are contributing to global warming. At this point, it is difficult to predict and assess the probability and opportunity of a global warming trend on Dow specifically. Preparedness plans are developed that detail actions needed in the event of severe weather. These measures have historically been in place and these activities and associated costs are driven by normal operational preparedness. Dow continues to study the long-term implications of changing climate parameters on water availability, plant siting issues, and impacts and opportunities for products.

Dow's Energy business and Public Affairs and Sustainability functions are tasked with developing and implementing a comprehensive strategy that addresses the potential challenges of energy security and GHG emissions on the Company. The Company continues to elevate its internal focus and external positions - to focus on the root causes of GHG emissions - including the unsustainable use of energy. Dow's energy plan provides the roadmap:

- ☛ Conserve - aggressively pursue energy efficiency and conservation
- ☛ Optimize - increase and diversify energy resources
- ☛ Accelerate - develop cost-effective, clean, renewable and alternative energy sources
- ☛ Transition - to a sustainable energy future

Through corporate energy efficiency programs and focused GHG management efforts, the Company has and is continuing to reduce its GHG emissions footprint. The Company's manufacturing intensity, measured in Btu per pound of product, has improved by more than 40 percent since 1990. As part of the Company's 2015 Sustainability Goals, Dow will maintain GHG emissions below 2006 levels on an absolute basis for all GHGs.

### Environmental Remediation

Dow accrues the costs of remediation of its facilities and formerly owned facilities based on current law and regulatory requirements. The nature of such remediation can include management of soil and groundwater contamination and closure of contaminated landfills and other waste management facilities. In the case of landfills and other active waste management facilities, Dow recognizes the costs over the useful life of the facility. The accounting policies adopted to properly reflect the monetary impacts of environmental matters are discussed in Note 1 to the Consolidated Financial Statements. To assess the impact on the financial statements, environmental experts review currently available facts to evaluate the probability and scope of potential liabilities. Inherent uncertainties exist in such evaluations primarily due to unknown environmental conditions, changing governmental regulations and legal standards regarding liability, and the ability to apply remediation technologies. These liabilities are adjusted periodically as remediation efforts progress or as additional technical or legal information becomes available. Dow had an accrued liability of \$628 million at December 31, 2014, related to the remediation of current or former Dow-owned sites. At December 31, 2013, the liability related to remediation was \$649 million.

In addition to current and former Dow-owned sites, under the federal Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA") and equivalent state laws (hereafter referred to collectively as "Superfund Law"), Dow is liable for remediation of other hazardous waste sites where Dow allegedly disposed of, or arranged for the treatment or disposal of, hazardous substances. Because Superfund Law imposes joint and several liability upon each party at a site, Dow has evaluated its potential liability in light of the number of other companies that also have been named potentially responsible parties ("PRPs") at each site, the estimated apportionment of costs among all PRPs, and the financial ability and commitment of each to pay its expected share. The Company's remaining liability for the remediation of Superfund sites was \$78 million at December 31, 2014 (\$73 million at December 31, 2013). The Company has not recorded any third-party recovery related to these sites as a receivable.



Table of Contents

Information regarding environmental sites is provided below:

Environmental Sites	Dow-owned Sites (1)		Superfund Sites (2)	
	2014	2013	2014	2013
Number of sites at January 1	200	290	121	126
Sites added during year	6	3	5	2
Sites closed during year	(22	) (93	) (2	) (7
Number of sites at December 31	184	200	124	121

Dow-owned sites are sites currently or formerly owned by Dow, where remediation obligations are imposed in the United States by the Resource Conservation Recovery Act or analogous state law. At December 31, 2014, 46 of (1) these sites (64 sites at December 31, 2013) were formerly owned by Dowell Schlumberger, Inc., a group of companies in which the Company previously owned a 50 percent interest. Dow sold its interest in Dowell Schlumberger in 1992.

(2) Superfund sites are sites, including sites not owned by Dow, where remediation obligations are imposed by Superfund Law.

Additional information is provided below for the Company's Midland, Michigan, manufacturing site and Midland off-site locations (collectively, the "Midland sites"), as well as a Superfund site in Wood-Ridge, New Jersey, the locations for which the Company has the largest potential environmental liabilities.

In the early days of operations at the Midland manufacturing site, wastes were usually disposed of on-site, resulting in soil and groundwater contamination, which has been contained and managed on-site under a series of Resource Conservation and Recovery Act permits and regulatory agreements. The most recent Hazardous Waste Operating License for the Midland manufacturing site, issued in 2003, also included provisions for the Company to conduct an investigation to determine the nature and extent of off-site contamination from historic Midland manufacturing site operations. In January 2010, the Company, the U.S. Environmental Protection Agency ("EPA") and the State of Michigan ("State") entered into an administrative order on consent that requires the Company to conduct a remedial investigation, a feasibility study and a remedial design for the Tittabawassee River, the Saginaw River and the Saginaw Bay, and pay the oversight costs of the EPA and the State under the authority of CERCLA. See Note 14 to the Consolidated Financial Statements for additional information. At December 31, 2014, the Company had an accrual of \$93 million (\$77 million at December 31, 2013) for environmental remediation and investigation associated with the Midland sites. In 2014, the Company spent \$22 million (\$27 million in 2013) for environmental remediation at the Midland sites.

Rohm and Haas is a PRP at the Wood-Ridge, New Jersey Ventron/Velsicol Superfund Site, and the adjacent Berry's Creek Study Area ("BCSA") (collectively, the "Wood-Ridge sites"). Rohm and Haas is a successor in interest to a company that owned and operated a mercury processing facility, where wastewater and waste handling resulted in contamination of soils and adjacent creek sediments. Currently, the Berry's Creek Study Area PRP group is undertaking a multi-stage Remedial Investigation/Feasibility Study ("RI/FS") to identify contamination in surface water, sediment and biota related to numerous contaminated sites in the Berry's Creek watershed. The RI/FS eventually will support a remedial action plan for the BCSA and is expected to require several more years to complete. At December 31, 2014, the Company had an accrual of \$18 million (\$15 million at December 31, 2013) for environmental remediation at the Wood-Ridge sites. In 2014, the Company spent \$6 million (\$4 million in 2013) on environmental remediation at the Wood-Ridge sites.

In total, the Company's accrued liability for probable environmental remediation and restoration costs was \$706 million at December 31, 2014, compared with \$722 million at the end of 2013. This is management's best estimate of the costs for remediation and restoration with respect to environmental matters for which the Company has accrued liabilities, although it is reasonably possible that the ultimate cost with respect to these particular matters could range

up to approximately two and half times that amount. Consequently, it is reasonably possible that environmental remediation and restoration costs in excess of amounts accrued could have a material impact on the Company's results of operations, financial condition and cash flows. It is the opinion of the Company's management, however, that the possibility is remote that costs in excess of the range disclosed will have a material impact on the Company's results of operations, financial condition and cash flows.

The amounts charged to income on a pretax basis related to environmental remediation totaled \$227 million in 2014, \$203 million in 2013 and \$197 million in 2012. The amounts charged to income on a pretax basis related to operating the Company's current pollution abatement facilities totaled \$762 million in 2014, \$720 million in 2013 and \$717 million in 2012. Capital expenditures for environmental protection were \$78 million in 2014, \$102 million in 2013 and \$145 million in 2012.

Table of Contents

## Asbestos-Related Matters of Union Carbide Corporation

Union Carbide Corporation ("Union Carbide"), a wholly owned subsidiary of the Company, is and has been involved in a large number of asbestos-related suits filed primarily in state courts during the past four decades. These suits principally allege personal injury resulting from exposure to asbestos-containing products and frequently seek both actual and punitive damages. The alleged claims primarily relate to products that Union Carbide sold in the past, alleged exposure to asbestos-containing products located on Union Carbide's premises, and Union Carbide's responsibility for asbestos suits filed against a former Union Carbide subsidiary, Amchem Products, Inc. ("Amchem"). In many cases, plaintiffs are unable to demonstrate that they have suffered any compensable loss as a result of such exposure, or that injuries incurred in fact resulted from exposure to Union Carbide's products.

It is the opinion of Dow's management that it is reasonably possible that the cost of Union Carbide disposing of its asbestos-related claims, including future defense costs, could have a material impact on the Company's results of operations and cash flows for a particular period and on the consolidated financial position of the Company.

The table below provides information regarding asbestos-related claims filed against Union Carbide and Amchem based on criteria developed by Union Carbide and its external consultants.

	2014	2013	2012
Claims unresolved at January 1	29,005	33,449	53,225
Claims filed	8,857	12,069	9,627
Claims settled, dismissed or otherwise resolved	(11,746)	(16,513)	(29,403)
Claims unresolved at December 31	26,116	29,005	33,449
Claimants with claims against both UCC and Amchem	(8,209)	(8,331)	(9,542)
Individual claimants at December 31	17,907	20,674	23,907

Plaintiffs' lawyers often sue numerous defendants in individual lawsuits or on behalf of numerous claimants. As a result, the damages alleged are not expressly identified as to Union Carbide, Amchem or any other particular defendant, even when specific damages are alleged with respect to a specific disease or injury. In fact, there are no personal injury cases in which only Union Carbide and/or Amchem are the sole named defendants. For these reasons and based upon Union Carbide's litigation and settlement experience, Union Carbide does not consider the damages alleged against Union Carbide and Amchem to be a meaningful factor in its determination of any potential asbestos-related liability.

For additional information see Part I, Item 3. Legal Proceedings and Asbestos-Related Matters in Note 14 to the Consolidated Financial Statements.

## K-Dow Arbitration

In February 2009, the Company initiated arbitration proceedings against Petrochemical Industries Company (K.S.C.) ("PIC") alleging that PIC breached the Joint Venture Formation Agreement related to the establishment of K-Dow, a proposed 50:50 global petrochemicals joint venture with PIC, by failing to close the transaction. In May 2012, the International Court of Arbitration of the International Chamber of Commerce ("ICC") awarded the Company \$2.161 billion in damages ("Partial Award"), not including pre- and post-award interest and arbitration costs. On March 4, 2013, the ICC released the Final Award in the arbitration case covering the Company's claim for pre- and post-award interest and arbitration costs and awarded the Company \$318 million, as of February 28, 2013. On May 6, 2013, the Company and PIC entered into a Deed providing for payment of the Company's claims against PIC under the K-Dow arbitration. On May 7, 2013, the Company confirmed the receipt of a \$2.195 billion cash payment from PIC, which included the Partial Award of \$2.161 billion as well as recovery of Dow's costs incurred in the arbitration, including legal fees. In addition, Kuwait Petroleum Corporation provided assurances that no retaliatory or punitive actions would be taken against the Company and its affiliates as a result of the Deed and payment. The K-Dow arbitration is

considered final and settled in full.

Table of Contents

The Dow Chemical Company and Subsidiaries

PART II, Item 7A. Quantitative and Qualitative Disclosures About Market Risk.

**QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK**

Dow's business operations give rise to market risk exposure due to changes in foreign exchange rates, interest rates, commodity prices and other market factors such as equity prices. To manage such risks effectively, the Company enters into hedging transactions, pursuant to established guidelines and policies, that enable it to mitigate the adverse effects of financial market risk. Derivatives used for this purpose are designated as hedges per the accounting guidance related to derivatives and hedging activities, where appropriate. A secondary objective is to add value by creating additional non-specific exposure within established limits and policies; derivatives used for this purpose are not designated as hedges. The potential impact of creating such additional exposures is not material to the Company's results.

The global nature of Dow's business requires active participation in the foreign exchange markets. As a result of investments, production facilities and other operations on a global basis, the Company has assets, liabilities and cash flows in currencies other than the U.S. dollar. The primary objective of the Company's foreign exchange risk management is to optimize the U.S. dollar value of net assets and cash flows, keeping the adverse impact of currency movements to a minimum. To achieve this objective, the Company hedges on a net exposure basis using foreign currency forward contracts, over-the-counter option contracts, cross-currency swaps, and nonderivative instruments in foreign currencies. Exposures primarily relate to assets, liabilities and bonds denominated in foreign currencies, as well as economic exposure, which is derived from the risk that currency fluctuations could affect the dollar value of future cash flows related to operating activities. The largest exposures are denominated in European currencies, the Japanese yen and the Canadian dollar, although exposures also exist in other currencies of Asia Pacific, Latin America, Middle East, Africa and India.

The main objective of interest rate risk management is to reduce the total funding cost to the Company and to alter the interest rate exposure to the desired risk profile. Dow uses interest rate swaps, "swaptions," and exchange-traded instruments to accomplish this objective. The Company's primary exposure is to the U.S. dollar yield curve.

Dow has a portfolio of equity securities derived primarily from the investment activities of its insurance subsidiaries. This exposure is managed in a manner consistent with the Company's market risk policies and procedures.

Inherent in Dow's business is exposure to price changes for several commodities. Some exposures can be hedged effectively through liquid tradable financial instruments. Feedstocks for ethylene production and natural gas constitute the main commodity exposures. Over-the-counter and exchange traded instruments are used to hedge these risks, when feasible.

Dow uses value at risk ("VAR"), stress testing and scenario analysis for risk measurement and control purposes. VAR estimates the maximum potential loss in fair market values, given a certain move in prices over a certain period of time, using specified confidence levels. In 2014, the Company changed the underlying methodology used to calculate VAR from a historical simulation model to a variance/covariance model after implementing a new market risk system. This new approach will provide greater insight and transparency into the contributors of the total portfolio VAR for use in the qualitative summary and will respond to risk in a more systematic fashion. This model uses a 97.5 percent confidence level and includes at least one year of historical data. The 2014 and 2013 year-end and average daily VAR for the aggregate of all positions are shown below. These amounts are immaterial relative to the total equity of the Company.

Total Daily VAR by Exposure Type at December 31	2014		2013 (1)	
In millions	Year-end	Average	Year-end	Average

Edgar Filing: DOW CHEMICAL CO /DE/ - Form 10-K

Commodities	\$13	\$9	\$4	\$9
Equities	\$10	\$10	\$11	\$11
Foreign exchange	\$4	\$5	\$5	\$4
Interest rate	\$119	\$114	\$148	\$147
Composite	\$145	\$138	\$168	\$170

(1)The 2013 VAR values reflect updated calculations using the variance/covariance model.

The Company's daily VAR for the aggregate of all positions decreased from a composite VAR of \$168 million at December 31, 2013 to a composite VAR of \$145 million at December 31, 2014. The decrease in interest rate VAR drives the composite VAR lower and is due to decreased interest rate volatility. The commodities VAR increased due to an increase in managed exposures. The equities and foreign exchange VARs both decreased due to decreased volatilities.

See Note 10 to the Consolidated Financial Statements for further disclosure regarding market risk.



Table of Contents

The Dow Chemical Company and Subsidiaries

PART II, Item 8. Financial Statements and Supplementary Data.

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of

The Dow Chemical Company:

We have audited the accompanying consolidated balance sheets of The Dow Chemical Company and subsidiaries (the “Company”) as of December 31, 2014 and 2013, and the related consolidated statements of income, comprehensive income (loss), equity, and cash flows for each of the three years in the period ended December 31, 2014. Our audits also included the financial statement schedule listed in the Index at Item 15(a)2. These financial statements and financial statement schedule are the responsibility of the Company’s management. Our responsibility is to express an opinion on these financial statements and financial statement schedule based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, such consolidated financial statements present fairly, in all material respects, the financial position of The Dow Chemical Company and subsidiaries as of December 31, 2014 and 2013, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2014, in conformity with accounting principles generally accepted in the United States of America. Also, in our opinion, such financial statement schedule, when considered in relation to the basic consolidated financial statements taken as a whole, presents fairly, in all material respects, the information set forth therein.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the Company's internal control over financial reporting as of December 31, 2014, based on the criteria established in Internal Control-Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated February 13, 2015 expressed an unqualified opinion on the Company's internal control over financial reporting.

/s/ DELOITTE & TOUCHE LLP

Deloitte & Touche LLP

Midland, Michigan

February 13, 2015

Table of Contents

## The Dow Chemical Company and Subsidiaries

## Consolidated Statements of Income

(In millions, except per share amounts) For the years ended December 31	2014	2013	2012	
Net Sales	\$58,167	\$57,080	\$56,786	
Cost of sales	47,464	47,594	47,792	
Research and development expenses	1,647	1,747	1,708	
Selling, general and administrative expenses	3,106	3,024	2,861	
Amortization of intangibles	436	461	478	
Goodwill and other intangible asset impairment losses	50	—	220	
Restructuring charges (credits)	(3	) (22	) 1,343	
Asbestos-related charge	78	—	—	
Equity in earnings of nonconsolidated affiliates	835	1,034	536	
Sundry income (expense) - net	(27	) 2,554	(27	)
Interest income	51	41	41	
Interest expense and amortization of debt discount	983	1,101	1,269	
Income Before Income Taxes	5,265	6,804	1,665	
Provision for income taxes	1,426	1,988	565	
Net Income	3,839	4,816	1,100	
Net income (loss) attributable to noncontrolling interests	67	29	(82	)
Net Income Attributable to The Dow Chemical Company	3,772	4,787	1,182	
Preferred stock dividends	340	340	340	
Net Income Available for The Dow Chemical Company Common Stockholders	\$3,432	\$4,447	\$842	
Per Common Share Data:				
Earnings per common share - basic	\$2.91	\$3.72	\$0.71	
Earnings per common share - diluted	\$2.87	\$3.68	\$0.70	
Dividends declared per share of common stock				
Weighted-average common shares outstanding - basic	1,170.9	1,186.2	1,169.7	
Weighted-average common shares outstanding - diluted	1,187.0	1,290.4	1,176.4	
See Notes to the Consolidated Financial Statements.				

Table of Contents

## The Dow Chemical Company and Subsidiaries

## Consolidated Statements of Comprehensive Income (Loss)

(In millions) For the years ended December 31

	2014	2013	2012
Net Income	\$3,839	\$4,816	\$1,100
Other Comprehensive Income (Loss), Net of Tax			
Net change in unrealized gains on investments	(19	) 13	69
Translation adjustments	(1,227	) 148	256
Adjustments to pension and other postretirement benefit plans	(1,861	) 2,535	(1,861 )
Net gains (losses) on cash flow hedging derivative instruments	(83	) (7	) 16
Total other comprehensive income (loss)	(3,190	) 2,689	(1,520 )
Comprehensive Income (Loss)	649	7,505	(420 )
Comprehensive income (loss) attributable to noncontrolling interests, net of tax	35	29	(82 )
Comprehensive Income (Loss) Attributable to The Dow Chemical Company	\$614	\$7,476	\$(338 )
See Notes to the Consolidated Financial Statements.			

Table of Contents

## The Dow Chemical Company and Subsidiaries

## Consolidated Balance Sheets

(In millions, except share amounts) At December 31

	2014	2013
Assets		
Current Assets		
Cash and cash equivalents (variable interest entities restricted - 2014: \$190; 2013: \$147)	\$5,654	\$5,940
Accounts and notes receivable:		
Trade (net of allowance for doubtful receivables - 2014: \$110; 2013: \$148)	4,685	4,935
Other	4,687	4,712
Inventories	8,101	8,303
Deferred income tax assets - current	812	743
Other current assets	328	344
Total current assets	24,267	24,977
Investments		
Investment in nonconsolidated affiliates	4,201	4,501
Other investments (investments carried at fair value - 2014: \$2,009; 2013: \$2,056)	2,439	2,541
Noncurrent receivables	620	365
Total investments	7,260	7,407
Property		
Property	55,230	55,114
Less accumulated depreciation	37,179	37,660
Net property (variable interest entities restricted - 2014: \$2,726; 2013: \$2,646)	18,051	17,454
Other Assets		
Goodwill	12,632	12,798
Other intangible assets (net of accumulated amortization - 2014: \$3,737; 2013: \$3,270)	3,768	4,314
Deferred income tax assets - noncurrent	2,135	1,964
Asbestos-related insurance receivables - noncurrent	62	86
Deferred charges and other assets	621	501
Total other assets	19,218	19,663
Total Assets	\$68,796	\$69,501
Liabilities and Equity		
Current Liabilities		
Notes payable	\$551	\$443
Long-term debt due within one year	394	697
Accounts payable:		
Trade	4,481	4,590
Other	2,299	2,290
Income taxes payable	361	435
Deferred income tax liabilities - current	105	133
Dividends payable	563	467
Accrued and other current liabilities	2,839	2,916
Total current liabilities	11,593	11,971
Long-Term Debt (variable interest entities nonrecourse - 2014: \$1,229; 2013: \$1,360)	18,838	16,820
Other Noncurrent Liabilities		
Deferred income tax liabilities - noncurrent	622	718
Pension and other postretirement benefits - noncurrent	10,459	8,176
Asbestos-related liabilities - noncurrent	438	434
Other noncurrent obligations	3,290	3,302
Total other noncurrent liabilities	14,809	12,630

Edgar Filing: DOW CHEMICAL CO /DE/ - Form 10-K

Redeemable Noncontrolling Interest	202	156
Stockholders' Equity		
Preferred stock, series A (\$1.00 par, \$1,000 liquidation preference, 4,000,000 shares)	4,000	4,000
Common stock (authorized 1,500,000,000 shares of \$2.50 par value each; issued 2014: 1,242,763,276 shares; 2013: 1,221,557,253 shares)	3,107	3,054
Additional paid-in capital	4,846	3,928
Retained earnings	23,045	21,407
Accumulated other comprehensive loss	(8,017)	(4,827)
Unearned ESOP shares	(325)	(357)
Treasury stock at cost (2014: 85,168,571 shares; 2013: 8,152,030 shares)	(4,233)	(307)
The Dow Chemical Company's stockholders' equity	22,423	26,898
Non-redeemable noncontrolling interests	931	1,026
Total equity	23,354	27,924
Total Liabilities and Equity	\$68,796	\$69,501
See Notes to the Consolidated Financial Statements.		

Table of Contents

## The Dow Chemical Company and Subsidiaries

## Consolidated Statements of Cash Flows

(In millions) For the years ended December 31

	2014	2013	2012
Operating Activities			
Net income	\$3,839	\$4,816	\$1,100
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	2,747	2,681	2,698
Provision (credit) for deferred income tax	466	113	(465)
Earnings of nonconsolidated affiliates less than (in excess of) dividends received	121	(129)	) 287
Pension contributions	(815)	) (865)	) (903)
Net gain on sales of investments	(76)	) (135)	) (19)
Net gain on sales of property, businesses and consolidated companies	(45)	) (582)	) (74)
Net (gain)/loss on sales of ownership interests in nonconsolidated affiliates	1	(30)	) —
Goodwill and other intangible asset impairment losses	50	—	220
Asset impairments and related costs	23	184	—
Restructuring charges (credits)	(3)	) (22)	) 1,343
Loss on early extinguishment of debt	—	329	123
Asbestos-related charge	78	—	—
Excess tax benefits from share-based payment arrangements	(42)	) (23)	) (76)
Other net loss	70	37	48
Changes in assets and liabilities, net of effects of acquired and divested companies:			
Accounts and notes receivable	(884)	) (915)	) (2,534)
Proceeds from interests in trade accounts receivable conduits	1,079	1,028	2,650
Inventories	224	130	(871)
Accounts payable	(79)	) (408)	) 261
Other assets and liabilities	(252)	) 1,614	287
Cash provided by operating activities	6,502	7,823	4,075
Investing Activities			
Capital expenditures	(3,572)	) (2,302)	) (2,614)
Construction of assets pending sale-leaseback	(48)	) —	—
Proceeds from sale-leaseback of assets	470	42	—
Proceeds from sales of property, businesses and consolidated companies, net of cash divested	119	660	77
Acquisitions of businesses	—	—	(2)
Investments in consolidated companies, net of cash acquired	(5)	) (21)	) (37)
Investments in and loans to nonconsolidated affiliates	(270)	) (137)	) (285)
Distributions and loan repayments from nonconsolidated affiliates	69	46	130
Proceeds from sales of ownership interests in nonconsolidated affiliates	8	66	—
Purchases of investments	(643)	) (462)	) (509)
Proceeds from sales and maturities of investments	767	639	553
Cash used in investing activities	(3,105)	) (1,469)	) (2,687)
Financing Activities			
Changes in short-term notes payable	74	(37)	) (116)
Proceeds from issuance of long-term debt	2,448	959	3,347
Payments on long-term debt	(747)	) (4,272)	) (3,988)
Purchases of treasury stock	(4,193)	) (307)	) —

Edgar Filing: DOW CHEMICAL CO /DE/ - Form 10-K

Proceeds from issuance of common stock	679	386	295
Proceeds from sales of common stock	269	—	—
Issuance costs for debt and equity securities	(20	) (7	) (22 )
Excess tax benefits from share-based payment arrangements	42	23	76
Distributions to noncontrolling interests	(91	) (55	) (72 )
Contributions from noncontrolling interests	36	58	—
Purchases of noncontrolling interests	(60	) —	—
Dividends paid to stockholders	(2,020	) (1,479	) (2,050 )
Cash used in financing activities	(3,583	) (4,731	) (2,530 )
Effect of Exchange Rate Changes on Cash	(100	) (1	) 16
Summary			
Increase (decrease) in cash and cash equivalents	(286	) 1,622	(1,126 )
Cash and cash equivalents at beginning of year	5,940	4,318	5,444
Cash and cash equivalents at end of year	\$5,654	\$5,940	\$4,318
See Notes to the Consolidated Financial Statements.			

Table of Contents

## The Dow Chemical Company and Subsidiaries

## Consolidated Statements of Equity

(In millions, except per share amounts) For the years ended December 31	2014	2013	2012
Preferred Stock			
Balance at beginning of year and end of year	\$4,000	\$4,000	\$4,000
Common Stock			
Balance at beginning of year	3,054	3,008	2,961
Common stock issued	53	46	47
Balance at end of year	3,107	3,054	3,008
Additional Paid-in Capital			
Balance at beginning of year	3,928	3,281	2,663
Common stock issued	895	340	248
Stock-based compensation and allocation of ESOP shares	30	307	370
Other	(7	) —	—
Balance at end of year	4,846	3,928	3,281
Retained Earnings			
Balance at beginning of year	21,407	18,495	19,087
Net income available for The Dow Chemical Company common stockholders	3,432	4,447	842
Dividends declared on common stock (per share - 2014: \$1.53; 2013: \$1.28; 2012: \$1.21)	(1,777	) (1,520	) (1,419
Dividend equivalents on participating securities	(17	) (15	) (15
Balance at end of year	23,045	21,407	18,495
Accumulated Other Comprehensive Loss			
Balance at beginning of year	(4,827	) (7,516	) (5,996
Other comprehensive income (loss)	(3,190	) 2,689	(1,520
Balance at end of year	(8,017	) (4,827	) (7,516
Unearned ESOP Shares			
Balance at beginning of year	(357	) (391	) (434
Shares acquired	(11	) (11	) (11
Shares allocated to ESOP participants	43	45	54
Balance at end of year	(325	) (357	) (391
Treasury Stock			
Balance at beginning of year	(307	) —	—
Purchases	(4,193	) (307	) —
Issuances - compensation plans	267	—	—
Balance at end of year	(4,233	) (307	) —
The Dow Chemical Company's Stockholders' Equity	22,423	26,898	20,877
Non-redeemable Noncontrolling Interests	931	1,026	990
Total Equity	\$23,354	\$27,924	\$21,867

See Notes to the Consolidated Financial Statements.



Table of Contents

The Dow Chemical Company and Subsidiaries  
Notes to the Consolidated Financial Statements  
Table of Contents

Note		Page
1	<u>Summary of Significant Accounting Policies</u>	<u>73</u>
2	<u>Recent Accounting Guidance</u>	<u>76</u>
3	<u>Restructuring</u>	<u>77</u>
4	<u>Acquisitions</u>	<u>81</u>
5	<u>Divestitures</u>	<u>81</u>
6	<u>Inventories</u>	<u>82</u>
7	<u>Property</u>	<u>83</u>
8	<u>Nonconsolidated Affiliates and Related Company Transactions</u>	<u>83</u>
9	<u>Goodwill and Other Intangible Assets</u>	<u>86</u>
10	<u>Financial Instruments</u>	<u>88</u>
11	<u>Fair Value Measurements</u>	<u>93</u>
12	<u>Supplementary Information</u>	<u>97</u>
13	<u>Earnings Per Share Calculations</u>	<u>98</u>
14	<u>Commitments and Contingent Liabilities</u>	<u>99</u>
15	<u>Transfers of Financial Assets</u>	<u>107</u>
16	<u>Notes Payable, Long-Term Debt and Available Credit Facilities</u>	<u>108</u>
17	<u>Pension Plans and Other Postretirement Benefits</u>	<u>111</u>
18	<u>Leased Property</u>	<u>118</u>
19	<u>Variable Interest Entities</u>	<u>119</u>
20	<u>Stock-Based Compensation</u>	<u>120</u>
21	<u>Stockholders' Equity</u>	<u>124</u>
22	<u>Income Taxes</u>	<u>126</u>
23	<u>Accumulated Other Comprehensive Loss</u>	<u>129</u>
24	<u>Noncontrolling Interests</u>	<u>130</u>
25	<u>Operating Segments and Geographic Areas</u>	<u>130</u>

## NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

## Principles of Consolidation and Basis of Presentation

The accompanying consolidated financial statements of The Dow Chemical Company and its subsidiaries (“Dow” or the “Company”) were prepared in accordance with accounting principles generally accepted in the United States of America (“U.S. GAAP”) and include the assets, liabilities, revenues and expenses of all majority-owned subsidiaries over which the Company exercises control and, when applicable, entities for which the Company has a controlling financial interest or is the primary beneficiary. Intercompany transactions and balances are eliminated in consolidation. Investments in nonconsolidated affiliates (20-50 percent owned companies, joint ventures and partnerships) are accounted for using the equity method.

## Use of Estimates in Financial Statement Preparation

The preparation of financial statements in accordance with U.S. GAAP requires the use of estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period. The Company’s consolidated financial statements include amounts that are based on management’s best estimates and judgments. Actual results could differ from those estimates.

#### Foreign Currency Translation

The local currency has been primarily used as the functional currency throughout the world. Translation gains and losses of those operations that use local currency as the functional currency are included in the consolidated balance sheets in "Accumulated other comprehensive loss" ("AOCL"). Where the U.S. dollar is used as the functional currency or when the foreign subsidiary operates in a hyper-inflationary environment, foreign currency translation gains and losses are reflected in income.

## Table of Contents

### Environmental Matters

Accruals for environmental matters are recorded when it is probable that a liability has been incurred and the amount of the liability can be reasonably estimated based on current law and existing technologies. These accruals are adjusted periodically as assessment and remediation efforts progress or as additional technical or legal information becomes available. Accruals for environmental liabilities are included in the consolidated balance sheets in “Accrued and other current liabilities” and “Other noncurrent obligations” at undiscounted amounts. Accruals for related insurance or other third-party recoveries for environmental liabilities are recorded when it is probable that a recovery will be realized and are included in the consolidated balance sheets as “Accounts and notes receivable - Other.”

Environmental costs are capitalized if the costs extend the life of the property, increase its capacity, and/or mitigate or prevent contamination from future operations. Environmental costs are also capitalized in recognition of legal asset retirement obligations resulting from the acquisition, construction and/or normal operation of a long-lived asset. Costs related to environmental contamination treatment and cleanup are charged to expense. Estimated future incremental operations, maintenance and management costs directly related to remediation are accrued when such costs are probable and reasonably estimable.

### Cash and Cash Equivalents

Cash and cash equivalents include time deposits and investments with maturities of three months or less at the time of purchase.

### Financial Instruments

The Company calculates the fair value of financial instruments using quoted market prices whenever available. When quoted market prices are not available for various types of financial instruments (such as forwards, options and swaps), the Company uses standard pricing models with market-based inputs that take into account the present value of estimated future cash flows.

The Company utilizes derivatives to manage exposures to foreign currency exchange rates, commodity prices and interest rate risk. The fair values of all derivatives are recognized as assets or liabilities at the balance sheet date. Changes in the fair value of these instruments are reported in income or AOCL, depending on the use of the derivative and whether it qualifies for hedge accounting treatment.

Gains and losses on derivatives that are designated and qualify as cash flow hedging instruments are recorded in AOCL, to the extent the hedges are effective, until the underlying transactions are recognized in income. To the extent effective, gains and losses on derivative and nonderivative instruments used as hedges of the Company’s net investment in foreign operations are recorded in AOCL as part of the cumulative translation adjustment. The ineffective portions of cash flow hedges and hedges of net investment in foreign operations, if any, are recognized in income immediately.

Gains and losses on derivatives designated and qualifying as fair value hedging instruments, as well as the offsetting losses and gains on the hedged items, are reported in income in the same accounting period. Derivatives not designated as hedging instruments are marked-to-market at the end of each accounting period with the results included in income.

### Inventories

Inventories are stated at the lower of cost or market. The method of determining cost for each subsidiary varies among last-in, first-out (“LIFO”); first-in, first-out (“FIFO”); and average cost, and is used consistently from year to year.

The Company routinely exchanges and swaps raw materials and finished goods with other companies to reduce delivery time, freight and other transportation costs. These transactions are treated as non-monetary exchanges and are

valued at cost.

#### Property

Land, buildings and equipment, including property under capital lease agreements, are carried at cost less accumulated depreciation. Depreciation is based on the estimated service lives of depreciable assets and is calculated using the straight-line method, unless the asset was capitalized before 1997 when the declining balance method was used. Fully depreciated assets are retained in property and accumulated depreciation accounts until they are removed from service. In the case of disposals, assets and related accumulated depreciation are removed from the accounts, and the net amounts, less proceeds from disposal, are included in income.

#### Impairment and Disposal of Long-Lived Assets

The Company evaluates long-lived assets and certain identifiable intangible assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. When undiscounted future cash flows

## Table of Contents

are not expected to be sufficient to recover an asset's carrying amount, the asset is written down to its fair value based on bids received from third parties or a discounted cash flow analysis based on market participant assumptions.

Long-lived assets to be disposed of by sale, if material, are classified as held for sale and reported at the lower of carrying amount or fair value less cost to sell, and depreciation is ceased. Long-lived assets to be disposed of other than by sale are classified as held and used until they are disposed of and reported at the lower of carrying amount or fair value, and depreciation is recognized over the remaining useful life of the assets.

### Goodwill and Other Intangible Assets

The Company records goodwill when the purchase price of a business acquisition exceeds the estimated fair value of net identified tangible and intangible assets acquired. Goodwill is tested for impairment at the reporting unit level annually, or more frequently when events or changes in circumstances indicate that the fair value of a reporting unit has more likely than not declined below its carrying value. When testing goodwill for impairment, the Company may first assess qualitative factors. If an initial qualitative assessment identifies that it is more likely than not that the carrying value of a reporting unit exceeds its estimated fair value, additional quantitative testing is performed. The Company may also elect to skip the qualitative testing and proceed directly to the quantitative testing. If the quantitative testing indicates that goodwill is impaired, the carrying value of goodwill is written down to fair value. The Company primarily utilizes a discounted cash flow methodology to calculate the fair value of its reporting units. See Note 9 for further information on goodwill.

Finite-lived intangible assets such as purchased customer lists, licenses, intellectual property, patents, trademarks and software, are amortized over their estimated useful lives, generally on a straight-line basis for periods ranging primarily from three to twenty years. Finite-lived intangible assets are reviewed for impairment or obsolescence annually, or more frequently when events or changes in circumstances indicate that the carrying amount of an intangible asset may not be recoverable. If impaired, intangible assets are written down to fair value based on discounted cash flows.

### Asset Retirement Obligations

The Company records asset retirement obligations as incurred and reasonably estimable, including obligations for which the timing and/or method of settlement are conditional on a future event that may or may not be within the control of the Company. The fair values of obligations are recorded as liabilities on a discounted basis and are accreted over time for the change in present value. Costs associated with the liabilities are capitalized and amortized over the estimated remaining useful life of the asset, generally for periods of 10 years or less.

### Investments

Investments in debt and marketable equity securities (including warrants), primarily held by the Company's insurance operations, are classified as trading, available-for-sale or held-to-maturity. Investments classified as trading are reported at fair value with unrealized gains and losses related to mark-to-market adjustments included in income. Those classified as available-for-sale are reported at fair value with unrealized gains and losses recorded in AOCL. Those classified as held-to-maturity are recorded at amortized cost. The cost of investments sold is determined by FIFO or specific identification. The Company routinely reviews available-for-sale and held-to-maturity securities for other-than-temporary declines in fair value below the cost basis. When events or changes in circumstances indicate the carrying value of an asset may not be recoverable, the security is written down to fair value, establishing a new cost basis.

### Revenue

Sales are recognized when the revenue is realized or realizable, and the earnings process is complete. Approximately 99 percent of the Company's sales in 2014 related to sales of product (99 percent in 2013 and 99 percent in 2012). The remaining 1 percent in 2014 related to the Company's service offerings, insurance operations, and licensing of patents

and technology (1 percent in 2013 and 1 percent in 2012). Revenue for product sales is recognized as risk and title to the product transfer to the customer, which usually occurs at the time shipment is made. As such, title to the product passes when the product is delivered to the freight carrier. Dow's standard terms of delivery are included in its contracts of sale, order confirmation documents and invoices. Freight costs and any directly related costs of transporting finished product to customers are recorded as "Cost of sales" in the consolidated statements of income.

Revenue related to the Company's insurance operations includes third-party insurance premiums, which are earned over the terms of the related insurance policies and reinsurance contracts. Revenue related to the initial licensing of patents and technology is recognized when earned; revenue related to running royalties is recognized according to licensee production levels.

## Table of Contents

### Legal Costs

The Company expenses legal costs as incurred. Accruals for legal matters are recorded when it is probable that a liability has been incurred and the amount of the liability can be reasonably estimated.

### Severance Costs

The Company routinely reviews its operations around the world in an effort to ensure competitiveness across its businesses and geographic areas. When the reviews result in a workforce reduction related to the shutdown of facilities or other optimization activities, severance benefits are provided to employees primarily under Dow's ongoing benefit arrangements. These severance costs are accrued once management commits to a plan of termination including the number of employees to be terminated, their job classifications or functions, their locations and the expected termination date.

### Income Taxes

The Company accounts for income taxes using the asset and liability method. Under this method, deferred tax assets and liabilities are recognized for the future tax consequences of temporary differences between the carrying amounts and tax bases of assets and liabilities using enacted tax rates. The effect of a change in tax rates on deferred tax assets or liabilities is recognized in income in the period that includes the enactment date.

Annual tax provisions include amounts considered sufficient to pay assessments that may result from examinations of prior year tax returns; however, the amount ultimately paid upon resolution of issues raised may differ from the amounts accrued.

The Company recognizes the financial statement effects of an uncertain income tax position when it is more likely than not, based on the technical merits, that the position will be sustained upon examination. The Company accrues for other tax contingencies when it is probable that a liability to a taxing authority has been incurred and the amount of the contingency can be reasonably estimated. The current portion of uncertain income tax positions is included in "Income taxes payable" and the long-term portion is included in "Other noncurrent obligations" in the consolidated balance sheets.

Provision is made for taxes on undistributed earnings of foreign subsidiaries and related companies to the extent that such earnings are not deemed to be permanently invested.

### Earnings per Common Share

The calculation of earnings per common share is based on the weighted-average number of the Company's common shares outstanding for the applicable period. The calculation of diluted earnings per common share reflects the effect of all dilutive potential common shares that were outstanding during the respective periods, unless the effect of doing so is antidilutive.

## NOTE 2 – RECENT ACCOUNTING GUIDANCE

### Recently Adopted Accounting Guidance

During the fourth quarter of 2014, the Company adopted Accounting Standards Update ("ASU") 2014-08, "Presentation of Financial Statements (Topic 205) and Property, Plant and Equipment (Topic 360): Reporting Discontinued Operations and Disclosures of Disposals of Components of an Entity," which changes the criteria for determining which disposals can be presented as discontinued operations and modifies related disclosure requirements. This ASU is effective for fiscal years beginning on or after December 15, 2014, and interim periods within those years. Early adoption is permitted, but only for disposals (or classifications as held for sale) that have not been reported in the financial statements previously issued or available for issuance. See Note 5 for disclosures related

to this adoption.

Accounting Guidance Issued But Not Adopted as of December 31, 2014

In May 2014, the Financial Accounting Standards Board ("FASB") issued ASU 2014-09, "Revenue from Contracts with Customers (Topic 606)," which is the new comprehensive revenue recognition standard that will supersede all existing revenue recognition guidance under U.S. GAAP. The standard's core principle is that a company will recognize revenue when it transfers promised goods or services to a customer in an amount that reflects the consideration to which the company expects to be entitled in exchange for those goods or services. This ASU is effective for annual and interim periods beginning on or after December 15, 2016, and early adoption is not permitted. Entities will have the option of using either a full retrospective approach or a modified approach to adopt the guidance in the ASU. The Company is currently evaluating the impact of adopting this guidance.



Table of Contents

## NOTE 3 – RESTRUCTURING

## 4Q12 Restructuring

On October 23, 2012, the Company's Board of Directors approved a restructuring plan ("4Q12 Restructuring") to advance the next stage of the Company's transformation and to address macroeconomic uncertainties. The restructuring plan affected approximately 2,850 positions and resulted in the shutdown of approximately 20 manufacturing facilities. These actions were substantially completed at December 31, 2014.

As a result of the 4Q12 Restructuring activities, the Company recorded pretax restructuring charges of \$990 million in the fourth quarter of 2012 consisting of costs associated with exit or disposal activities of \$39 million, severance costs of \$375 million and asset write-downs and write-offs of \$576 million. The impact of these charges is shown as "Restructuring charges (credits)" in the consolidated statements of income and reflected in the Company's segments results as shown in the following table:

4Q12 Restructuring Charges by Operating Segment			Impairment of		
In millions	Costs Associated with Exit or Disposal Activities	Severance Costs	Long-Lived Assets, Other Assets and Equity Method Investments	Total	
Consumer Solutions	\$—	\$—	\$136	\$136	
Infrastructure Solutions	—	—	24	24	
Performance Materials & Chemicals	19	—	77	96	
Performance Plastics	8	—	25	33	
Corporate	12	375	314	701	
Total 4Q12 Restructuring charges	\$39	\$375	\$576	\$990	
Adjustments to 4Q12 Restructuring charges					
2013 - Performance Plastics	(6	) —	—	(6	)
2014 - Performance Materials & Chemicals	(3	) —	—	(3	)
Net 4Q12 Restructuring charges	\$30	\$375	\$576	\$981	

Details regarding the components of the 4Q12 Restructuring charges are discussed below:

## Costs Associated with Exit or Disposal Activities

The restructuring charges for costs associated with exit or disposal activities totaled \$39 million in the fourth quarter of 2012 and included \$9 million of curtailment costs associated with other postretirement benefit plans, impacting Corporate; contract cancellation fees of \$25 million, impacting Performance Materials & Chemicals (\$17 million) and Performance Plastics (\$8 million); and environmental remediation of \$5 million, impacting Performance Materials & Chemicals (\$2 million) and Corporate (\$3 million).

## Severance Costs

The restructuring charges in the fourth quarter of 2012 included severance of \$375 million for the separation of approximately 2,850 employees under the terms of the Company's ongoing benefit arrangements, which is expected to be completed by March 31, 2015. These costs were charged against Corporate. At December 31, 2014, severance of \$342 million had been paid and a liability of \$33 million remained for approximately 230 employees.

## Impairment of Long-Lived Assets, Other Assets and Equity Method Investments

The restructuring charges related to the write-down and write-off of assets in the fourth quarter of 2012 totaled \$576 million. Details regarding the write-downs and write-offs are as follows:

As a result of weak global demand for lithium-ion batteries, the Company recorded a pretax impairment charge of \$303 million related to the write-down of Dow Kokam LLC's long-lived assets, impacting Corporate. At the time of the impairment, Dow had a 63.6 percent ownership interest in Dow Kokam LLC. The impact to Dow, after adjustments for income taxes and the portion attributable to noncontrolling interests, was \$189 million.

## Table of Contents

In response to global economic conditions and competitive dynamics, the decision was made to shut down and/or consolidate a number of manufacturing facilities, with an impact of \$246 million, summarized as follows:

A Dow Automotive Systems diesel particulate filters manufacturing facility in Midland, Michigan, was shut down, resulting in the write-down of assets and capital projects associated with this facility of \$114 million, impacting the Consumer Solutions segment. The facility was shut down in the fourth quarter of 2012.

Certain Industrial Solutions manufacturing facilities in Texas City, Texas, were consolidated and/or shut down, resulting in an asset write-down of \$36 million against the Performance Materials & Chemicals segment. The assets were shut down in the fourth quarter of 2012.

An asset write-down of \$17 million for a sodium borohydride manufacturing facility in Delfzijl, The Netherlands, was recorded against the Performance Materials & Chemicals segment in the fourth quarter of 2012. The manufacturing facility was shut down in the third quarter of 2013.

Two Interconnect Technologies manufacturing facilities, one in Lucerne, Switzerland, and the other in Marlborough, Massachusetts, were shut down or sold, resulting in a charge in the fourth quarter of 2012 related to the write-down of assets of \$13 million against the Consumer Solutions segment. The manufacturing facility in Massachusetts was shut down in the fourth quarter of 2013; the manufacturing facility in Switzerland was sold in the third quarter of 2014.

An asset write-down of \$9 million for a polyethylene manufacturing facility in Tessenderlo, Belgium, was recorded against the Performance Plastics segment in the fourth quarter of 2012. The manufacturing facility was shut down in the second quarter of 2013.

Certain Energy & Water Solutions manufacturing assets in Midland, Michigan, were shut down in the fourth quarter of 2012. As a result, an asset write-down of \$9 million was recorded against the Infrastructure Solutions segment.

Polyurethanes manufacturing capacity was consolidated in the United States, resulting in the shut down of a Solon, Ohio, manufacturing facility and an asset write-down of \$6 million in the fourth quarter of 2012, impacting the Performance Materials & Chemicals segment. The manufacturing facility was shut down in the third quarter of 2013.

The decision was made to shut down a number of small manufacturing, research and development, and administrative facilities to optimize the assets of the Company. Write-downs of \$42 million were recorded in the fourth quarter of 2012, impacting Performance Materials & Chemicals (\$15 million), Infrastructure Solutions (\$12 million), Consumer Solutions (\$9 million) and Corporate (\$6 million). Most of these facilities were shut down by the end of the fourth quarter of 2014.

Certain capital projects were canceled resulting in the write-off of project spending of \$8 million against the Performance Plastics (\$7 million) and Infrastructure Solutions (\$1 million) segments.

Due to a change in the Company's strategy regarding its ownership in Nippon Unicar Company, Limited ("NUC"), a 50:50 joint venture, the Company determined its equity investment in NUC to be other-than-temporarily impaired and recorded a \$9 million write-down of its interest in NUC against the Performance Plastics segment in the fourth quarter of 2012. Dow divested its ownership interest in NUC on July 1, 2013.

The fourth quarter of 2012 restructuring charge also included the write-off of other assets associated with plant closures totaling \$10 million. These charges are reflected in the results of the operating segments impacted by the restructuring activities.



Table of Contents

The following table summarizes the activities related to the Company's 4Q12 Restructuring reserve, which is included in "Accrued and other current liabilities" and "Other noncurrent obligations" in the consolidated balance sheets:

4Q12 Restructuring Activities				
In millions	Costs Associated with Exit or Disposal Activities	Severance Costs	Impairment of Long-Lived Assets, Other Assets and Equity Method Investments	Total
Restructuring charges recognized in the fourth quarter of 2012	\$39	\$375	\$576	\$990
Charges against the reserve	(9	) —	(576	) (585
Cash payments	—	(8	) —	(8
Reserve balance at December 31, 2012	\$30	\$367	\$—	\$397
Adjustments to the reserve	(6	) —	—	(6
Cash payments	(5	) (228	) —	(233
Reserve balance at December 31, 2013	\$19	\$139	\$—	\$158
Adjustments to the reserve	(3	) —	—	(3
Cash payments	(4	) (106	) —	(110
Reserve balance at December 31, 2014	\$12	\$33	\$—	\$45

The 4Q12 Restructuring activities were substantially completed in 2014, with remaining liabilities related to severance, contract cancellation fees and environmental remediation to be settled over time.

1Q12 Restructuring

On March 27, 2012, the Company's Board of Directors approved a restructuring plan ("1Q12 Restructuring") to optimize its portfolio, respond to changing and volatile economic conditions, particularly in Western Europe, and to advance the Company's Efficiency for Growth program, which was initiated by the Company in the second quarter of 2011. The 1Q12 Restructuring plan included the elimination of approximately 900 positions. In addition, the Company shut down a number of manufacturing facilities. These actions were substantially completed at December 31, 2013.

As a result of the 1Q12 Restructuring activities, the Company recorded pretax restructuring charges of \$357 million in the first quarter of 2012 consisting of costs associated with exit or disposal activities of \$150 million, severance costs of \$113 million and asset write-downs and write-offs of \$94 million. The impact of these charges is shown as "Restructuring charges (credits)" in the consolidated statements of income and reflected in the Company's segment results as shown in the following table:

1Q12 Restructuring Charges by Operating Segment				
In millions	Costs Associated with Exit or Disposal Activities	Severance Costs	Impairment of Long-Lived Assets and Other Assets	Total
Infrastructure Solutions	\$4	\$—	\$37	\$41
Performance Materials & Chemicals	146	—	57	203
Corporate	—	113	—	113
Total 1Q12 Restructuring charges	\$150	\$113	\$94	\$357
Adjustment to 1Q12 Restructuring charges: 2012 - Infrastructure Solutions	—	—	(4	) (4

Edgar Filing: DOW CHEMICAL CO /DE/ - Form 10-K

2013 - Infrastructure Solutions	(1	) —	—	(1	)
2013 - Performance Materials & Chemicals	(15	) —	—	(15	)
Net 1Q12 Restructuring charges	\$134	\$113	\$90	\$337	

79

---

Table of Contents

Details regarding the components of the 1Q12 Restructuring charge are discussed below:

**Costs Associated with Exit or Disposal Activities**

The restructuring charges for costs associated with exit or disposal activities totaled \$150 million in the first quarter of 2012 and included contract cancellation fees of \$149 million, impacting Performance Materials & Chemicals (\$146 million) and Infrastructure Solutions (\$3 million), and asbestos abatement costs of \$1 million impacting Infrastructure Solutions.

**Severance Costs**

The restructuring charges in the first quarter of 2012 included severance of \$113 million for the separation of approximately 900 employees under the terms of the Company's ongoing benefit arrangements, primarily by December 31, 2013. These costs were charged against Corporate. At December 31, 2013, severance of \$110 million had been paid and a liability of \$3 million remained for 42 employees.

**Impairment of Long-Lived Assets and Other Assets**

The restructuring charges related to the write-down and write-off of assets in the first quarter of 2012 totaled \$94 million. Details regarding the write-downs and write-offs are as follows:

The Company evaluated its facilities that manufacture STYROFOAM™ brand insulation and as a result, the decision was made to shut down facilities in Balatonfuzfo, Hungary; Estarreja, Portugal; and Charleston, Illinois. In addition, a facility in Terneuzen, The Netherlands, was idled and impaired. Write-downs associated with these facilities of \$37 million were recorded in the first quarter of 2012 against the Infrastructure Solutions segment. The Netherlands facility was shut down at the end of the second quarter of 2012. The remaining facilities were shut down in the fourth quarter of 2012.

The decision was made to shut down and/or consolidate certain manufacturing assets in the Polyurethanes and Epoxy businesses in Texas and Germany. Write-downs associated with these assets of \$15 million were recorded in the first quarter of 2012 against the Performance Materials & Chemicals segment. The manufacturing assets in Texas were shut down in the second quarter of 2012. The German manufacturing assets were shut down in 2012.

Certain capital projects were canceled resulting in the write-off of project spending of \$42 million against the Performance Materials & Chemicals segment.

During the fourth quarter of 2012, the Company recorded a favorable adjustment to the 1Q12 Restructuring charge related to the impairment of long-lived assets and other assets of \$4 million, impacting the Infrastructure Solutions segment.

The following table summarizes the activities related to the Company's 1Q12 Restructuring reserve:

**1Q12 Restructuring Activities**

In millions	Costs Associated with Exit or Disposal Activities	Severance Costs	Impairment of Long-Lived Assets and Other Assets	Total
Restructuring charges recognized in the first quarter of 2012	\$150	\$113	\$94	\$357
Adjustments to the reserve	—	—	(4	) (4
Charges against the reserve	—	—	(90	) (90
Cash payments	(45	) (82	) —	(127

Edgar Filing: DOW CHEMICAL CO /DE/ - Form 10-K

Noncash settlements	(47	) —	—	(47	)
Foreign currency impact	(2	) —	—	(2	)
Reserve balance at December 31, 2012	\$56	\$31	\$—	\$87	
Adjustments to the reserve	(16	) —	—	(16	)
Cash payments	(15	) (28	) —	(43	)
Noncash settlements	(8	) —	—	(8	)
Foreign currency impact	(1	) —	—	(1	)
Reserve balance at December 31, 2013	\$16	\$3	\$—	\$19	

80

---



## Table of Contents

The 1Q12 Restructuring activities were substantially completed in 2013, with remaining liabilities related to severance and contract cancellation fees to be settled over time.

Dow expects to incur additional costs in the future related to its restructuring activities, as the Company continually looks for ways to enhance the efficiency and cost effectiveness of its operations, and to ensure competitiveness across its businesses and geographic areas. Future costs are expected to include demolition costs related to closed facilities; these costs will be recognized as incurred. The Company also expects to incur additional employee-related costs, including involuntary termination benefits, related to its other optimization activities. These costs cannot be reasonably estimated at this time.

### 2014 Adjustments to the 4Q12 Restructuring Plan

In 2014, the Company reduced the 4Q12 Restructuring reserve related to contract cancellation fees by \$3 million, impacting Performance Materials & Chemicals.

### 2013 Adjustments to 1Q12 and 4Q12 Restructuring Plans

In 2013, the Company reduced the 4Q12 Restructuring reserve related to contract cancellation fees by \$6 million, impacting Performance Plastics. The Company also reduced the 1Q12 Restructuring reserve related to the adjustment of contract cancellation fees and asbestos abatement costs by \$16 million, impacting Infrastructure Solutions (\$1 million) and Performance Materials & Chemicals (\$15 million).

## NOTE 4 – ACQUISITIONS

### Acquisition of Cooperativa Central de Pesquisa Agrícola's Seed Business

On July 2, 2014, Dow AgroSciences LLC ("DAS") signed a binding agreement to purchase Cooperativa Central de Pesquisa Agrícola's ("Coodetec") seed business, pending regulatory approval by the Brazilian Antitrust Authority ("CADE"). CADE approved the transaction on December 12, 2014. On January 30, 2015, DAS acquired Coodetec's seed business for approximately \$145 million, with approximately half of the purchase price to be paid in the first quarter of 2015 and the remaining portion to be paid in two equal installments in February 2016 and February 2017. The acquisition of Coodetec's seed business is expected to advance the development of Dow AgroSciences' soybean program and strengthen the Company's position in the corn market segment.

### Pending Acquisition of ExxonMobil Chemical Company's Interest in Univation Technologies, LLC

On October 2, 2014, the Company signed a definitive agreement with ExxonMobil Chemical Company ("ExxonMobil") to restructure the ownership of Univation Technologies, LLC ("Univation"), currently a 50:50 joint venture between Dow and ExxonMobil. This transaction will result in Univation becoming a wholly owned subsidiary of Dow. This transaction is expected to close in the first half of 2015, pending regulatory approvals.

## NOTE 5 – DIVESTITURES

During the fourth quarter of 2014, the Company adopted ASU 2014-08. In accordance with this guidance, the Company evaluated the pending divestitures of the Sodium Borohydride business and ANGUS Chemical Company ("ANGUS") (both discussed below) and determined that they do not have a major effect on the Company's operations and financial results and do not qualify as individually significant components of the Company. As a result, the Sodium Borohydride business and ANGUS will not be reported as discontinued operations. In addition, the Sodium Borohydride and ANGUS assets and liabilities are immaterial and are not reflected as held for sale in the Company's consolidated balance sheets.

Divestiture of the Global Sodium Borohydride Business

On December 5, 2014, the Company signed a definitive agreement to sell its global Sodium Borohydride business, currently part of the Performance Materials & Chemicals segment, to Vertellus Specialty Materials LLC for approximately \$190 million. The divestiture included a manufacturing facility located in Elma, Washington, as well as the associated business, inventory, customer contracts and lists, process technology, business know-how and certain intellectual property. The transaction closed on January 30, 2015.

Divestiture of ANGUS Chemical Company

On November 12, 2014, the Company signed a definitive agreement to sell ANGUS Chemical Company (“ANGUS”), currently part of the Performance Materials & Chemicals segment, to Golden Gate Capital for \$1.215 billion. The divestiture included the business headquarters and research and development facility in Buffalo Grove, Illinois; manufacturing facilities located in Sterlington, Louisiana, and Ibbenbueren, Germany; a packaging facility in Niagara Falls, New York; as well as the

Table of Contents

associated business, inventory, customer contracts, process technology, business know-how and certain intellectual property. The transaction closed on February 2, 2015.

#### Divestiture of Polypropylene Licensing and Catalysts Business

On December 2, 2013, the Company sold its global Polypropylene Licensing and Catalysts business to W. R. Grace & Co. for \$490 million, net of working capital adjustments and costs to sell, with proceeds subject to customary post-closing adjustments which were finalized in the fourth quarter of 2014. The carrying value of the net assets divested was \$39 million. The Company recorded a \$451 million pretax gain on the sale, included in "Sundry income (expense) - net" in the consolidated statements of income and reflected in Performance Plastics. The Company recorded an after-tax gain of \$356 million on the sale.

Post-closing adjustments were finalized in the fourth quarter of 2014 and the Company recorded a pretax gain of \$5 million (\$3 million after tax) for the post-closing adjustments. The gain was included in "Sundry income (expense) - net" in the consolidated statements of income and reflected in Performance Plastics.

#### Divestiture of Ownership Interest in Dow Kokam LLC

On November 22, 2013, the Company sold its 67.4 percent ownership interest in Dow Kokam LLC ("Dow Kokam") to MBP Investors, LLC. The Company recorded a pretax gain of \$26 million on the sale, included in "Sundry income (expense) - net" in the consolidated statements of income and reflected in Corporate. In the fourth quarter of 2012, the Company recorded a restructuring charge related to the impairment of Dow Kokam's long-lived assets. See Note 3 for additional information.

As a condition of the sale, Dow acquired the third party lenders' interest in Dow Kokam's \$75 million note, which is included in "Payments on long-term debt" in the consolidated statements of cash flows, and received a \$75 million note from Dow Kokam. At December 31, 2014, \$61 million is classified as "Noncurrent receivables" in the consolidated balance sheets. The note receivable is due to be paid in full by November 22, 2018. Payments received on the note receivable are included in "Proceeds from sales of property, businesses and consolidated companies, net of cash divested" in the consolidated statements of cash flows.

#### Divestiture of Contract Manufacturing Business

On December 31, 2011, the Company sold the shares of Chemoxy International Limited, a contract manufacturing company located in the United Kingdom, to Crossco (1255) Limited.

Post-closing adjustments were finalized in the fourth quarter of 2012 and the Company recognized a pretax and after-tax gain of \$8 million for the post-closing adjustments. The gain was included in "Sundry income (expense) - net" in the consolidated statements of income and reflected in Performance Materials & Chemicals.

#### NOTE 6 – INVENTORIES

The following table provides a breakdown of inventories:

Inventories at December 31	2014	2013
In millions		
Finished goods	\$4,547	\$4,717
Work in process	1,905	1,948
Raw materials	797	760
Supplies	852	878
Total inventories	\$8,101	\$8,303

The reserves reducing inventories from a FIFO basis to a LIFO basis amounted to \$569 million at December 31, 2014 and \$854 million at December 31, 2013. Inventories valued on a LIFO basis, principally hydrocarbon and U.S. chemicals and plastics product inventories, represented 29 percent of the total inventories at December 31, 2014 and 25 percent of total inventories at December 31, 2013.

A reduction of certain inventories resulted in the liquidation of some of the Company's LIFO inventory layers, increasing pretax income \$23 million in 2014, \$55 million in 2013 and \$91 million in 2012.

Table of Contents

## NOTE 7 – PROPERTY

Property at December 31 In millions	Estimated Useful Lives (Years)	2014	2013
Land	—	\$ 874	\$ 907
Land and waterway improvements	15-25	1,374	1,404
Buildings	5-55	4,910	4,945
Machinery and equipment	3-20	39,278	39,971
Utility and supply lines	5-20	2,448	2,446
Other property	3-50	1,940	2,430
Construction in progress	—	4,406	3,011
Total property		\$ 55,230	\$ 55,114

In millions	2014	2013	2012
Depreciation expense	\$ 2,136	\$ 2,051	\$ 2,057
Manufacturing maintenance and repair costs	\$ 2,117	\$ 2,325	\$ 2,188
Capitalized interest	\$ 125	\$ 78	\$ 84

## NOTE 8 – NONCONSOLIDATED AFFILIATES AND RELATED COMPANY TRANSACTIONS

The Company's investments in companies accounted for using the equity method ("nonconsolidated affiliates") were \$4,201 million at December 31, 2014 and \$4,501 million at December 31, 2013. At December 31, 2014, the carrying amount of the Company's investments in nonconsolidated affiliates was \$56 million more than its share of the investees' net assets, exclusive of additional differences for Dow Corning Corporation ("Dow Corning") and MEGlobal, which are discussed separately below. At December 31, 2013, the carrying amount of the Company's investments in nonconsolidated affiliates was \$67 million more than its share of the investees' net assets, exclusive of additional differences for Dow Corning and MEGlobal. Dividends received from the Company's nonconsolidated affiliates were \$961 million in 2014 (including accrued dividends of \$5 million), \$905 million in 2013 and \$823 million in 2012. At December 31, 2014, the Company's investment in Dow Corning was \$149 million less than the Company's proportionate share of Dow Corning's underlying net assets (\$149 million less at December 31, 2013). This amount is considered a permanent difference related to the other-than-temporary decline in the Company's investment in Dow Corning, triggered by Dow Corning's May 15, 1995 bankruptcy filing, and Dow Corning's purchase of additional ownership interests in its Hemlock Semiconductor Group entities in 2013. Dow Corning emerged from bankruptcy in 2004.

At December 31, 2014, the Company's investment in MEGlobal was \$177 million less than the Company's proportionate share of MEGlobal's underlying net assets (\$184 million less at December 31, 2013). This amount represents the difference between the value of certain assets of the joint venture and the Company's related valuation on a U.S. GAAP basis, of which \$41 million is being amortized over the remaining useful lives of the assets and \$136 million is considered to be a permanent difference. In the fourth quarter of 2014, MEGlobal purchased the noncontrolling interest of a subsidiary, which resulted in a \$3 million reduction in the permanent difference. The Company and Saudi Arabian Oil Company formed Sadara Chemical Company ("Sadara") to build and operate a world-scale, fully integrated chemicals complex in Jubail Industrial City, Kingdom of Saudi Arabia. The first production units are expected to come on-line in the second half of 2015, with all units expected to be on-line in 2016. The Company's investment in Sadara is included in "Investments in and loans to nonconsolidated affiliates" in the consolidated statements of cash flows.

The nonconsolidated affiliates in which the Company has investments are primarily privately held companies; therefore, quoted market prices are not available.

Table of Contents

Sales to and purchases from nonconsolidated affiliates were not material to the consolidated financial statements. Balances due to or due from nonconsolidated affiliates at December 31, 2014 and 2013 are as follows:

## Balances Due To or Due From Nonconsolidated Affiliates at December 31

In millions	2014	2013
Accounts and notes receivable - other	\$511	\$512
Noncurrent receivables (1)	212	5
Total assets	\$723	\$517
Notes payable	\$189	\$137
Accounts payable - other	274	221
Total current liabilities	\$463	\$358

(1) Included in "Noncurrent receivables" is a \$193 million note receivable from Sadara that is expected to be converted into equity in the first quarter of 2015.

## Principal Nonconsolidated Affiliates

Dow had an ownership interest in 59 nonconsolidated affiliates at December 31, 2014 (63 at December 31, 2013). The Company's principal nonconsolidated affiliates and its ownership interest (direct and indirect) for each at December 31, 2014, 2013 and 2012 are as follows:

## Principal Nonconsolidated Affiliates at December 31

	Ownership Interest			
	2014	2013	2012	
Dow Corning Corporation	50	% 50	% 50	%
EQUATE Petrochemical Company K.S.C. (1)	42.5	% 42.5	% 42.5	%
The Kuwait Olefins Company K.S.C. (1)	42.5	% 42.5	% 42.5	%
The Kuwait Styrene Company K.S.C. (1) (2)	42.5	% N/A	N/A	
Map Ta Phut Olefins Company Limited (3)	32.77	% 32.77	% 32.77	%
MEGlobal (1)	50	% 50	% 50	%
Sadara Chemical Company	35	% 35	% 35	%
The SCG-Dow Group:				
Siam Polyethylene Company Limited	50	% 50	% 50	%
Siam Polystyrene Company Limited	50	% 50	% 50	%
Siam Styrene Monomer Co., Ltd.	50	% 50	% 50	%
Siam Synthetic Latex Company Limited	50	% 50	% 50	%
Univation Technologies, LLC (4)	50	% 50	% 50	%

In the fourth quarter of 2014, the Company announced it will reconfigure and reduce its equity base in EQUATE Petrochemical Company K.S.C., The Kuwait Olefins Company K.S.C., The Kuwait Styrene Company K.S.C. and MEGlobal through a divestment of a portion of the Company's interests. Dow expects such transaction(s) to be completed by mid-2016.

(2) The Kuwait Styrene Company K.S.C. was added as a principal nonconsolidated affiliate in the fourth quarter of 2014.

The Company's effective ownership of Map Ta Phut Olefins Company Limited is 32.77 percent, of which the Company directly owns 20.27 percent and indirectly owns 12.5 percent through its equity interest in Siam Polyethylene Company Limited and Siam Synthetic Latex Company Limited.

On October 2, 2014, the Company reached a definitive agreement with ExxonMobil Chemical Company to acquire the remaining 50 percent ownership interest in Univation Technologies, LLC ("Univation"), which will result in Univation becoming a wholly owned subsidiary of Dow. The transaction is expected to close in the first half of 2015, pending regulatory approvals.

The Company's investment in its principal nonconsolidated affiliates was \$3,487 million at December 31, 2014 and \$3,625 million at December 31, 2013. Equity earnings from these companies were \$845 million in 2014, \$951 million

in 2013 and \$479 million in 2012. Equity earnings from principal nonconsolidated affiliates decreased in 2014 compared with 2013, primarily due to lower equity earnings at EQUATE Petrochemical Company K.S.C., The Kuwait Styrene Company K.S.C. and MEGlobal as well as increased equity losses from Sadara which were partially offset by increased equity earnings from Dow Corning. In 2014, Dow Corning's equity earnings were unfavorably impacted by an impairment charge related to the abandonment of a polycrystalline silicon plant expansion in Clarksville, Tennessee, which was partially offset by a reduction to its implant liability reserve. In 2012, Dow Corning's equity earnings were negatively impacted by asset impairment and restructuring charges.



Table of Contents

The summarized financial information that follows represents the combined accounts (at 100 percent) of the principal nonconsolidated affiliates.

## Summarized Balance Sheet Information at December 31

In millions	2014	2013 (1)
Current assets	\$9,611	\$8,675
Noncurrent assets	27,025	24,166
Total assets	\$36,636	\$32,841
Current liabilities	\$6,321	\$5,972
Noncurrent liabilities	21,047	17,129
Total liabilities	\$27,368	\$23,101
Noncontrolling interests	\$666	\$624

(1) The summarized balance sheet information for 2013 does not include the results of The Kuwait Styrene Company K.S.C. as this entity became a principal nonconsolidated affiliate in 2014.

## Summarized Income Statement Information

In millions	2014	2013 (1)	2012 (1)
Sales	\$19,333	\$18,257	\$17,668
Gross profit	\$3,526	\$3,403	\$2,911
Net income	\$1,673	\$1,906	\$872

(1) The summarized income statement information for 2013 and 2012 does not include the results of The Kuwait Styrene Company K.S.C. as this entity became a principal nonconsolidated affiliate in 2014.

The Company has service agreements with some of these entities, including contracts to manage the operations of manufacturing sites and the construction of new facilities; licensing and technology agreements; and marketing, sales, purchase and lease agreements.

The Company sells excess ethylene glycol produced at Dow's manufacturing facilities in the United States and Europe to MEGlobal. The Company also sells ethylene to MEGlobal as a raw material for its ethylene glycol plants in Canada. Sales of these products to MEGlobal represented 1 percent of total net sales in 2014 (1 percent of total net sales in 2013 and 1 percent of total net sales in 2012). Sales of ethylene glycol to MEGlobal are reflected in the Performance Materials & Chemicals segment and represented 2 percent of the segment's sales in 2014 (2 percent in 2013 and 2 percent in 2012). Sales of ethylene to MEGlobal are reflected in the Performance Plastics segment and represented 1 percent of the segment's sales in 2014 (2 percent in 2013 and 1 percent in 2012).

Table of Contents

## NOTE 9 – GOODWILL AND OTHER INTANGIBLE ASSETS

The following tables show changes in the carrying amount of goodwill for the years ended December 31, 2014 and 2013, by operating segment:

2014 Goodwill	Agricultural Sciences	Consumer Solutions	Infrastructure Solutions	Performance Materials & Chemicals	Performance Plastics	Total
In millions						
Gross goodwill at Jan 1, 2014	\$1,563	\$4,618	\$4,540	\$1,041	\$1,465	\$13,227
Accumulated impairments at Jan 1, 2014	—	(209)	—	(220)	—	(429)
Net goodwill at Jan 1, 2014	\$1,563	\$4,409	\$4,540	\$821	\$1,465	\$12,798
Purchase price adjustment of a seed company	(5)	—	—	—	—	(5)
Foreign currency impact	—	(20)	(89)	(12)	(40)	(161)
Net goodwill at Dec 31, 2014	\$1,558	\$4,389	\$4,451	\$809	\$1,425	\$12,632
Accumulated impairments at Dec 31, 2014	—	209	—	220	—	429
Gross goodwill at Dec 31, 2014	\$1,558	\$4,598	\$4,451	\$1,029	\$1,425	\$13,061

2013 Goodwill	Agricultural Sciences	Consumer Solutions	Infrastructure Solutions	Performance Materials & Chemicals	Performance Plastics	Total
In millions						
Gross goodwill at Jan 1, 2013	\$1,558	\$4,611	\$4,511	\$1,037	\$1,451	\$13,168
Accumulated impairments at Jan 1, 2013	—	(209)	—	(220)	—	(429)
Net goodwill at Jan 1, 2013	\$1,558	\$4,402	\$4,511	\$817	\$1,451	\$12,739
Acquisition of a seed company	5	—	—	—	—	5
Sale of a Performance Monomers product line	—	—	(3)	—	—	(3)
Foreign currency impact	—	7	32	4	14	57
Net goodwill at Dec 31, 2013	\$1,563	\$4,409	\$4,540	\$821	\$1,465	\$12,798
Accumulated impairments at Dec 31, 2013	—	209	—	220	—	429
Gross goodwill at Dec 31, 2013	\$1,563	\$4,618	\$4,540	\$1,041	\$1,465	\$13,227

## Goodwill Impairments

The Company performs an impairment test for goodwill annually during the fourth quarter. Qualitative factors may be assessed by the Company to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying value. The qualitative factors assessed at the Company level include, but are not limited to, GDP growth rates, long-term hydrocarbon and energy prices, equity and credit market activity, discount rates, foreign

exchange rates and overall financial performance. Qualitative factors assessed at the reporting unit level include, but are not limited to, changes in industry and market structure, competitive environments, planned capacity and new product launches, cost factors such as raw material prices, and financial performance of the reporting unit.

#### 2014 Goodwill Impairment Testing

In 2014, the Company assessed qualitative factors for 9 of the 14 reporting units carrying goodwill. The qualitative assessment indicated that it was more likely than not that the fair value exceeded carrying value for those reporting units included in the qualitative test. The Company performed the first step of the quantitative testing for the remaining five reporting units. The Company utilized a discounted cash flow methodology to calculate the fair value of the reporting units. Based on the fair value analysis, management concluded that fair value exceeded carrying value for all reporting units. As a result, no additional quantitative testing was required for the reporting units.

Table of Contents**2013 Goodwill Impairment Testing**

In 2013, the Company assessed qualitative factors for 14 of the 19 reporting units carrying goodwill. The qualitative assessment indicated that it was more likely than not that the fair value exceeded carrying value for those reporting units included in the qualitative test. The Company performed the first step of the quantitative testing for the remaining five reporting units. The Company utilized a discounted cash flow methodology to calculate the fair value of the reporting units. Based on the fair value analysis, management concluded that fair value exceeded carrying value for all reporting units. As a result, no additional quantitative testing was required for the reporting units.

**2012 Goodwill Impairment Testing**

In 2012, the Company assessed qualitative factors for 11 of the 20 reporting units carrying goodwill. The qualitative assessment indicated that it was more likely than not that the fair value exceeded carrying value for those reporting units included in the qualitative test. The Company performed the first step of the quantitative testing for the remaining nine reporting units. The Company utilized a discounted cash flow methodology to calculate the fair value of the reporting units. Based on the fair value analysis, management concluded that fair value exceeded carrying value for all reporting units except Dow Formulated Systems. Management completed the second step of the quantitative test for Dow Formulated Systems which compared the implied fair value of the reporting unit's goodwill to the carrying value. As a result, the Company recorded an impairment loss of \$220 million in the fourth quarter of 2012, which is included in "Goodwill and other intangible asset impairment losses" in the consolidated statements of income and reflected in the Performance Materials & Chemicals segment. The goodwill impairment loss represented the total amount of goodwill that was carried by the Dow Formulated Systems reporting unit.

**Other Intangible Assets**

The following table provides information regarding the Company's other intangible assets:

Other Intangible Assets at December 31	2014			2013		
In millions	Gross Carrying Amount	Accumulated Amortization	Net	Gross Carrying Amount	Accumulated Amortization	Net
Intangible assets with finite lives:						
Licenses and intellectual property	\$1,777	\$(1,060)	) \$717	\$1,774	\$(908)	) \$866
Patents	122	(108)	) 14	125	(109)	) 16
Software	1,287	(648)	) 639	1,186	(591)	) 595
Trademarks	685	(409)	) 276	686	(345)	) 341
Customer-related	3,443	(1,366)	) 2,077	3,622	(1,181)	) 2,441
Other	158	(146)	) 12	154	(136)	) 18
Total other intangible assets, finite lives	\$7,472	\$(3,737)	) \$3,735	\$7,547	\$(3,270)	) \$4,277
IPR&D (1), indefinite lives	33	—	33	37	—	37
Total other intangible assets	\$7,505	\$(3,737)	) \$3,768	\$7,584	\$(3,270)	) \$4,314

(1) In-process research and development ("IPR&D") purchased in a business combination.

The following table provides information regarding amortization expense related to intangible assets:

Amortization Expense	2014	2013	2012
In millions			
Other intangible assets, excluding software (1)	\$436	\$461	\$478
Software, included in "Cost of sales"	\$70	\$67	\$63

(1) Includes a \$3 million asset impairment charge related to intangible assets in 2013.

During 2014, the Company recognized a \$50 million asset impairment charge related to customer-related, trademarks and intellectual property intangible assets in the Dow Electronic Materials business, which is recorded in "Goodwill and other intangible asset impairment losses" in the consolidated statements of income and reflected in Consumer Solutions. During 2013, the Company recognized a \$3 million asset impairment charge related to software, which is recorded in "Cost of sales" and reflected in Corporate.

Table of Contents

Total estimated amortization expense for the next five fiscal years is as follows:

Estimated Amortization Expense  
for Next Five Years

In millions

2015	\$485
2016	\$476
2017	\$445
2018	\$424
2019	\$359

#### NOTE 10 – FINANCIAL INSTRUMENTS

The following table summarizes the fair value of financial instruments at December 31, 2014 and 2013:

Fair Value of Financial Instruments at December 31

In millions	2014				2013			
	Cost	Gain	Loss	Fair Value	Cost	Gain	Loss	Fair Value
Marketable securities: (1)								
Debt securities:								
Government debt (2)	\$559	\$26	\$(1)	\$584	\$544	\$28	\$(8)	\$564
Corporate bonds	654	45	(2)	697	659	43	(7)	695
Total debt securities	\$1,213	\$71	\$(3)	\$1,281	\$1,203	\$71	\$(15)	\$1,259
Equity securities	566	177	(15)	728	605	196	(4)	797
Total marketable securities	\$1,779	\$248	\$(18)	\$2,009	\$1,808	\$267	\$(19)	\$2,056
Long-term debt including debt due within one year (3)	\$(19,232)	\$100	\$(2,318)	\$(21,450)	\$(17,517)	\$296	\$(2,246)	\$(19,467)
Derivatives relating to:								
Interest rates	\$—	\$—	\$(12)	\$(12)	\$—	\$—	\$(5)	\$(5)
Commodities (4)	\$—	\$3	\$(81)	\$(78)	\$—	\$11	\$(2)	\$9
Foreign currency	\$—	\$26	\$(71)	\$(45)	\$—	\$45	\$(13)	\$32

(1) Included in “Other investments” in the consolidated balance sheets.

(2) U.S. Treasury obligations, U.S. agency obligations, agency mortgage-backed securities and other municipalities’ obligations.

(3) Cost includes fair value adjustments of \$21 million at December 31, 2014 and \$22 million at December 31, 2013.

(4) Presented net of cash collateral, as disclosed in Note 11.

Cost approximates fair value for all other financial instruments.

#### Investments

The Company’s investments in marketable securities are primarily classified as available-for-sale securities.

#### Investing Results

In millions	2014	2013	2012
Proceeds from sales of available-for-sale securities	\$675	\$486	\$514
Gross realized gains	\$99	\$66	\$40
Gross realized losses	\$(6)	\$(4)	\$(11)



Table of Contents

The following table summarizes the contractual maturities of the Company's investments in debt securities:

Contractual Maturities of Debt Securities  
at December 31, 2014

In millions	Amortized Cost	Fair Value
Within one year	\$8	\$9
One to five years	496	517
Six to ten years	503	521
After ten years	206	234
Total	\$1,213	\$1,281

At December 31, 2014, the Company had \$1,050 million (\$1,581 million at December 31, 2013) of held-to-maturity securities (primarily Treasury Bills) classified as cash equivalents as these securities had maturities of three months or less at the time of purchase. The Company's investments in held-to-maturity securities are held at amortized cost, which approximates fair value. At December 31, 2014, the Company had investments in money market funds of \$1,655 million classified as cash equivalents (\$1,331 million at December 31, 2013).

The net unrealized gain/loss from mark-to-market adjustments recognized in earnings on trading securities held at the end of the year was a \$3 million gain in 2014, a \$13 million loss in 2013 and a \$1 million gain in 2012.

The following table provides the fair value and gross unrealized losses of the Company's investments that were deemed to be temporarily impaired at December 31, 2014 and 2013, aggregated by investment category:

Temporarily Impaired Securities at December 31 (1)	2014		2013	
	Less than 12 months		Less than 12 months	
In millions	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
Government debt (2)	\$74	\$(1)	\$160	\$(8)
Corporate bonds	102	(1)	213	(7)
Equity securities	175	(15)	144	(4)
Total temporarily impaired securities	\$351	\$(17)	\$517	\$(19)

(1) Unrealized losses of 12 months or more were \$1 million at December 31, 2014 and less than \$1 million at December 31, 2013.

(2) U.S. Treasury obligations, U.S. agency obligations, agency mortgage-backed securities and other municipalities' obligations.

Portfolio managers regularly review the Company's holdings to determine if any investments are other-than-temporarily impaired. The analysis includes reviewing the amount of the impairment, as well as the length of time it has been impaired. In addition, specific guidelines for each instrument type are followed to determine if an other-than-temporary impairment has occurred.

For debt securities, the credit rating of the issuer, current credit rating trends, the trends of the issuer's overall sector, the ability of the issuer to pay expected cash flows and the length of time the security has been in a loss position are considered in determining whether unrealized losses represent an other-than-temporary impairment. The Company did not have any credit-related losses during 2014, 2013 or 2012.

For equity securities, the Company's investments are primarily in Standard & Poor's ("S&P") 500 companies; however, the Company's policies allow investments in companies outside of the S&P 500. The largest holdings are Exchange



Traded Funds that represent the S&P 500 index or an S&P 500 sector or subset; the Company also has holdings in Exchange Traded Funds that represent emerging markets. The Company considers the evidence to support the recovery of the cost basis of a security including volatility of the stock, the length of time the security has been in a loss position, value and growth expectations, and overall market and sector fundamentals, as well as technical analysis, in determining whether unrealized losses represent an other-than-temporary impairment. In 2014, other-than-temporary impairment write-downs on investments still held by the Company were \$6 million (\$2 million in 2013).

The aggregate cost of the Company's cost method investments totaled \$181 million at December 31, 2014 (\$185 million at December 31, 2013). Due to the nature of these investments, either the cost basis approximates fair market value or fair value is

## Table of Contents

not readily determinable. These investments are reviewed quarterly for impairment indicators. The Company's impairment analysis resulted in an \$18 million reduction in the cost basis of these investments for the year ended December 31, 2014; the analysis in 2013 resulted in a \$6 million reduction for the year ended December 31, 2013.

### **Risk Management**

Dow's business operations give rise to market risk exposure due to changes in interest rates, foreign currency exchange rates, commodity prices and other market factors such as equity prices. To manage such risks effectively, the Company enters into hedging transactions, pursuant to established guidelines and policies, which enable it to mitigate the adverse effects of financial market risk. Derivatives used for this purpose are designated as cash flow, fair value or net foreign investment hedges where appropriate. Accounting guidance requires companies to recognize all derivative instruments as either assets or liabilities at fair value. A secondary objective is to add value by creating additional nonspecific exposures within established limits and policies; derivatives used for this purpose are not designated as hedges. The potential impact of creating such additional exposures is not material to the Company's results.

The Company's risk management program for interest rate, foreign currency and commodity risks is based on fundamental, mathematical and technical models that take into account the implicit cost of hedging. Risks created by derivative instruments and the mark-to-market valuations of positions are strictly monitored at all times, using value at risk and stress tests. Counterparty credit risk arising from these contracts is not significant because the Company minimizes counterparty concentration, deals primarily with major financial institutions of solid credit quality, and the majority of its hedging transactions mature in less than three months. In addition, the Company minimizes concentrations of credit risk through its global orientation by transacting with large, internationally diversified financial counterparties. It is the Company's policy to not have credit-risk-related contingent features in its derivative instruments. No significant concentration of counterparty credit risk existed at December 31, 2014. The Company does not anticipate losses from credit risk, and the net cash requirements arising from counterparty risk associated with risk management activities are not expected to be material in 2015.

The Company revises its strategies as market conditions dictate and management reviews its overall financial strategies and the impacts from using derivatives in its risk management program with the Company's Board of Directors.

### **Interest Rate Risk Management**

The Company enters into various interest rate contracts with the objective of lowering funding costs or altering interest rate exposures related to fixed and variable rate obligations. In these contracts, the Company agrees with other parties to exchange, at specified intervals, the difference between fixed and floating interest amounts calculated on an agreed-upon notional principal amount. At December 31, 2014, the Company had open interest rate swaps with maturity dates that extend to 2021.

### **Foreign Currency Risk Management**

The Company's global operations require active participation in foreign exchange markets. The Company enters into foreign exchange forward contracts and options, and cross-currency swaps to hedge various currency exposures or create desired exposures. Exposures primarily relate to assets, liabilities and bonds denominated in foreign currencies, as well as economic exposure, which is derived from the risk that currency fluctuations could affect the dollar value of future cash flows related to operating activities. The primary business objective of the activity is to optimize the U.S. dollar value of the Company's assets, liabilities and future cash flows with respect to exchange rate fluctuations. Assets and liabilities denominated in the same foreign currency are netted, and only the net exposure is hedged. At December 31, 2014, the Company had forward contracts, options and cross-currency swaps to buy, sell or exchange foreign currencies. These contracts had various expiration dates, primarily in the first quarter of 2015.

### **Commodity Risk Management**

The Company has exposure to the prices of commodities in its procurement of certain raw materials. The primary purpose of commodity hedging activities is to manage the price volatility associated with these forecasted inventory purchases. At December 31, 2014, the Company had futures contracts, options and swaps to buy, sell or exchange commodities. These agreements had various expiration dates through the fourth quarter of 2020.

#### Accounting for Derivative Instruments and Hedging Activities

##### Cash Flow Hedges

For derivatives that are designated and qualify as cash flow hedging instruments, the effective portion of the gain or loss on the derivative is recorded in “Accumulated other comprehensive loss” (“AOCL”); it is reclassified to “Cost of sales” in the same period or periods that the hedged transaction affects income. The unrealized amounts in AOCL fluctuate based on changes in the fair value of open contracts at the end of each reporting period. The Company anticipates volatility in AOCL and net income from its cash flow hedges. The amount of volatility varies with the level of derivative activities and market conditions

Table of Contents

during any period. Gains and losses on the derivatives representing either hedge ineffectiveness or hedge components excluded from the assessment of effectiveness are recognized in current period income.

The Company had open interest rate derivatives designated as cash flow hedges at December 31, 2014 with a net loss of \$8 million after tax and a notional U.S. dollar equivalent of \$434 million (net loss of \$3 million after tax and a notional U.S. dollar equivalent of \$417 million at December 31, 2013).

Current open foreign currency forward contracts hedge the currency risk of forecasted feedstock purchase transactions until August 2015. The effective portion of the mark-to-market effects of the foreign currency forward contracts is recorded in AOCL; it is reclassified to income in the same period or periods that the underlying feedstock purchase affects income. The net gain from the foreign currency hedges included in AOCL at December 31, 2014 was \$31 million after tax (net loss of \$11 million after tax at December 31, 2013). During 2014, 2013 and 2012, there was no material impact on the consolidated financial statements due to foreign currency hedge ineffectiveness. At December 31, 2014, the Company had open forward contracts with various expiration dates to buy, sell or exchange foreign currencies with a notional U.S. dollar equivalent of \$374 million (\$459 million at December 31, 2013).

In the third quarter of 2014, the Company revised its risk management policies for cash flow hedges related to commodity swaps, futures and option contracts whereby allowing the maturity of trades to extend through December 2020, or 72 months at December 31, 2014 (at December 31, 2013 maturities of not more than 36 months were allowed). These trades are designated as cash flow hedges of forecasted commodity purchases. Current open contracts hedge forecasted transactions until December 2020. The effective portion of the mark-to-market effect of the cash flow hedge instrument is recorded in AOCL; it is reclassified to income in the same period or periods that the underlying commodity purchase affects income. The net loss from commodity hedges included in AOCL at December 31, 2014 was \$96 million after tax (\$14 million after tax gain at December 31, 2013). During 2014, 2013 and 2012, there was no material impact on the consolidated financial statements due to commodity hedge ineffectiveness. At December 31, 2014 and 2013, the Company had the following gross aggregate notionals of outstanding commodity forward and futures contracts to hedge forecasted purchases:

Commodity	Dec 31, 2014	Dec 31, 2013	Notional Volume Unit
Corn	1.3	2.7	million bushels
Crude Oil	0.5	0.5	million barrels
Ethane	0.9	1.0	million barrels
Naphtha	—	3.0	kilotons
Natural Gas	192.5	82.9	million million British thermal units
Soybeans	1.2	0.8	million bushels

The net after-tax amounts to be reclassified from AOCL to income within the next 12 months are a \$64 million loss for commodity contracts, a \$31 million gain for foreign currency contracts and a \$4 million loss for interest rate contracts.

**Fair Value Hedges**

For derivative instruments that are designated and qualify as fair value hedges, the gain or loss on the derivative as well as the offsetting loss or gain on the hedged item attributable to the hedged risk are recognized in current period income and reflected as “Interest expense and amortization of debt discount” in the consolidated statements of income. The short-cut method is used when the criteria are met. At December 31, 2014 and 2013, the Company had no open interest rate swaps designated as fair value hedges of underlying fixed rate debt obligations.

**Net Foreign Investment Hedges**

For derivative instruments that are designated and qualify as net foreign investment hedges, the effective portion of the gain or loss on the derivative is included in "Cumulative Translation Adjustments" in AOCL. At December 31, 2014 and 2013, the Company had no open forward contracts or outstanding options to buy, sell or exchange foreign currencies designated as net foreign investment hedges. At December 31, 2014, the Company had outstanding foreign-currency denominated debt designated as a hedge of net foreign investment of \$167 million (\$190 million at December 31, 2013). The results of hedges of the Company's net investment in foreign operations included in "Cumulative Translation Adjustments" in AOCL was a net gain of \$15 million after tax for the period ended December 31, 2014 (net gain of \$27 million after tax for the period ended December 31, 2013). During 2014, 2013 and 2012 there was no material impact on the consolidated financial statements due to hedge ineffectiveness. See Note 23 for further detail on changes in AOCL.

Table of Contents

## Other Derivative Instruments

The Company utilizes futures, options and swap instruments that are effective as economic hedges of commodity price exposures, but do not meet hedge accounting criteria for derivatives and hedging. At December 31, 2014 and 2013, the Company had the following gross aggregate notionals of outstanding commodity contracts:

Commodity	Dec 31, 2014	Dec 31, 2013	Notional Volume Unit
Ethane	0.2	0.3	million barrels
Gasoline	15.0	—	kilotons
Naphtha Price Spread	91.0	—	kilotons
Natural Gas	0.5	5.2	million million British thermal units

The Company also uses foreign exchange forward contracts, options and cross-currency swaps that are not designated as hedging instruments primarily to manage foreign currency exposure. The Company had open foreign exchange contracts and cross-currency swaps with various expiration dates to buy, sell or exchange foreign currencies with a gross notional U.S. dollar equivalent of \$20,156 million at December 31, 2014 (\$17,228 million at December 31, 2013) and had no open interest rate swaps at December 31, 2014 and December 31, 2013.

The following table provides the fair value and gross balance sheet classification of derivative instruments at December 31, 2014 and 2013:

Fair Value of Derivative Instruments In millions	Balance Sheet Classification	2014	2013
Asset Derivatives			
Derivatives designated as hedges:			
Commodities	Other current assets	\$4	\$13
Foreign currency	Accounts and notes receivable – Other	25	—
Total derivatives designated as hedges		\$29	\$13
Derivatives not designated as hedges:			
Commodities	Other current assets	\$2	\$1
Foreign currency	Accounts and notes receivable – Other	91	65
Total derivatives not designated as hedges		\$93	\$66
Total asset derivatives		\$122	\$79
Liability Derivatives			
Derivatives designated as hedges:			
Interest rates	Accounts payable – Other	\$12	\$5
Commodities	Accounts payable – Other	106	5
Foreign currency	Accounts payable – Other	—	9
Total derivatives designated as hedges		\$118	\$19
Derivatives not designated as hedges:			
Commodities	Accounts payable – Other	\$2	\$1
Foreign currency	Accounts payable – Other	161	24
Total derivatives not designated as hedges		\$163	\$25
Total liability derivatives		\$281	\$44

Foreign currency derivatives not designated as hedges are offset by foreign exchange gains or losses resulting from the underlying exposures of foreign currency denominated assets and liabilities. The amount charged on a pretax basis related to foreign currency derivatives not designated as a hedge, which is included in "Sundry income (expense) -

net" in the consolidated statements of income, was a loss of \$333 million for 2014, gain of \$89 million for 2013 and loss of \$9 million for 2012. See Note 12 for the net impact of foreign exchange transactions.

Table of Contents

## NOTE 11 – FAIR VALUE MEASUREMENTS

## Fair Value Measurements on a Recurring Basis

The following tables summarize the bases used to measure certain assets and liabilities at fair value on a recurring basis:

Basis of Fair Value Measurements on a Recurring Basis at December 31, 2014	Quoted Prices in Active Markets for Identical Items (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Counterparty and Cash Collateral Netting (1)	Total
In millions					
Assets at fair value:					
Cash equivalents (2)	\$—	\$2,705	\$—	\$—	\$2,705
Interests in trade accounts receivable conduits (3)	—	—	1,328	—	1,328
Equity securities (4)	692	36	—	—	728
Debt securities: (4)					
Government debt (5)	—	584	—	—	584
Corporate bonds	—	697	—	—	697
Derivatives relating to: (6)					
Commodities	—	6	—	(3	) 3
Foreign currency	—	116	—	(90	) 26
Total assets at fair value	\$692	\$4,144	\$1,328	\$(93	) \$6,071
Liabilities at fair value:					
Long-term debt (7)	\$—	\$21,450	\$—	\$—	\$21,450
Derivatives relating to: (6)					
Interest rates	—	12	—	—	12
Commodities	9	99	—	(27	) 81
Foreign currency	—	161	—	(90	) 71
Total liabilities at fair value	\$9	\$21,722	\$—	\$(117	) \$21,614

(1) Cash collateral amounts represent the estimated net settlement amount when applying netting and set-off rights included in master netting arrangements between the Company and its counterparties and the payable or receivable for cash collateral held or placed with the same counterparty.

(2) Treasury Bills and money market funds included in "Cash and cash equivalents" in the consolidated balance sheets and held at amortized cost, which approximates fair value.

(3) Included in "Accounts and notes receivable – Other" in the consolidated balance sheets. See Note 15 for additional information on transfers of financial assets.

(4) The Company's investments in equity and debt securities are primarily classified as available-for-sale and are included in "Other investments" in the consolidated balance sheets.

(5) U.S. Treasury obligations, U.S. agency obligations, agency mortgage-backed securities and other municipalities' obligations.

(6) See Note 10 for the classification of derivatives in the consolidated balance sheets.

(7) See Note 10 for information on fair value measurements of long-term debt.



Table of Contents

Basis of Fair Value Measurements on a Recurring Basis at December 31, 2013	Quoted Prices in Active Markets for Identical Items (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Counterparty and Cash Collateral Netting (1)	Total
In millions					
Assets at fair value:					
Cash equivalents (2)	\$—	\$2,912	\$—	\$—	\$2,912
Interests in trade accounts receivable conduits (3)	—	—	1,227	—	1,227
Equity securities (4)	760	37	—	—	797
Debt securities: (4)					
Government debt (5)	—	564	—	—	564
Corporate bonds	—	695	—	—	695
Derivatives relating to: (6)					
Commodities	3	11	—	(3	) 11
Foreign currency	—	65	—	(20	) 45
Total assets at fair value	\$763	\$4,284	\$1,227	\$(23	) \$6,251
Liabilities at fair value:					
Long-term debt (7)	\$—	\$19,467	\$—	\$—	\$19,467
Derivatives relating to: (6)					
Interest Rates	—	5	—	—	5
Commodities	4	2	—	(4	) 2
Foreign currency	—	33	—	(20	) 13
Total liabilities at fair value	\$4	\$19,507	\$—	\$(24	) \$19,487

(1) Cash collateral amounts represent the estimated net settlement amount when applying netting and set-off rights included in master netting arrangements between the Company and its counterparties and the payable or receivable for cash collateral held or placed with the same counterparty.

(2) Treasury Bills and money market funds included in "Cash and cash equivalents" in the consolidated balance sheets and held at amortized cost, which approximates fair value.

(3) Included in "Accounts and notes receivable – Other" in the consolidated balance sheets. See Note 15 for additional information on transfers of financial assets.

(4) The Company's investments in equity and debt securities are primarily classified as available-for-sale and are included in "Other investments" in the consolidated balance sheets.

(5) U.S. Treasury obligations, U.S. agency obligations, agency mortgage-backed securities and other municipalities' obligations.

(6) See Note 10 for the classification of derivatives in the consolidated balance sheets.

(7) See Note 10 for information on fair value measurements of long-term debt.

Assets and liabilities related to forward contracts, interest rate swaps, currency swaps, options and other conditional or exchange contracts executed with the same counterparty under a master netting arrangement are netted. Collateral accounts are netted with corresponding liabilities. The Company posted cash collateral of \$29 million at December 31, 2014 (\$5 million of cash collateral at December 31, 2013).

For assets and liabilities classified as Level 1 measurements (measured using quoted prices in active markets), total fair value is either the price of the most recent trade at the time of the market close or the official close price, as defined by the exchange on which the asset is most actively traded on the last trading day of the period, multiplied by the number of units held without consideration of transaction costs.

For assets and liabilities classified as Level 2 measurements, where the security is frequently traded in less active markets, fair value is based on the closing price at the end of the period; where the security is less frequently traded, fair value is based on the price a dealer would pay for the security or similar securities, adjusted for any terms specific

to that asset or liability, or by using observable market data points of similar, more liquid securities to imply the price. Market inputs are obtained from well-established and recognized vendors of market data and subjected to tolerance and quality checks.

For derivative assets and liabilities, standard industry models are used to calculate the fair value of the various financial instruments based on significant observable market inputs, such as foreign exchange rates, commodity prices, swap rates, interest rates and implied volatilities obtained from various market sources. Market inputs are obtained from well-established and recognized vendors of market data and subjected to tolerance/quality checks. For all other assets and liabilities for which observable inputs are used, fair value is derived through the use of fair value models, such as a discounted cash flow model or other standard pricing models. See Note 10 for further information on the types of instruments used by the Company for risk management.

Table of Contents

There were no transfers between Levels 1 and 2 during the year ended December 31, 2014 and \$4 million of transfers in the year ended December 31, 2013.

For assets classified as Level 3 measurements, the fair value is based on significant unobservable inputs including assumptions where there is little, if any, market activity. The fair value of the Company's interests held in trade receivable conduits is determined by calculating the expected amount of cash to be received using the key input of anticipated credit losses in the portfolio of receivables sold that have not yet been collected. Given the short-term nature of the underlying receivables, discount rate and prepayments are not factors in determining the fair value of the interests. See Note 15 for further information on assets classified as Level 3 measurements.

The following table summarizes the changes in fair value measurements using Level 3 inputs for the years ended December 31, 2014 and 2013:

## Fair Value Measurements Using Level 3 Inputs for Interests Held in Trade

Receivable Conduits (1)	2014	2013
In millions		
Balance at January 1	\$1,227	\$1,057
Gain included in earnings (2)	9	—
Purchases	1,171	1,198
Settlements	(1,079)	(1,028)
Balance at December 31	\$1,328	\$1,227

(1)Included in "Accounts and notes receivable – Other" in the consolidated balance sheets.

(2)Included in "Selling, general and administrative expenses" in the consolidated statements of income.

## Fair Value Measurements on a Nonrecurring Basis

The following table summarizes the basis used to measure certain assets and liabilities at fair value on a nonrecurring basis in the consolidated balance sheets in 2014, 2013 and 2012:

Basis of Fair Value Measurements on a Nonrecurring Basis	Significant Other Unobservable Inputs (Level 3)	Total Losses
In millions		
2014		
Assets at fair value:		
Long-lived assets and other assets	\$4	\$(73)
2013		
Assets at fair value:		
Long-lived assets, other assets and equity method investments	\$127	\$(178)
2012		
Assets at fair value:		
Long-lived assets, other assets and equity method investments	\$45	\$(693)
Goodwill	\$—	\$(220)

## 2014 Fair Value Measurements on a Nonrecurring Basis

As a result of weakening demand for certain optical and ceramic technologies, the Company recognized a \$73 million asset impairment charge in the fourth quarter of 2014 in the Dow Electronic Materials business. The charge was included in "Cost of sales" (\$23 million) and "Goodwill and other intangible asset impairment losses" (\$50 million) in the consolidated statements of income and reflected in Consumer Solutions. The assets, classified as Level 3 measurements, were written down to \$4 million based on a valuation using unobservable inputs, including assumptions a market participant would use to measure the fair value of the group of assets, which included projected

cash flows.

#### 2013 Fair Value Measurements on a Nonrecurring Basis

As a result of Dow's announcement of its new market-driven growth strategy, the Company recognized a \$178 million asset impairment charge in the fourth quarter of 2013, including charges for manufacturing plant shutdowns. The charge was included in "Cost of sales" (\$175 million) and "Amortization of intangibles" (\$3 million) in the consolidated statements of income and impacted the following businesses/operating segments: Energy & Water Solutions and Performance Monomers

95

---

## Table of Contents

businesses, part of the Infrastructure Solutions segment (\$93 million); Chlor-Alkali and Vinyl, Epoxy and Polyurethanes businesses, part of the Performance Materials & Chemicals segment (\$70 million); and Corporate (\$15 million).

The assets, classified as Level 3 measurements, were valued at \$127 million using unobservable inputs, including assumptions a market participant would use to measure the fair value of the group of assets, which included projected cash flows. The carrying value by segment was as follows: Infrastructure Solutions assets were valued at \$100 million; Performance Materials & Chemicals assets were valued at \$9 million; and Corporate assets were valued at \$18 million.

### 2012 Fair Value Measurements on a Nonrecurring Basis

As part of the 1Q12 Restructuring plan that was approved on March 27, 2012, the Company shut down a number of manufacturing facilities during 2012. The manufacturing assets and facilities associated with this plan were written down to zero in the first quarter of 2012 and a \$94 million impairment charge was included in "Restructuring charges (credits)" in the consolidated statements of income. During the fourth quarter of 2012, the Company reduced the 1Q12 Restructuring reserve by \$4 million. See Note 3 for additional information.

In the second half of 2012, a \$27 million asset impairment charge was recognized in the Infrastructure Solutions segment. The assets, classified as Level 3 measurements, were valued at \$12 million using unobservable inputs, including assumptions a market participant would use to measure the fair value of the group of assets, which included projected cash flows.

As part of the 4Q12 Restructuring plan that was approved on October 23, 2012, the Company shut down a number of manufacturing facilities. The manufacturing assets and facilities associated with this plan were written down to zero in the fourth quarter of 2012. In addition, an equity method investment was impaired. The equity method investment, classified as a Level 3 measurement, was valued at \$33 million using unobservable inputs, including assumptions a market participant would use to measure the fair value of the investment, which included projected cash flows. These impairment charges, totaling \$576 million, were included in "Restructuring charges (credits)" in the consolidated statements of income. See Note 3 for additional information.

In the fourth quarter of 2012, the Company performed its annual goodwill impairment testing utilizing a discounted cash flow methodology as its valuation technique. As a result of this testing, the Company recognized a \$220 million goodwill impairment charge related to its Dow Formulated Systems reporting unit (part of the Performance Materials & Chemicals segment), which was included in "Goodwill and other intangible asset impairment losses" in the consolidated statements of income. See Note 9 for additional information.

Table of Contents

## NOTE 12 – SUPPLEMENTARY INFORMATION

## Sundry Income (Expense) – Net

In millions	2014	2013	2012
Gain on sales of other assets and investments (1)	\$40	\$98	\$81
Foreign exchange loss	(61)	) (31	) (51
Gain on termination of ethylene off-take agreement	53	—	—
Chlorine value chain separation costs	(49)	) —	—
K-Dow settlement (2)	—	2,161	—
Gain on sale of Polypropylene Licensing and Catalysts business (3)	5	451	—
Loss on early extinguishment of debt	—	(329)	) (123
Gain on sale of a 7.5 percent ownership interest in Freeport LNG Development, L.P.	—	87	—
Gain on sale of ownership interest in Dow Kokam LLC (3)	—	26	—
Reclassification of cumulative translation adjustments	(12)	) 21	—
Gain on sale of a contract manufacturing business	—	—	8
Other - net	(3	) 70	58
Total sundry income (expense) – net	\$(27	) \$2,554	\$(27

The 2013 gain on sales of other assets and investments also included a \$21 million gain reported as

(1) "Reclassification of cumulative translation adjustments."

(2) See Note 14 for additional information.

(3) See Note 5 for additional information.

## Accrued and Other Current Liabilities

"Accrued and other current liabilities" were \$2,839 million at December 31, 2014 and \$2,916 million at December 31, 2013. Accrued payroll, which is a component of "Accrued and other current liabilities," was \$855 million at December 31, 2014 and \$968 million at December 31, 2013. No other component of accrued liabilities was more than 5 percent of total current liabilities.

## Other Income Statement Information

In millions	2014	2013	2012
Provision for doubtful receivables (1)	\$52	\$59	\$13

(1) Included in "Selling, general and administrative expenses" in the consolidated statements of income.

## Supplemental Disclosure of Cash Flow Information

In millions	2014	2013	2012
Cash payments for interest	\$1,038	\$1,191	\$1,345
Cash payments for income taxes	\$1,109	\$1,708	\$1,107

Table of Contents

## NOTE 13 – EARNINGS PER SHARE CALCULATIONS

The following tables provide the earnings per share calculations for the years ended December 31, 2014, 2013 and 2012:

Net Income for Earnings Per Share Calculations - Basic	2014	2013	2012
In millions			
Net income attributable to The Dow Chemical Company	\$3,772	\$4,787	\$1,182
Preferred stock dividends	(340)	) (340)	) (340)
Net income attributable to participating securities (1)	(27)	) (38)	) (13)
Net income attributable to common stockholders	\$3,405	\$4,409	\$829
 Earnings Per Share Calculations - Basic	 2014	 2013	 2012
Dollars per share			
Net income attributable to The Dow Chemical Company	\$3.22	\$4.04	\$1.01
Preferred stock dividends	(0.29)	) (0.29)	) (0.29)
Net income attributable to participating securities (1)	(0.02)	) (0.03)	) (0.01)
Net income attributable to common stockholders	\$2.91	\$3.72	\$0.71
 Net Income for Earnings Per Share Calculations - Diluted	 2014	 2013	 2012
In millions			
Net income attributable to The Dow Chemical Company	\$3,772	\$4,787	\$1,182
Preferred stock dividends (2)	(340)	) —	) (340)
Net income attributable to participating securities (1)	(27)	) (38)	) (13)
Net income attributable to common stockholders	\$3,405	\$4,749	\$829
 Earnings Per Share Calculations - Diluted	 2014	 2013	 2012
Dollars per share			
Net income attributable to The Dow Chemical Company	\$3.18	\$3.71	\$1.00
Preferred stock dividends (2)	(0.29)	) —	) (0.29)
Net income attributable to participating securities (1)	(0.02)	) (0.03)	) (0.01)
Net income attributable to common stockholders	\$2.87	\$3.68	\$0.70
 Share Count Information	 2014	 2013	 2012
Shares in millions			
Weighted-average common shares - basic	1,170.9	1,186.2	1,169.7
Plus dilutive effect of stock options and awards	16.1	7.4	6.7
Plus dilutive effect of assumed conversion of preferred stock (3)	—	96.8	—
Weighted-average common shares - diluted	1,187.0	1,290.4	1,176.4
Stock options and deferred stock awards excluded from EPS calculations (4)	5.8	47.4	52.6

(1) Deferred stock awards are considered participating securities due to Dow's practice of paying dividend equivalents on unvested shares.

(2) Preferred stock dividends were not added back in the calculation of diluted earnings per share for the periods ended December 31, 2014 and December 31, 2012 because the effect of adding them back would have been antidilutive.

Conversion of the Company's Cumulative Convertible Perpetual Preferred Stock, Series A into shares of the Company's common stock was excluded from the calculation of diluted earnings per share for the periods ended December 31, 2014 and December 31, 2012 because the effect of including them would have been antidilutive.

(4) These outstanding options to purchase shares of common stock and deferred stock awards were excluded from the calculation of diluted earnings per share because the effect of including them would have been antidilutive.





Table of Contents

## NOTE 14 – COMMITMENTS AND CONTINGENT LIABILITIES

## Dow Corning Credit Facility

The Company is a 50 percent shareholder in Dow Corning Corporation ("Dow Corning"). On June 1, 2004, the Company agreed to provide a ten-year credit facility to Dow Corning as part of Dow Corning's Joint Plan of Reorganization. The aggregate amount available under the credit facility was originally \$300 million, of which the Company's share was \$150 million. No advances were issued under the credit facility and it expired June 1, 2014.

## Environmental Matters

## Introduction

Accruals for environmental matters are recorded when it is probable that a liability has been incurred and the amount of the liability can be reasonably estimated based on current law and existing technologies. At December 31, 2014, the Company had accrued obligations of \$706 million for probable environmental remediation and restoration costs, including \$78 million for the remediation of Superfund sites. This is management's best estimate of the costs for remediation and restoration with respect to environmental matters for which the Company has accrued liabilities, although it is reasonably possible that the ultimate cost with respect to these particular matters could range up to approximately two and a half times that amount. Consequently, it is reasonably possible that environmental remediation and restoration costs in excess of amounts accrued could have a material impact on the Company's results of operations, financial condition and cash flows. It is the opinion of the Company's management, however, that the possibility is remote that costs in excess of the range disclosed will have a material impact on the Company's results of operations, financial condition or cash flows. Inherent uncertainties exist in these estimates primarily due to unknown conditions, changing governmental regulations and legal standards regarding liability, and emerging remediation technologies for handling site remediation and restoration. At December 31, 2013, the Company had accrued obligations of \$722 million for probable environmental remediation and restoration costs, including \$73 million for the remediation of Superfund sites.

The following table summarizes the activity in the Company's accrued obligations for environmental matters for the years ended December 31, 2014 and 2013:

## Accrued Obligations for Environmental Matters

In millions	2014	2013
Balance at January 1	\$722	\$754
Additional accruals	228	200
Charges against reserve	(219)	) (222)
Foreign currency impact	(25)	) (10)
Balance at December 31	\$706	\$722

The amounts charged to income on a pretax basis related to environmental remediation totaled \$227 million in 2014, \$203 million in 2013 and \$197 million in 2012. Capital expenditures for environmental protection were \$78 million in 2014, \$102 million in 2013 and \$145 million in 2012.

## Midland Off-Site Environmental Matters

On June 12, 2003, the Michigan Department of Environmental Quality ("MDEQ") issued a Hazardous Waste Operating License (the "License") to the Company's Midland, Michigan manufacturing site (the "Midland site"), which included provisions requiring the Company to conduct an investigation to determine the nature and extent of off-site contamination in the City of Midland soils, the Tittabawassee River and Saginaw River sediment and floodplain soils, and the Saginaw Bay, and, if necessary, undertake remedial action.

## City of Midland

On March 6, 2012, the Company submitted an Interim Response Activity Plan Designed to Meet Criteria ("Work Plan") to the MDEQ that involved the sampling of soil at residential properties near the Midland site for the presence of dioxins to determine where clean-up may be required and then conducting remediation for properties that sample above the remediation criteria. The MDEQ approved the Work Plan on June 1, 2012 and implementation of the Work Plan began on June 4, 2012. During 2012 and 2013, the Company submitted and had approved by the MDEQ, amendments to the Work Plan to sample properties in 2012 and 2013 that were originally scheduled for sampling in 2014 through 2017. On March 14, 2014, the Company submitted a plan for properties to be sampled during 2014 ("2014 Plan"), as required by the approved Work Plan. On June 12, 2014, the Company submitted a modified plan based on MDEQ comments. The 2014 Plan was approved on June 27, 2014. As of December 31, 2014, remediation has been completed on all 132 properties that tested above the remediation criteria.

## Table of Contents

### Tittabawassee and Saginaw Rivers, Saginaw Bay

The Company, the U.S. Environmental Protection Agency ("EPA") and the State of Michigan ("State") entered into an administrative order on consent ("AOC"), effective January 21, 2010, that requires the Company to conduct a remedial investigation, a feasibility study and a remedial design for the Tittabawassee River, the Saginaw River and the Saginaw Bay, and pay the oversight costs of the EPA and the State under the authority of the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA"). These actions, to be conducted under the lead oversight of the EPA, will build upon the investigative work completed under the State Resource Conservation Recovery Act ("RCRA") program from 2005 through 2009.

The Tittabawassee River, beginning at the Midland Site and extending down to the first six miles of the Saginaw River, are designated as the first Operable Unit for purposes of conducting the remedial investigation, feasibility study and remedial design work. This work will be performed in a largely upriver to downriver sequence for eight geographic segments of the Tittabawassee and upper Saginaw Rivers. In the first quarter of 2012, the EPA requested the Company address the Tittabawassee River floodplain ("Floodplain") as an additional segment. In August 2014, the EPA proposed for public comment the techniques that can be used to remedy the Floodplain, including proposed site specific clean-up criteria. In January 2015, the Company and the EPA entered into an order to address remediation of the Floodplain. The remedial work is expected to take place over the next six years. The remainder of the Saginaw River and the Saginaw Bay are designated as a second Operable Unit and the work associated with that unit may also be geographically segmented. The AOC does not obligate the Company to perform removal or remedial action; that action can only be required by a separate order. The Company and the EPA will be negotiating orders separate from the AOC that will obligate the Company to perform remedial actions under the scope of work of the AOC. The Company and the EPA have entered into three separate orders to perform limited remedial actions to implement early actions - two separate orders to address remedial actions in two of the nine geographic segments in the first Operable Unit and the order to address the Floodplain.

### Alternative Dispute Resolution Process

The Company, the EPA, the U.S. Department of Justice, and the natural resource damage trustees (which include the Michigan Office of the Attorney General, the MDEQ, the U.S. Fish and Wildlife Service, the U.S. Bureau of Indian Affairs and the Saginaw-Chippewa tribe) have been engaged in negotiations to seek to resolve potential governmental claims against the Company related to historical off-site contamination associated with the City of Midland, the Tittabawassee and Saginaw Rivers and the Saginaw Bay. The Company and the governmental parties started meeting in the fall of 2005 and entered into a Confidentiality Agreement in December 2005. The Company continues to conduct negotiations under the Federal Alternative Dispute Resolution Act with all of the governmental parties, except the EPA which withdrew from the alternative dispute resolution process on September 12, 2007.

On September 28, 2007, the Company and the natural resource damage trustees entered into a Funding and Participation Agreement that addressed the Company's payment of past costs incurred by the natural resource damage trustees, payment of the costs of a trustee coordinator and a process to review additional cooperative studies that the Company might agree to fund or conduct with the natural resource damage trustees. On March 18, 2008, the Company and the natural resource damage trustees entered into a Memorandum of Understanding ("MOU") to provide a mechanism for the Company to fund cooperative studies related to the assessment of natural resource damages. This MOU was amended and funding of cooperative studies was extended until March 2014. All cooperative studies have been completed. On April 7, 2008, the natural resource damage trustees released their "Natural Resource Damage Assessment Plan for the Tittabawassee River System Assessment Area."

At December 31, 2014, the accrual for these off-site matters was \$62 million (included in the total accrued obligation of \$706 million). At December 31, 2013, the Company had an accrual for these off-site matters of \$47 million (included in the total accrued obligation of \$722 million).

#### Environmental Matters Summary

It is the opinion of the Company's management that the possibility is remote that costs in excess of those disclosed will have a material impact on the Company's results of operations, financial condition or cash flows.

#### Litigation

##### DBCP Matters

Numerous lawsuits have been brought against the Company and other chemical companies, both inside and outside of the United States, alleging that the manufacture, distribution, and use of pesticides containing dibromochloropropane ("DBCP") have caused personal injury and property damage, including contamination of groundwater. It is the opinion of the Company's management that the possibility is remote that the resolution of such lawsuits will have a material impact on the Company's consolidated financial statements.

## Table of Contents

### Asbestos-Related Matters of Union Carbide Corporation

#### Introduction

Union Carbide Corporation (“Union Carbide”), a wholly owned subsidiary of the Company, is and has been involved in a large number of asbestos-related suits filed primarily in state courts during the past four decades. These suits principally allege personal injury resulting from exposure to asbestos-containing products and frequently seek both actual and punitive damages. The alleged claims primarily relate to products that Union Carbide sold in the past, alleged exposure to asbestos-containing products located on Union Carbide’s premises, and Union Carbide’s responsibility for asbestos suits filed against a former Union Carbide subsidiary, Amchem Products, Inc. (“Amchem”). In many cases, plaintiffs are unable to demonstrate that they have suffered any compensable loss as a result of such exposure, or that injuries incurred in fact resulted from exposure to Union Carbide’s products.

Union Carbide expects more asbestos-related suits to be filed against Union Carbide and Amchem in the future, and will aggressively defend or reasonably resolve, as appropriate, both pending and future claims.

#### Estimating the Liability

Based on a study completed by Analysis, Research & Planning Corporation (“ARPC”) in January 2003, Union Carbide increased its December 31, 2002 asbestos-related liability for pending and future claims for the 15-year period ending in 2017 to \$2.2 billion, excluding future defense and processing costs. Since then, Union Carbide has compared current asbestos claim and resolution activity to the results of the most recent ARPC study at each balance sheet date to determine whether the accrual continues to be appropriate. In addition, Union Carbide has requested ARPC to review Union Carbide’s historical asbestos claim and resolution activity each year since 2004 to determine the appropriateness of updating the most recent ARPC study.

In October 2012, Union Carbide requested ARPC to review its historical asbestos claim and resolution activity and determine the appropriateness of updating its then most recent study completed in December 2010. In response to that request, ARPC reviewed and analyzed data through September 30, 2012. In December 2012, based upon ARPC’s December 2012 study and Union Carbide’s own review of the asbestos claim and resolution activity for 2012, it was determined that no adjustment to the accrual was required at December 31, 2012. Union Carbide’s asbestos-related liability for pending and future claims was \$602 million at December 31, 2012.

In October 2013, Union Carbide requested ARPC to review its historical asbestos claim and resolution activity and determine the appropriateness of updating its December 2012 study. In response to that request, ARPC reviewed and analyzed data through September 30, 2013. In December 2013, ARPC stated that an update of its study would not provide a more likely estimate of future events than the estimate reflected in its December 2012 study and, therefore, the estimate in that study remained applicable. Based on Union Carbide’s own review of the asbestos claim and resolution activity and ARPC’s response, Union Carbide determined that no change to the accrual was required. At December 31, 2013, the asbestos-related liability for pending and future claims was \$501 million.

In October 2014, Union Carbide requested ARPC to review its historical asbestos claim and resolution activity and determine the appropriateness of updating its December 2012 study. In response to that request, ARPC reviewed and analyzed data through September 30, 2014. The resulting study, completed by ARPC in December 2014, estimates that the undiscounted cost of disposing of pending and future claims against Union Carbide and Amchem, excluding future defense and processing costs, to be between \$540 million and \$640 million through 2029 based on the data as of September 30, 2014. As in earlier studies, ARPC provided longer periods of time in its December 2014 study, but also reaffirmed that forecasts for shorter periods of time are more accurate than those for longer periods of time.

In December 2014, based on ARPC’s December 2014 study and Union Carbide’s own review of the asbestos claim and resolution activity, Union Carbide determined that an adjustment to the accrual was required due to the increase in mesothelioma claim activity compared with what had been forecasted in the December 2012 study. Accordingly,

Union Carbide increased its asbestos-related liability for pending and future claims by \$78 million, included in "Asbestos-related charge" in the consolidated statements of income. At December 31, 2014, the asbestos-related liability for pending and future claims was \$513 million. At December 31, 2014, approximately 22 percent of the recorded liability related to pending claims and approximately 78 percent related to future claims. At December 31, 2013, approximately 19 percent of the recorded liability related to pending claims and approximately 81 percent related to future claims.

#### Insurance Receivables

At December 31, 2002, Union Carbide increased the receivable for insurance recoveries related to its asbestos liability to \$1.35 billion, substantially exhausting its asbestos product liability coverage. The insurance receivable related to the asbestos liability was determined by Union Carbide after a thorough review of applicable insurance policies and the 1985 Wellington Agreement, to which Union Carbide and many of its liability insurers are signatory parties, as well as other insurance

Table of Contents

settlements, with due consideration given to applicable deductibles, retentions and policy limits, and taking into account the solvency and historical payment experience of various insurance carriers. The Wellington Agreement and other agreements with insurers are designed to facilitate an orderly resolution and collection of Union Carbide's insurance policies and to resolve issues that the insurance carriers may raise.

In September 2003, Union Carbide filed a comprehensive insurance coverage case, now proceeding in the Supreme Court of the State of New York, County of New York, seeking to confirm its rights to insurance for various asbestos claims and to facilitate an orderly and timely collection of insurance proceeds (the "Insurance Litigation"). The Insurance Litigation was filed against insurers that are not signatories to the Wellington Agreement and/or do not otherwise have agreements in place with Union Carbide regarding their asbestos-related insurance coverage, in order to facilitate an orderly resolution and collection of such insurance policies and to resolve issues that the insurance carriers may raise. Since the filing of the case, Union Carbide has reached settlements with most of the carriers involved in the Insurance Litigation and continues to pursue a settlement with the remaining carrier. Union Carbide's receivable for insurance recoveries related to its asbestos liability was \$10 million at December 31, 2014 and \$25 million at December 31, 2013.

At December 31, 2014 and December 31, 2013, all of the receivable for insurance recoveries was related to insurers that are not signatories to the Wellington Agreement and/or do not otherwise have agreements in place regarding their asbestos-related insurance coverage.

In addition to the receivable for insurance recoveries related to its asbestos liability, Union Carbide had receivables for defense and resolution costs submitted to insurance carriers that have settlement agreements in place regarding their asbestos-related insurance coverage. The following table summarizes Union Carbide's receivables related to its asbestos-related liability:

Receivables for Asbestos-Related Costs at December 31	2014	2013
In millions		
Receivables for defense and resolution costs – carriers with settlement agreements	\$69	\$66
Receivables for insurance recoveries – carriers without settlement agreements	10	25
Total	\$79	\$91

After a review of its insurance policies, with due consideration given to applicable deductibles, retentions and policy limits, after taking into account the solvency and historical payment experience of various insurance carriers; existing insurance settlements; and the advice of outside counsel with respect to the applicable insurance coverage law relating to the terms and conditions of its insurance policies, Union Carbide continues to believe that its recorded receivable for insurance recoveries from all insurance carriers is probable of collection.

Union Carbide expenses defense costs as incurred. The pretax impact for defense and resolution costs, net of insurance, was \$108 million in 2014, \$107 million in 2013 and \$100 million in 2012, and was reflected in "Cost of sales" in the consolidated statements of income.

Summary

The amounts recorded by Union Carbide for the asbestos-related liability and related insurance receivable described above were based upon current, known facts. However, future events, such as the number of new claims to be filed and/or received each year, the average cost of disposing of each such claim, coverage issues among insurers, and the continuing solvency of various insurance companies, as well as the numerous uncertainties surrounding asbestos litigation in the United States, could cause the actual costs and insurance recoveries for Union Carbide to be higher or lower than those projected or those recorded.

Because of the uncertainties described above, Union Carbide's management cannot estimate the full range of the cost of resolving pending and future asbestos-related claims facing Union Carbide and Amchem. Union Carbide's management believes that it is reasonably possible that the cost of disposing of Union Carbide's asbestos-related claims, including future defense costs, could have a material impact on Union Carbide's results of operations and cash flows for a particular period and on the consolidated financial position of Union Carbide.

It is the opinion of Dow's management that it is reasonably possible that the cost of Union Carbide disposing of its asbestos-related claims, including future defense costs, could have a material impact on the Company's results of operations and cash flows for a particular period and on the consolidated financial position of the Company.



## Table of Contents

### Synthetic Rubber Industry Matters

In 2003, the U.S., Canadian and European competition authorities initiated separate investigations into alleged anticompetitive behavior by certain participants in the synthetic rubber industry. Certain subsidiaries of the Company (as to the investigation in Europe) responded to requests for documents and otherwise cooperated in the investigations.

On June 10, 2005, the Company received a Statement of Objections from the European Commission (the "EC") stating that it believed that the Company and certain subsidiaries of the Company (the "Dow Entities"), together with other participants in the synthetic rubber industry, engaged in conduct in violation of European competition laws with respect to the butadiene rubber and emulsion styrene butadiene rubber businesses. In connection therewith, on November 29, 2006, the EC issued its decision alleging infringement of Article 81 of the Treaty of Rome and imposed a fine of Euro 64.575 million (approximately \$85 million at that time) on the Dow Entities; several other companies were also named and fined. As a result, the Company recognized a loss contingency of \$85 million related to the fine in the fourth quarter of 2006. After appeals were exhausted, the Dow Entities paid the fine, including accrued interest, on August 12, 2013, and this proceeding is now considered resolved. Subsequent to the imposition of the fine in 2006, the Company and/or certain subsidiaries of the Company became named parties in various related U.S., United Kingdom and Italian civil actions. The U.S. matter was settled in March 2010 and the United Kingdom and Italian matters were settled in May 2014. Each of the settlement agreements was confidential and had an immaterial impact on the Company's consolidated financial statements.

### Urethane Matters

On February 16, 2006, the Company, among others, received a subpoena from the U.S. Department of Justice ("DOJ") as part of a previously announced antitrust investigation of manufacturers of polyurethane chemicals, including methylene diphenyl diisocyanate, toluene diisocyanate, polyether polyols and system house products. The Company cooperated with the DOJ and, following an extensive investigation, on December 10, 2007, the Company received notice from the DOJ that it had closed its investigation of potential antitrust violations involving these products without indictments or pleas.

In 2005, the Company, among others, was named as a defendant in multiple civil class action lawsuits alleging a conspiracy to fix the price of various urethane chemical products, namely the products that were the subject of the above-described DOJ antitrust investigation. These lawsuits were consolidated in the U.S. District Court for the District of Kansas (the "District Court") or have been tolled. On July 29, 2008, the District Court certified a class of purchasers of the products for the six-year period from 1999 through 2004. Shortly thereafter, a series of "opt-out" cases were filed by a number of large volume purchasers; these cases are substantively identical to the class action lawsuit, but expanded the time period to include 1994 through 1998. In January 2013, the class action lawsuit went to trial in the District Court with the Company as the sole remaining defendant, the other defendants having previously settled. On February 20, 2013, the jury returned a damages verdict of approximately \$400 million against the Company, which ultimately was trebled by the District Court under applicable antitrust laws - less offsets from other settling defendants - resulting in a judgment entered in July 2013 in the amount of \$1.06 billion. The Company appealed this judgment to the U.S. Tenth Circuit Court of Appeals ("Tenth Circuit" or "Court of Appeals"), which heard oral arguments on the matter on May 14, 2014. On September 29, 2014, the Court of Appeals issued an opinion affirming the District Court judgment. On October 14, 2014, the Company filed a petition for Rehearing or Rehearing En Banc (collectively the "Rehearing Petition") with the Court of Appeals, which the Circuit Court denied on November 7, 2014.

The Company will file a petition for writ of certiorari ("Writ Petition") with the U.S. Supreme Court in March 2015, seeking judicial review by the U.S. Supreme Court and requesting that the Supreme Court ultimately correct fundamental errors in the Circuit Court opinion. While it is unknowable whether or not the U.S. Supreme Court will accept the Writ Petition for review, there are several compelling reasons why the U.S. Supreme Court should grant the petition for writ of certiorari, and if the petition for writ of certiorari is accepted, the Company believes it is likely that

the District Court judgment would be vacated. Specifically, it is the Company's position that the Tenth Circuit decision violates the law as expressed by the U.S. Supreme Court as set out in Wal-Mart Stores, Inc. v. Dukes, 131 S. Ct. 2541 (2011) and Comcast Corp. v. Behrend, 133 S. Ct. 1426 (2013). The Tenth Circuit also did not follow accepted law from other federal circuits on dispositive case issues, including legal precedent from the U.S. First, Second, Third, Fifth, Ninth and D.C. Circuit Courts. Finally, the erroneous law applied by the Tenth Circuit is not supported by any other circuit court.

The Company has consistently denied plaintiffs' allegations of price fixing and, as outlined above, the Company will continue to vigorously defend this litigation. As part of the Company's review of the jury verdict, the resulting judgment and the Court of Appeals' opinions, the Company assessed the legal and factual circumstances of the case, the trial record, the appellate record, and the applicable law including clear precedent from the U.S. Supreme Court. Based on this review and the reasons stated above, the Company believes the judgment and decisions from the Court of Appeals are not appropriate. As a result, the Company has concluded it is not probable that a loss will occur and, therefore, a liability has not been recorded with respect to these matters. While the Company believes it is not probable a loss will occur, the existence of the jury verdict, the Court of

Table of Contents

Appeals' opinion, and subsequent denial of Dow's Rehearing Petition indicate that it is reasonably possible that a loss could occur. The estimate of the possible range of loss to Dow is zero to the \$1.06 billion judgment (excluding post-judgment interest and possible award of class attorney fees).

On September 30, 2014, the "opt-out" cases that had been consolidated with the class action lawsuit for purposes of pre-trial proceedings were remanded from the District Court to the U.S. District Court for the District of New Jersey.

In addition to the matters described above, there are two separate but inter-related matters in Ontario and Quebec, Canada. In March 2014, the Superior Court of Justice in London, Ontario, ruled in favor of the plaintiffs' motion for class certification. Dow filed its Notice of Motion for Leave to Appeal in March 2014, which was subsequently denied. The Quebec case has been stayed pending the outcome of the Ontario case. The Company has concluded it is not probable that a loss will occur and, therefore, a liability has not been recorded with respect to the opt-out litigation or the Canadian matters.

**Other Litigation Matters**

In addition to the specific matters described above, the Company is party to a number of other claims and lawsuits arising out of the normal course of business with respect to product liability, patent infringement, governmental regulation, contract and commercial litigation, and other actions. Certain of these actions purport to be class actions and seek damages in very large amounts. All such claims are being contested. Dow has an active risk management program consisting of numerous insurance policies secured from many carriers at various times. These policies often provide coverage that will be utilized to minimize the financial impact, if any, of the contingencies described above. It is the opinion of the Company's management that the possibility is remote that the aggregate of all such other claims and lawsuits will have a material adverse impact on the results of operations, financial condition and cash flows of the Company.

**Purchase Commitments**

The Company has numerous agreements for the purchase of ethylene-related products globally. The purchase prices are determined primarily on a cost-plus basis. Total purchases under these agreements were \$354 million in 2014, \$405 million in 2013 and \$304 million in 2012. The Company's take-or-pay commitments associated with these agreements at December 31, 2014 are included in the table below.

The Company also has various commitments for take-or-pay and throughput agreements. These commitments are at prices not in excess of current market prices. The remaining terms for all but one of these agreements extend from 1 to 31 years. One agreement has a remaining term of 63 years. The 10-year future commitments for this agreement as well as the fixed and determinable portion of all other obligations under the Company's purchase commitments have been updated as of December 31, 2014 and are included in the following table:

**Fixed and Determinable Portion of Take-or-Pay and  
Throughput Obligations at December 31, 2014**

In millions

2015	\$2,930
2016	2,688
2017	2,222
2018	1,981
2019	1,385
2020 and beyond	7,305
<b>Total</b>	<b>\$18,511</b>

In the fourth quarter of 2014, the Company redeemed its remaining 7.5 percent limited partner interest in Freeport LNG Development, L.P. in exchange for favorably amended terms related to a Terminal Use Agreement ("TUA"). The primary changes to the amended TUA include a reduction in the contract term from December 31, 2028 to December 31, 2020, and monthly fixed and variable take-or-pay payments were replaced with fixed monthly fees. As a result of these changes, Dow's fixed and determinable portion of the take-or-pay obligation was reduced by approximately \$700 million and is reflected in the preceding table.

In addition to the take-or-pay obligations at December 31, 2014, the Company had outstanding commitments which ranged from 1 to 11 years for materials, services and other items used in the normal course of business of approximately \$346 million. Such commitments were at prices not in excess of current market prices.

Table of Contents

## Guarantees

The following tables provide a summary of the final expiration, maximum future payments and recorded liability reflected in the consolidated balance sheets for each type of guarantee:

Guarantees at December 31, 2014	Final	Maximum Future	Recorded
In millions	Expiration	Payments	Liability
Guarantees	2021	\$5,042	\$160
Residual value guarantees	2024	951	123
Total guarantees		\$5,993	\$283

Guarantees at December 31, 2013	Final	Maximum Future	Recorded
In millions	Expiration	Payments	Liability
Guarantees	2021	\$5,074	\$137
Residual value guarantees	2021	708	27
Total guarantees		\$5,782	\$164

## Guarantees

Guarantees arise during the ordinary course of business from relationships with customers and nonconsolidated affiliates when the Company undertakes an obligation to guarantee the performance of others (via delivery of cash or other assets) if specified triggering events occur. With guarantees, such as commercial or financial contracts, non-performance by the guaranteed party triggers the obligation of the Company to make payments to the beneficiary of the guarantee. The majority of the Company's guarantees relates to debt of nonconsolidated affiliates, which have expiration dates ranging from less than one year to seven years, and trade financing transactions in Latin America, which typically expire within one year of inception. The Company's current expectation is that future payment or performance related to the non-performance of others is considered unlikely.

During 2013, the Company entered into guarantee agreements ("Guarantees") related to project financing for Sadara Chemical Company ("Sadara"), a nonconsolidated affiliate. The total of an Islamic bond and Additional Project Financing (collectively "Total Project Financing") obtained by Sadara is approximately \$12.5 billion. Sadara had \$10.5 billion of Total Project Financing outstanding at December 31, 2014 (\$5.8 billion at December 31, 2013). The Company's guarantee of the Total Project Financing is in proportion to the Company's 35 percent ownership interest in Sadara, or up to approximately \$4.4 billion when the project financing is fully drawn. The Guarantees will be released upon completion of construction of the Sadara complex and satisfactory fulfillment of certain other conditions, including passage of an extensive operational testing program, which is currently anticipated by the end of 2017.

## Residual Value Guarantees

The Company provides guarantees related to leased assets specifying the residual value that will be available to the lessor at lease termination through sale of the assets to the lessee or third parties.

During the third quarter of 2014, the Company entered into a residual value guarantee as part of a sale-leaseback transaction for a significant portion of its North American railcar fleet. The maximum value of the guarantee is \$229 million. The sale transaction resulted in a deferred gain of \$102 million, which was recorded as a liability due to the guarantee and will be deferred until expiration of the ten-year lease unless otherwise terminated.

Table of Contents

## Warranties

The Company provides warranty policies on certain products and accrues liabilities under warranty policies using historical warranty claim experience. Adjustments are made to accruals as claim data and historical experience change. The following table summarizes changes in the Company's warranty liability for the years ended December 31, 2014 and 2013:

## Warranty Accrual

In millions	2014	2013
Balance at January 1	\$24	\$44
Accruals related to existing warranties (1)	104	2
Settlements made during the year	(21	) (22
Balance at December 31	\$107	\$24

In the fourth quarter of 2014, the Company recorded a pretax charge of \$100 million for a warranty accrual (1) adjustment related to an exited business. The charge was included in "Cost of sales" in the consolidated statements of income and reflected in Infrastructure Solutions.

## Asset Retirement Obligations

Dow has 201 manufacturing sites in 35 countries. Most of these sites contain numerous individual manufacturing operations, particularly at the Company's larger sites. Asset retirement obligations are recorded as incurred and reasonably estimable, including obligations for which the timing and/or method of settlement are conditional on a future event that may or may not be within the control of the Company. The retirement of assets may involve such efforts as remediation and treatment of asbestos, contractually required demolition, and other related activities, depending on the nature and location of the assets; and retirement obligations are typically realized only upon demolition of those facilities. In identifying asset retirement obligations, the Company considers identification of legally enforceable obligations, changes in existing law, estimates of potential settlement dates and the calculation of an appropriate discount rate to be used in calculating the fair value of the obligations. Dow has a well-established global process to identify, approve and track the demolition of retired or to-be-retired facilities; and no assets are retired from service until this process has been followed. Dow typically forecasts demolition projects based on the usefulness of the assets; environmental, health and safety concerns; and other similar considerations. Under this process, as demolition projects are identified and approved, reasonable estimates are determined for the time frames during which any related asset retirement obligations are expected to be settled. For those assets where a range of potential settlement dates may be reasonably estimated, obligations are recorded. Dow routinely reviews all changes to items under consideration for demolition to determine if an adjustment to the value of the asset retirement obligation is required.

The Company has recognized asset retirement obligations for the following activities: demolition and remediation activities at manufacturing sites in the United States, Canada, Brazil, Argentina, Chile, China, Japan and Europe; and capping activities at landfill sites in the United States, Canada, Brazil and Italy. The Company has also recognized conditional asset retirement obligations related to asbestos encapsulation as a result of planned demolition and remediation activities at manufacturing and administrative sites in the United States, Canada, Brazil, Argentina, Chile, China, Japan and Europe. The aggregate carrying amount of conditional asset retirement obligations recognized by the Company (included in the asset retirement obligations balance shown below) was \$28 million at December 31, 2014 (\$34 million at December 31, 2013).

The following table shows changes in the aggregate carrying amount of the Company's asset retirement obligations for the years ended December 31, 2014 and 2013:

## Asset Retirement Obligations

In millions	2014	2013
-------------	------	------

Balance at January 1	\$89		\$92
Additional accruals	3		5
Liabilities settled	(8	)	(2
Accretion expense	1		1
Revisions in estimated cash flows	3		(8
Other	(4	)	1
Balance at December 31	\$84		\$89

The discount rate used to calculate the Company's asset retirement obligations at December 31, 2014 was 1.48 percent (0.88 percent at December 31, 2013). These obligations are included in the consolidated balance sheets as "Accrued and other current liabilities" and "Other noncurrent obligations."

Table of Contents

The Company has not recognized conditional asset retirement obligations for which a fair value cannot be reasonably estimated in its consolidated financial statements. Assets that have not been submitted/reviewed for potential demolition activities are considered to have continued usefulness and are generally still operating normally. Therefore, without a plan to demolish the assets or the expectation of a plan, such as shortening the useful life of assets for depreciation purposes in accordance with the accounting guidance related to property, plant and equipment, the Company is unable to reasonably forecast a time frame to use for present value calculations. As such, the Company has not recognized obligations for individual plants/buildings at its manufacturing sites where estimates of potential settlement dates cannot be reasonably made. In addition, the Company has not recognized conditional asset retirement obligations for the capping of its approximately 44 underground storage wells and 138 underground brine mining and other wells at Dow-owned sites when there are no plans or expectations of plans to exit the sites. It is the opinion of the Company's management that the possibility is remote that such conditional asset retirement obligations, when estimable, will have a material impact on the Company's consolidated financial statements based on current costs.

**K-Dow Arbitration**

In February 2009, the Company initiated arbitration proceedings against Petrochemical Industries Company (K.S.C.) ("PIC") alleging that PIC breached the Joint Venture Formation Agreement related to the establishment of K-Dow, a proposed 50:50 global petrochemicals joint venture with PIC, by failing to close the transaction. On May 6, 2013, the Company and PIC entered into a Deed providing for payment and resolution of the Company's claims against PIC under the K-Dow arbitration. On May 7, 2013, the Company confirmed the receipt of a \$2.195 billion cash payment from PIC, which included damages awarded of \$2.161 billion as well as recovery of Dow's costs incurred in the arbitration, including legal fees. In the second quarter of 2013, the Company recorded a pretax gain of \$2.195 billion, of which \$2.161 billion is included in "Sundry income (expense) - net" and \$34 million is included in "Cost of sales" in the consolidated statements of income and reflected in Corporate. The K-Dow arbitration is considered final and settled in full.

**NOTE 15 – TRANSFERS OF FINANCIAL ASSETS**

The Company sells trade accounts receivable of select North America entities and qualifying trade accounts receivable of select European entities on a revolving basis to certain multi-seller commercial paper conduit entities ("conduits"). The proceeds received are comprised of cash and interests in specified assets of the conduits (the receivables sold by the Company) that entitle the Company to the residual cash flows of such specified assets in the conduits after the commercial paper has been repaid. Neither the conduits nor the investors in those entities have recourse to other assets of the Company in the event of nonpayment by the debtors.

During the year ended December 31, 2014, the Company recognized a loss of \$16 million on the sale of these receivables (\$17 million loss for the years ended December 31, 2013 and December 31, 2012), which is included in "Interest expense and amortization of debt discount" in the consolidated statements of income.

The Company's interests in the conduits are carried at fair value and included in "Accounts and notes receivable – Other" in the consolidated balance sheets. Fair value of the interests is determined by calculating the expected amount of cash to be received and is based on unobservable inputs (a Level 3 measurement). The key input in the valuation is the percentage of anticipated credit losses in the portfolio of receivables sold that have not yet been collected. Given the short-term nature of the underlying receivables, discount rates and prepayments are not factors in determining the fair value of the interests.

The following table summarizes the carrying value of interests held, which represents the Company's maximum exposure to loss related to the receivables sold, and the percentage of anticipated credit losses related to the trade accounts receivable sold. Also provided is the sensitivity of the fair value of the interests held to hypothetical adverse



changes in the anticipated credit losses; amounts shown below are the corresponding hypothetical decreases in the carrying value of interests.

Interests Held at December 31

In millions	2014	2013	
Carrying value of interests held	\$1,328	\$1,227	
Percentage of anticipated credit losses	0.35	% 0.71	%
Impact to carrying value - 10% adverse change	\$1	\$1	
Impact to carrying value - 20% adverse change	\$2	\$2	

Credit losses, net of any recoveries, were \$7 million for the year ended December 31, 2014 (\$1 million for the year ended December 31, 2013, and \$1 million for the year ended December 31, 2012).

Table of Contents

Following is an analysis of certain cash flows between the Company and the conduits:

Cash Proceeds			
In millions	2014	2013	2012
Sale of receivables	\$98	\$34	\$57
Collections reinvested in revolving receivables	\$26,479	\$25,864	\$25,828
Interests in conduits (1)	\$1,079	\$1,028	\$2,650

(1) Presented in "Operating Activities" in the consolidated statements of cash flows.

Following is additional information related to the sale of receivables under these facilities:

Trade Accounts Receivable Sold at December 31		
In millions	2014	2013
Delinquencies on sold receivables still outstanding	\$133	\$138
Trade accounts receivable outstanding and derecognized	\$2,607	\$2,494

In 2013, the Company repurchased \$10 million of previously sold receivables related to divestitures.

## NOTE 16 – NOTES PAYABLE, LONG-TERM DEBT AND AVAILABLE CREDIT FACILITIES

Notes Payable at December 31			
In millions	2014	2013	
Notes payable to banks and other lenders	\$353	\$300	
Notes payable to related companies	189	137	
Notes payable trade	9	6	
Total notes payable	\$551	\$443	
Year-end average interest rates	4.08	% 3.23	%

Long-Term Debt at December 31	2014		2013	
In millions	Average Rate	2014	Average Rate	2013
Promissory notes and debentures:				
Final maturity 2014	—	\$—	5.33	% \$399
Final maturity 2015	2.74	% 60	2.89	% 56
Final maturity 2016	2.52	% 805	2.53	% 805
Final maturity 2017	5.66	% 489	5.65	% 491
Final maturity 2018	5.44	% 567	5.43	% 570
Final maturity 2019	8.41	% 2,168	8.40	% 2,171
Final maturity 2020 and thereafter	5.16	% 12,063	5.41	% 10,029
Other facilities:				
U.S. dollar loans, various rates and maturities	1.38	% 461	1.44	% 490
Foreign currency loans, various rates and maturities	3.01	% 1,013	3.18	% 1,140
Medium-term notes, varying maturities through 2024	3.55	% 1,528	3.76	% 1,143
Tax-exempt bonds, varying maturities through 2038	5.66	% 343	5.59	% 518
Capital lease obligations	—	85	—	41
Unamortized debt discount	—	(350)	—	(336)
Long-term debt due within one year	—	(394)	—	(697)
Long-term debt	—	\$18,838	—	\$16,820



Table of ContentsAnnual Installments on Long-Term Debt  
for Next Five Years

In millions

2015	\$394
2016	\$1,375
2017	\$778
2018	\$932
2019	\$2,578

## 2014 Activity

On September 16, 2014, the Company issued \$2 billion of senior unsecured notes in a public offering. The offering included \$900 million aggregate principal amount of 3.5 percent notes due 2024; \$600 million aggregate principal amount of 4.25 percent notes due 2034; and \$500 million aggregate principal amount of 4.625 percent notes due 2044.

During 2014, the Company issued \$390 million aggregate principal amount of InterNotes with varying maturities in 2019, 2021 and 2024, at various interest rates averaging 2.94 percent. The Company also repaid \$346 million of long-term debt related to the purchase of an ethylene production facility (see Note 19 for additional information), redeemed \$124 million of tax-exempt bonds at maturity and repurchased \$51 million of tax-exempt bonds. In addition, approximately \$97 million of long-term debt (net of \$69 million of additional borrowings) was repaid by consolidated variable interest entities.

## 2013 Activity

On November 18, 2013, the Company concluded cash tender offers for \$700 million aggregate principal amount of certain notes issued by the Company. As a result of the tender offers, the Company redeemed \$414 million of 6.0 percent notes due 2017 and \$286 million of 5.7 percent notes due 2018 and recognized a \$156 million loss on the early extinguishment of debt, included in "Sundry income (expense) - net" in the consolidated statements of income and reflected in Corporate.

During the third quarter of 2013, the Company redeemed \$209 million aggregate principal amount of InterNotes of various interest rates and maturities in 2017, 2018, 2020, 2021 and 2022. As a result of this redemption, the Company realized a \$3 million pretax loss on the early extinguishment of debt, included in "Sundry income (expense) - net" in the consolidated statements of income and reflected in Corporate.

On June 24, 2013, the Company redeemed \$1.25 billion aggregate principal amount of 5.9 percent notes due February 15, 2015, at a price of 108.4 percent of the principal amount of the notes, plus accrued and unpaid interest. As a result of this redemption, the Company realized a \$108 million pretax loss on the early extinguishment of debt, included in "Sundry income (expense) - net" in the consolidated statements of income and reflected in Corporate.

On June 15, 2013, the Company redeemed \$142 million aggregate principal amount of InterNotes of various interest rates and varying maturities in 2017, 2018, 2020, 2021 and 2022. As a result of this redemption, the Company realized a \$2 million pretax loss on the early extinguishment of debt, included in "Sundry income (expense) - net" in the consolidated statements of income and reflected in Corporate.

On March 25, 2013, the Company redeemed \$750 million aggregate principal amount of 7.6 percent notes due May 15, 2014, at a price of 107.8 percent of the principal amount of the notes, plus accrued and unpaid interest. As a result of this redemption, the Company realized a \$60 million pretax loss on the early extinguishment of debt, included in "Sundry income (expense) - net" in the consolidated statements of income and reflected in Corporate.

During 2013, the Company issued \$447 million aggregate principal amount of InterNotes with varying maturities in 2018, 2020 and 2023, at various interest rates averaging 3.24 percent; and approximately \$80 million of long-term debt (net of \$119 million of repayments) was entered into by consolidated variable interest entities. The Company also drew \$300 million on a Committed Term Loan Facility on April 5, 2013.

During 2013, the Company redeemed \$250 million of 5.6 percent notes that matured on March 15, 2013, redeemed \$138 million of 6.85 percent notes that matured on August 15, 2013, and redeemed \$82 million principal amount of InterNotes at maturity. In the second quarter of 2013, the Company repurchased \$200 million of tax-exempt bonds. The Company also acquired third party lenders' interest in Dow Kokam LLC's \$75 million note, which was previously classified as "Long-Term Debt" in the consolidated balance sheets. See Note 5 for additional information on this transaction.

Table of Contents

## 2012 Activity

On December 17, 2012, the Company redeemed \$1.0 billion aggregate principal amount of 7.6 percent notes due May 15, 2014, at a price of 109.6 percent of the principal amount of the notes, plus accrued and unpaid interest. As a result of this redemption, the Company realized a \$99 million pretax loss on the early extinguishment of debt, included in "Sundry income (expense) - net" in the consolidated statements of income and reflected in Corporate.

On November 14, 2012, the Company issued \$2.5 billion of senior unsecured notes in a public offering. The offering included \$1.25 billion aggregate principal amount of 3.0 percent notes due 2022 and \$1.25 billion aggregate principal amount of 4.375 percent notes due 2042.

On March 8, 2012, the Company redeemed \$1.25 billion aggregate principal amount of 4.85 percent notes due August 15, 2012, at a price of 101.8 percent of the principal amount of the notes, plus accrued and unpaid interest. As a result of this redemption, the Company realized a \$24 million pretax loss on the early extinguishment of debt, included in "Sundry income (expense) - net" in the consolidated statements of income and reflected in Corporate.

During 2012, the Company issued \$281 million aggregate principal amount of InterNotes with varying maturities in 2017, 2019 and 2022, at various interest rates averaging 2.95 percent; and approximately \$367 million of long-term debt was entered into by consolidated variable interest entities.

During 2012, the Company redeemed \$37 million of tax-exempt bonds that matured on January 1, 2012, repurchased \$105 million of tax-exempt bonds that were subject to re-marketing; redeemed Euro 253 million of notes that matured on September 19, 2012 (\$317 million equivalent); and redeemed \$900 million of notes that matured on October 1, 2012.

## Available Credit Facilities

The following table summarizes the Company's credit facilities:

## Committed and Available Credit Facilities at December 31, 2014

In millions	Effective Date	Committed Credit	Credit Available	Maturity Date	Interest
Five Year Competitive Advance and Revolving Credit Facility	October 2011	\$ 5,000	\$5,000	October 2016	Floating rate
Bilateral Revolving Credit Facility	October 2012	170	170	October 2016	Floating rate
Bilateral Revolving Credit Facility	March 2013	100	100	March 2015	Floating rate
Bilateral Revolving Credit Facility	March 2013	300	300	October 2016	Floating rate
Term Loan Facility	March 2013	300	—	March 2016	Floating rate
Bilateral Revolving Credit Facility	April 2013	200	200	April 2016	Floating rate
Bilateral Revolving Credit Facility	October 2013	200	200	October 2016	Floating rate
Bilateral Revolving Credit Facility	October 2013	100	100	October 2016	Floating rate
Bilateral Revolving Credit Facility	January 2014	100	100	October 2016	Floating rate
Total Committed and Available Credit Facilities		\$ 6,470	\$6,170		

## Debt Covenants and Default Provisions

The Company's outstanding long-term debt has been issued under indentures which contain, among other provisions, certain customary restrictive covenants with which the Company must comply while the underlying notes are outstanding. Such covenants include obligations to not allow liens on principal U.S. manufacturing facilities, enter into sale and lease-back transactions with respect to principal U.S. manufacturing facilities, or merge or consolidate with any other corporation, or sell or convey all or substantially all of the Company's assets. The outstanding debt also

contains customary default provisions. Failure of the Company to comply with any of these covenants could result in a default under the applicable indenture, which would allow the note holders to accelerate the due date of the outstanding principal and accrued interest on the underlying notes.

The Company's primary, private credit agreements also contain certain customary restrictive covenant and default provisions in addition to the covenants set forth above with respect to the Company's debt. Significant other restrictive covenants and default provisions related to these agreements include:

- (a) the obligation to maintain the ratio of the Company's consolidated indebtedness to consolidated capitalization at no greater than 0.65 to 1.00 at any time the aggregate outstanding amount of loans under the Five Year Competitive Advance and Revolving Credit Facility Agreement dated October 18, 2011 equals or exceeds \$500 million,

Table of Contents

- a default if the Company or an applicable subsidiary fails to make any payment, including principal, premium or interest, under the applicable agreement on other indebtedness of, or guaranteed by, the Company or such (b) applicable subsidiary in an aggregate amount of \$100 million or more when due, or any other default or other event under the applicable agreement with respect to such indebtedness occurs which permits or results in the acceleration of \$400 million or more in the aggregate of principal, and
- (c) a default if the Company or any applicable subsidiary fails to discharge or stay within 60 days after the entry of a final judgment against the Company or such applicable subsidiary of more than \$400 million.

Failure of the Company to comply with any of the covenants or default provisions could result in a default under the applicable credit agreement which would allow the lenders to not fund future loan requests and to accelerate the due date of the outstanding principal and accrued interest on any outstanding indebtedness.

## NOTE 17 – PENSION PLANS AND OTHER POSTRETIREMENT BENEFITS

## Pension Plans

The Company has defined benefit pension plans that cover employees in the United States and a number of other countries. The U.S. qualified plan covering the parent company is the largest plan. Benefits for employees hired before January 1, 2008 are based on length of service and the employee's three highest consecutive years of compensation. Employees hired after January 1, 2008 earn benefits that are based on a set percentage of annual pay, plus interest.

The Company's funding policy is to contribute to the plans when pension laws and/or economics either require or encourage funding. In 2014, Dow contributed \$815 million to its pension plans, including contributions to fund benefit payments for its non-qualified supplemental plans. Dow expects to contribute approximately \$750 million to its pension plans in 2015.

The weighted-average assumptions used to determine pension plan obligations and net periodic benefit costs for the plans are provided in the two tables below:

Weighted-Average Assumptions for All Pension Plans	Benefit Obligations at December 31			Net Periodic Costs for the Year		
	2014	2013	2012	2014	2013	2012
Discount rate	3.60	% 4.54	% 3.88	% 4.54	% 3.88	% 4.93
Rate of increase in future compensation levels	4.13	% 4.15	% 3.96	% 4.15	% 3.96	% 4.14
Expected long-term rate of return on plan assets	—	—	—	7.40	% 7.47	% 7.60

Weighted-Average Assumptions for U.S. Pension Plans	Benefit Obligations at December 31			Net Periodic Costs for the Year		
	2014	2013	2012	2014	2013	2012
Discount rate	4.04	% 4.92	% 4.02	% 4.92	% 4.02	% 4.98
Rate of increase in future compensation levels	4.50	% 4.50	% 4.50	% 4.50	% 4.50	% 4.50
Expected long-term rate of return on plan assets	—	—	—	7.82	% 7.85	% 7.83



The Company determines the expected long-term rate of return on plan assets by performing a detailed analysis of key economic and market factors driving historical returns for each asset class and formulating a projected return based on factors in the current environment. Factors considered include, but are not limited to, inflation, real economic growth, interest rate yield, interest rate spreads, and other valuation measures and market metrics. The expected long-term rate of return for each asset class is then weighted based on the strategic asset allocation approved by the governing body for each plan. The Company's historical experience with the pension fund asset performance is also considered. The discount rates utilized to measure the pension and other postretirement obligations of the U.S. qualified plans are based on the yield on high-quality fixed income investments at the measurement date. Future expected actuarially determined cash flows of Dow's major U.S. plans are matched against the Towers Watson RATE:Link yield curve (based on 60th to 90th percentile bond yields) to arrive at a single discount rate for each plan.

On October 27, 2014, the Society of Actuaries ("SOA") published updated mortality tables and mortality improvement scales (generational mortality tables), which reflect increased life expectancy. Based on an evaluation of the mortality experience of

Table of Contents

the Company's U.S. pension plans and the SOA's tables, the Company adopted updated generational mortality tables for purposes of measuring U.S. pension and other postretirement obligations at year-end. The mortality assumption change increased pension and other postretirement benefit obligations by \$479 million at December 31, 2014.

The accumulated benefit obligation for all defined benefit pension plans was \$26.5 billion at December 31, 2014 and \$23.8 billion at December 31, 2013.

Pension Plans with Accumulated Benefit Obligations in Excess  
of Plan Assets at December 31

In millions	2014	2013
Projected benefit obligations	\$25,539	\$22,565
Accumulated benefit obligations	\$24,281	\$21,554
Fair value of plan assets	\$16,932	\$16,247

In addition to the U.S. qualified defined benefit pension plan, U.S. employees may participate in defined contribution plans (Employee Savings Plans or 401(k) plans) by contributing a portion of their compensation, which is partially matched by the Company. Defined contribution plans also cover employees in some subsidiaries in other countries, including Australia, Brazil, Canada, Italy, Spain and the United Kingdom. Expense recognized for all defined contribution plans was \$243 million in 2014, \$231 million in 2013 and \$186 million in 2012.

Other Postretirement Benefits

The Company provides certain health care and life insurance benefits to retired employees. The Company's plans outside of the United States are not significant; therefore, this discussion relates to the U.S. plans only. The plans provide health care benefits, including hospital, physicians' services, drug and major medical expense coverage, and life insurance benefits. In general, for employees hired before January 1, 1993, the plans provide benefits supplemental to Medicare when retirees are eligible for these benefits. The Company and the retiree share the cost of these benefits, with the Company portion increasing as the retiree has increased years of credited service, although there is a cap on the Company portion. The Company has the ability to change these benefits at any time. Employees hired after January 1, 2008 are not covered under the plans.

On January 1, 2014, the Company implemented an Employer Group Waiver Plan ("EGWP") for its Medicare-eligible, retiree medical plan participants. The Medicare Part D Retiree Drug Subsidy program ("RDS") was eliminated on January 1, 2014. The EGWP does not significantly alter the benefits provided to retiree medical plan participants. Federal subsidies to be earned under the EGWP are expected to exceed those earned under the RDS and will be partially offset by increased costs related to the administration of the EGWP. The formation of the EGWP and the resulting change in assumption generated an actuarial gain of \$250 million at December 31, 2013, included in "Accumulated other comprehensive loss" in the consolidated balance sheets. The Company also recognized a reduction in the postretirement benefit obligation of \$250 million at December 31, 2013. The net periodic benefit cost decreased by \$25 million in 2014 due to the EGWP.

The Company funds most of the cost of these health care and life insurance benefits as incurred. In 2014, Dow did not make any contributions to its other postretirement benefit plan trusts. The trusts did not hold assets at December 31, 2014. Dow does not expect to contribute assets to its other postretirement benefits plan trusts in 2015.

The weighted-average assumptions used to determine other postretirement benefit obligations and net periodic benefit costs for the U.S. plans are provided below:

U.S. Plan Assumptions for Other Postretirement Benefits	Benefit Obligations at December 31	Net Periodic Costs for the Year
--	---------------------------------------	------------------------------------

	2014		2013		2012		2014		2013		2012
Discount rate	3.68	%	4.37	%	3.67	%	4.37	%	3.67	%	4.66
Expected long-term rate of return on plan assets	—	%	—	%	—	%	—	%	—	%	1.00
Initial health care cost trend rate	7.06	%	7.45	%	7.84	%	7.45	%	7.84	%	8.28
Ultimate health care cost trend rate	5.00	%	5.00	%	5.00	%	5.00	%	5.00	%	5.00
Year ultimate trend rate to be reached	2020		2020		2019		2020		2020		2019

Table of Contents

Increasing the assumed medical cost trend rate by one percentage point in each year would decrease the accumulated postretirement benefit obligation at December 31, 2014 by \$16 million and decrease the net periodic postretirement benefit cost for the year by \$2 million. Decreasing the assumed medical cost trend rate by one percentage point in each year would increase the accumulated postretirement benefit obligation at December 31, 2014 by \$10 million and the net periodic postretirement benefit cost for the year by \$2 million.

## Net Periodic Benefit Cost for All Significant Plans

In millions	Defined Benefit Pension Plans			Other Postretirement Benefits		
	2014	2013	2012	2014	2013	2012
Service cost	\$411	\$471	\$378	\$14	\$19	\$17
Interest cost	1,096	1,012	1,093	72	78	92
Expected return on plan assets	(1,322 )	(1,248 )	(1,262 )	—	—	(1 )
Amortization of prior service cost (credit)	22	25	26	(2 )	(4 )	(4 )
Amortization of unrecognized (gain) loss	500	788	519	(14 )	4	1
Curtailment/settlement/other (1) (2) (3)	(2 )	5	—	—	—	9
Net periodic benefit cost	\$705	\$1,053	\$754	\$70	\$97	\$114

(1) Included \$9 million of curtailment costs recorded in 2012 related to the 4Q12 Restructuring plan (see Note 3).

(2) The 2013 impact primarily relates to settlements associated with the wind-up of a Canadian pension plan.

(3) The 2014 impact relates to settlements associated with the wind-up of a pension plan in The Netherlands and a pension plan in Canada.

## Other Changes in Plan Assets and Benefit Obligations Recognized in Other Comprehensive (Income) Loss for All Significant Plans

In millions	Defined Benefit Pension Plans			Other Postretirement Benefits		
	2014	2013	2012	2014	2013	2012
Net (gain) loss	\$3,528	\$(2,343 )	\$3,135	\$63	\$(404 )	\$163
Prior service credit arising during period	(500 )	—	—	—	—	—
Amortization of prior service (cost) credit	(22 )	(25 )	(26 )	2	4	4
Amortization of unrecognized gain (loss)	(498 )	(793 )	(519 )	14	(4 )	(1 )
Total recognized in other comprehensive (income) loss	\$2,508	\$(3,161 )	\$2,590	\$79	\$(404 )	\$166
Total recognized in net periodic benefit cost and other comprehensive (income) loss	\$3,213	\$(2,108 )	\$3,344	\$149	\$(307 )	\$280

Table of Contents

## Change in Projected Benefit Obligations, Plan Assets and Funded Status of All Significant Plans

In millions	Defined Benefit Pension Plans		Other Postretirement Benefits	
	2014	2013	2014	2013
Change in projected benefit obligations:				
Benefit obligations at beginning of year	\$25,027	\$26,840	\$1,742	\$2,210
Service cost	411	471	14	19
Interest cost	1,096	1,012	72	78
Plan participants' contributions	21	17	—	—
Plan amendments (1)	(500)	) —	—	—
Actuarial changes in assumptions and experience	4,096	(2,029)	) 63	(401)
Acquisition/divestiture/other activity	(1)	) —	—	—
Benefits paid	(1,316)	) (1,322)	) (169)	) (156)
Currency impact	(779)	) 123	(15)	) (8)
Termination benefits/curtailment cost/settlements (2) (3)	(76)	) (85)	) —	—
Benefit obligations at end of year	\$27,979	\$25,027	\$1,707	\$1,742
Change in plan assets:				
Fair value of plan assets at beginning of year	\$18,827	\$17,725	\$—	\$65
Actual return on plan assets	1,961	1,548	—	—
Currency impact	(593)	) 85	—	—
Employer contributions	815	865	—	—
Plan participants' contributions	21	17	—	—
Acquisition/divestiture/other activity	(86)	) (91)	) —	—
Benefits paid	(1,316)	) (1,322)	) —	(65)
Fair value of plan assets at end of year	\$19,629	\$18,827	\$—	\$—
Funded status at end of year	\$ (8,350)	) \$ (6,200)	) \$ (1,707)	) \$ (1,742)
Net amounts recognized in the consolidated balance sheets at December 31:				
Noncurrent assets	\$263	\$139	\$—	\$—
Current liabilities	(68)	) (66)	) (147)	) (157)
Noncurrent liabilities	(8,545)	) (6,273)	) (1,560)	) (1,585)
Net amounts recognized in the consolidated balance sheets	\$ (8,350)	) \$ (6,200)	) \$ (1,707)	) \$ (1,742)
Pretax amounts recognized in AOCL at December 31:				
Net loss (gain)	\$10,345	\$7,815	\$ (176)	) \$ (253)
Prior service cost (credit)	81	103	(5)	) (7)
Pretax balance in AOCL at end of year	\$10,426	\$7,918	\$ (181)	) \$ (260)

(1) The 2014 plan amendments include a change in post-termination interest rates in the U.S. and new legislation in The Netherlands.

(2) The 2013 impact primarily relates to settlements associated with the wind-up of a Canadian pension plan.

(3) The 2014 impact relates to settlements associated with the wind-up of a pension plan in The Netherlands and a pension plan in Canada.

In 2015, an estimated net loss of \$744 million and prior service credit of \$29 million for the defined benefit pension plans will be amortized from AOCL to net periodic benefit cost. In 2015, an estimated net gain of \$11 million and prior service credit of \$2 million for other postretirement benefit plans will be amortized from AOCL to net periodic benefit cost.



Table of Contents

## Estimated Future Benefit Payments

The estimated future benefit payments, reflecting expected future service, as appropriate, are presented in the following table:

## Estimated Future Benefit Payments at December 31, 2014

In millions	Defined Benefit Pension Plans	Other Postretirement Benefits
2015	\$ 1,270	\$ 150
2016	1,284	140
2017	1,314	134
2018	1,359	133
2019	1,401	129
2020 through 2024	7,554	589
Total	\$ 14,182	\$ 1,275

## Plan Assets

Plan assets consist primarily of equity and fixed income securities of U.S. and foreign issuers, and include alternative investments such as real estate, private equity and absolute return strategies. At December 31, 2014, plan assets totaled \$19.6 billion and included no Company common stock. At December 31, 2013, plan assets totaled \$18.8 billion and included no Company common stock. In 2013, the Company received \$32 million from residual plan assets after the completion of a non-U.S. pension plan wind-up.

## Investment Strategy and Risk Management for Plan Assets

The Company's investment strategy for the plan assets is to manage the assets in relation to the liability in order to pay retirement benefits to plan participants over the life of the plans. This is accomplished by identifying and managing the exposure to various market risks, diversifying investments across various asset classes and earning an acceptable long-term rate of return consistent with an acceptable amount of risk, while considering the liquidity needs of the plans.

The plans are permitted to use derivative instruments for investment purposes, as well as for hedging the underlying asset and liability exposure and rebalancing the asset allocation. The plans use value at risk, stress testing, scenario analysis and Monte Carlo simulations to monitor and manage both the risk within the portfolios and the surplus risk of the plans.

Equity securities primarily include investments in large- and small-cap companies located in both developed and emerging markets around the world. Fixed income securities include investment and non-investment grade corporate bonds of companies diversified across industries, U.S. treasuries, non-U.S. developed market securities, U.S. agency mortgage-backed securities, emerging market securities and fixed income related funds. Alternative investments primarily include investments in real estate, private equity limited partnerships and absolute return strategies. Other significant investment types include various insurance contracts; and interest rate, equity, commodity and foreign exchange derivative investments and hedges.

## Strategic Weighted-Average Target Allocation of Plan

## Assets for All Significant Plans

Asset Category	Target Allocation	
Equity securities	34	%
Fixed income securities	35	%
Alternative investments	30	%
Other investments	1	%

Total	100	%
-------	-----	---

#### Concentration of Risk

The Company mitigates the credit risk of investments by establishing guidelines with investment managers that limit investment in any single issue or issuer to an amount that is not material to the portfolio being managed. These guidelines are monitored for compliance both by the Company and external managers. Credit risk related to derivative activity is mitigated by utilizing multiple counterparties, collateral support agreements and centralized clearing, where appropriate.

The Northern Trust Collective Government Short Term Investment money market fund is utilized as the sweep vehicle for the U.S. plans, which from time to time can represent a significant investment. For one U.S. plan, approximately half of the liability is covered by a participating group annuity issued by Prudential Insurance Company.

115

---



Table of Contents

The following tables summarize the bases used to measure the Company's pension plan assets at fair value for the years ended December 31, 2014 and 2013:

Basis of Fair Value Measurements of Pension Plan Assets at December 31, 2014	Quoted Prices in Active Markets for Identical Items (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total
In millions				
Cash and cash equivalents	\$61	\$953	\$—	\$1,014
Equity securities:				
U.S. equity (1)	\$3,011	\$428	\$9	\$3,448
Non-U.S. equity – developed countries	1,814	1,410	—	3,224
Emerging markets	472	538	23	1,033
Convertible bonds	15	195	—	210
Equity derivatives	—	7	—	7
Total equity securities	\$5,312	\$2,578	\$32	\$7,922
Fixed income securities:				
U.S. government and municipalities	\$—	\$1,406	\$—	\$1,406
U.S. agency and agency mortgage-backed securities	—	310	—	310
Corporate bonds – investment grade	—	1,605	—	1,605
Non-U.S. governments – developed countries	—	1,212	—	1,212
Non-U.S. corporate bonds – developed countries	—	961	—	961
Emerging market debt	—	93	—	93
Other asset-backed securities	—	105	1	106
High yield bonds	—	168	16	184
Other fixed income funds	—	299	294	593
Fixed income derivatives	—	31	—	31
Total fixed income securities	\$—	\$6,190	\$311	\$6,501
Alternative investments:				
Real estate	\$31	\$36	\$1,627	\$1,694
Private equity	—	—	1,059	1,059
Absolute return	—	586	656	1,242
Total alternative investments	\$31	\$622	\$3,342	\$3,995
Other investments	\$—	\$157	\$40	\$197
Total pension plan assets at fair value	\$5,404	\$10,500	\$3,725	\$19,629

(1) Includes no Company common stock.

Table of Contents

Basis of Fair Value Measurements of Pension Plan Assets at December 31, 2013	Quoted Prices in Active Markets for Identical Items (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total
In millions				
Cash and cash equivalents	\$83	\$1,179	\$—	\$1,262
Equity securities:				
U.S. equity (1)	\$2,759	\$695	\$—	\$3,454
Non-U.S. equity – developed countries	2,014	1,122	2	3,138
Emerging markets	648	574	10	1,232
Convertible bonds	23	326	—	349
Equity derivatives	5	(27	) —	(22
Total equity securities	\$5,449	\$2,690	\$12	\$8,151
Fixed income securities:				
U.S. government and municipalities	\$—	\$1,154	\$—	\$1,154
U.S. agency and agency mortgage-backed securities	—	313	—	313
Corporate bonds – investment grade	—	1,397	—	1,397
Non-U.S. governments – developed countries	—	1,075	—	1,075
Non-U.S. corporate bonds – developed countries	—	838	2	840
Emerging market debt	—	106	—	106
Other asset-backed securities	—	113	15	128
High yield bonds	—	178	20	198
Other fixed income funds	—	243	200	443
Fixed income derivatives	(1	) (31	) —	(32
Total fixed income securities	\$(1	) \$5,386	\$237	\$5,622
Alternative investments:				
Real estate	\$30	\$33	\$1,338	\$1,401
Private equity	—	—	1,017	1,017
Absolute return	—	611	406	1,017
Total alternative investments	\$30	\$644	\$2,761	\$3,435
Other investments	\$—	\$317	\$40	\$357
Total pension plan assets at fair value	\$5,561	\$10,216	\$3,050	\$18,827

(1) Includes no Company common stock.

For pension plan assets classified as Level 1 measurements (measured using quoted prices in active markets), total fair value is either the price of the most recent trade at the time of the market close or the official close price, as defined by the exchange on which the asset is most actively traded on the last trading day of the period, multiplied by the number of units held without consideration of transaction costs.

For pension or other postretirement benefit plan assets classified as Level 2 measurements, where the security is frequently traded in less active markets, fair value is based on the closing price at the end of the period; where the security is less frequently traded, fair value is based on the price a dealer would pay for the security or similar securities, adjusted for any terms specific to that asset or liability. Market inputs are obtained from well-established and recognized vendors of market data and subjected to tolerance and quality checks. For derivative assets and liabilities, standard industry models are used to calculate the fair value of the various financial instruments based on significant observable market inputs, such as foreign exchange rates, commodity prices, swap rates, interest rates and implied volatilities obtained from various market sources.

Some pension plan assets are held in funds where a net asset value is calculated based on the fair value of the underlying assets and the number of shares owned. The classification of the fund (Level 2 or 3 measurements) is determined based on the lowest level classification of significant holdings within the fund. For all other pension plan assets for which observable inputs are used, fair value is derived through the use of fair value models, such as a discounted cash flow model or other standard pricing models.

Table of Contents

For pension plan assets classified as Level 3 measurements, total fair value is based on significant unobservable inputs including assumptions where there is little, if any, market activity for the investment. Investment managers or fund managers provide valuations of the investment on a monthly or quarterly basis. These valuations are reviewed for reasonableness based on applicable sector, benchmark and company performance. Adjustments to valuations are made where appropriate. Where available, audited financial statements are obtained and reviewed for the investments as support for the manager's investment valuation.

The following table summarizes the changes in fair value of Level 3 pension plan assets for the years ended December 31, 2013 and 2014:

Fair Value Measurement of Level 3 Pension Plan Assets In millions	Equity Securities	Fixed Income Securities	Alternative Investments	Other Investments	Total
Balance at January 1, 2013	\$13	\$258	\$2,515	\$42	\$2,828
Actual return on plan assets:					
Relating to assets sold during 2013	—	42	176	—	218
Relating to assets held at Dec 31, 2013	—	(32)	) 67	(1)	) 34
Purchases, sales and settlements	2	(27)	) (5	) (1	) (31)
Transfers out of Level 3, net	(3)	) (2	) —	—	(5)
Foreign currency impact	—	(2)	) 8	—	6
Balance at December 31, 2013	\$12	\$237	\$2,761	\$40	\$3,050
Actual return on plan assets:					
Relating to assets sold during 2014	—	22	139	—	161
Relating to assets held at Dec 31, 2014	(12)	) (7	) 191	1	) 173
Purchases, sales and settlements	32	63	300	(1)	) 394
Transfers out of Level 3, net	—	(3)	) —	—	(3)
Foreign currency impact	—	(1)	) (49	) —	(50)
Balance at December 31, 2014	\$32	\$311	\$3,342	\$40	\$3,725

## NOTE 18 – LEASED PROPERTY

## Leased Property

The Company routinely leases premises for use as sales and administrative offices, warehouses and tanks for product storage, motor vehicles, railcars, computers, office machines and equipment under leases. In addition, the Company leases aircraft in the United States. At the termination of the leases, the Company has the option to purchase certain leased equipment and buildings based on a fair market value determination.

Rental expenses under leases, net of sublease rental income, were \$539 million in 2014, \$490 million in 2013 and \$476 million in 2012. Future minimum rental payments under leases with remaining noncancelable terms in excess of one year are as follows:

## Minimum Lease Commitments at December 31, 2014

In millions

2015	\$294
2016	275
2017	241
2018	199
2019	188

2020 and thereafter  
Total

1,837  
\$3,034

118

---

Table of Contents

NOTE 19 – VARIABLE INTEREST ENTITIES

Consolidated Variable Interest Entities

The Company holds a variable interest in eight joint ventures for which the Company is the primary beneficiary.

Three joint ventures own and operate manufacturing and logistics facilities, which produce chemicals and provide services in Asia Pacific. The Company's variable interest in these joint ventures relates to arrangements between the joint ventures and the Company, involving the majority of the output on take-or-pay terms with pricing ensuring a guaranteed return to the joint ventures.

The fourth joint venture owns and operates a membrane chlor-alkali manufacturing facility located at the Company's Freeport, Texas, integrated manufacturing complex. The Company's variable interests in this joint venture relate to equity options between the partners and a cost-plus off-take arrangement between the joint venture and the Company, involving proportional purchase commitments on take-or-pay terms and ensuring a guaranteed return to the joint venture. The Company provides the joint venture with operation and maintenance services, utilities and raw materials; markets the joint venture's co-products; and converts the other partner's proportional purchase commitments into ethylene dichloride under a tolling arrangement. The joint venture successfully initiated full-scale, commercial production in the first quarter of 2014.

The fifth joint venture manufactures products in Japan for the semiconductor industry. Each joint venture partner holds several equivalent variable interests, with the exception of a royalty agreement held exclusively between the joint venture and the Company. In addition, the entire output of the joint venture is sold to the Company for resale to third-party customers.

The sixth joint venture is an ethylene storage joint venture located in Alberta, Canada. The Company's variable interests relate to arrangements involving a majority of the joint venture's storage capacity on take-or-pay terms with pricing ensuring a guaranteed return to the joint venture; and favorably priced leases provided to the joint venture. The Company provides the joint venture with operation and maintenance services and utilities.

The seventh joint venture is a development-stage enterprise located in Brazil that will initially produce ethanol from sugarcane. The Company's variable interests in this joint venture relate to an equity option between the partners, a parental loan and guarantee related to debt financing, and contractual arrangements limiting the partner's initial participation in the economics of certain assets and liabilities. Since formation of the joint venture, the partners have amended the governing documents, including terms of the equity option. These amendments did not result in a change to the Company's accounting treatment of the joint venture. Terms of the equity option require the Company to purchase the partner's equity investment at a price based on a specified formula if the partner elects to exit the joint venture. The Company has classified a portion of the partner's equity investment as "Redeemable Noncontrolling Interest" in the consolidated balance sheets. The joint venture's ethanol mill is expected to process its first harvest of sugarcane in 2015. Original plans for the joint venture's expansion into downstream derivative products have been postponed. This joint venture also holds variable interests in an entity that will construct and own a cogeneration facility. The joint venture's variable interests are the result of a tolling arrangement where it provides fuel to the entity and purchases a majority of the cogeneration facility's output on terms that ensure a return to the entity's equity holders. The eighth joint venture manages the growth, harvest and conditioning of soybean seed and grain, corn and wheat in several midwestern states in the United States. On March 2, 2012, the Company acquired a 49 percent equity interest in this venture. The Company's variable interest in this joint venture relates to an equity option between the partners. Terms of the equity option require the Company to purchase the partner's equity investment at a fixed price, after a specified period of time if the partner elects to sell its equity investment. The joint venture provides seed production services to the Company.

The Company previously held a variable interest in an owner trust, for which the Company was the primary beneficiary. The owner trust leased an ethylene production facility in The Netherlands to the Company, whereby

substantially all of the rights and obligations of ownership were transferred to the Company. The Company's variable interest in the owner trust related to a fixed purchase price option. On January 2, 2014, the Company purchased the ethylene production facility for \$406 million. The Company classified \$346 million as "Payments on long-term debt" and \$60 million as "Purchases of noncontrolling interests" in the consolidated statements of cash flows.

The Company's consolidated financial statements include the assets, liabilities and results of operations of variable interest entities ("VIEs") for which the Company is the primary beneficiary. The other equity holders' interests are reflected in "Net income (loss) attributable to noncontrolling interests" in the consolidated statements of income and "Redeemable Noncontrolling Interest" and "Non-redeemable noncontrolling interests" in the consolidated balance sheets. The following table

Table of Contents

summarizes the carrying amounts of these entities' assets and liabilities included in the Company's consolidated balance sheets at December 31, 2014 and 2013:

Assets and Liabilities of Consolidated VIEs at December 31	2014	2013
In millions		
Cash and cash equivalents (1)	\$190	\$147
Other current assets	175	143
Property	2,726	2,646
Other noncurrent assets	85	105
Total assets (2)	\$3,176	\$3,041
Current liabilities (nonrecourse 2014: \$391; 2013: \$318)	\$394	\$664
Long-term debt (nonrecourse 2014: \$1,229; 2013: \$1,360)	1,260	1,392
Other noncurrent liabilities (nonrecourse 2014: \$62; 2013: \$69)	62	69
Total liabilities	\$1,716	\$2,125

(1) Included \$20 million at December 31, 2014 (\$1 million at December 31, 2013) specifically restricted for the construction, debt servicing and operational expenses of a manufacturing facility.

(2) All assets were restricted at December 31, 2014 and December 31, 2013.

In addition, the Company holds a variable interest in an entity created to monetize accounts receivable of select European entities. The Company is the primary beneficiary of this entity as a result of holding subordinated notes while maintaining servicing responsibilities for the accounts receivable. The carrying amounts of assets and liabilities included in the Company's consolidated balance sheets pertaining to this entity, were current assets of \$99 million (zero restricted) at December 31, 2014 (\$105 million, zero restricted, at December 31, 2013) and current liabilities were less than \$1 million (zero nonrecourse) at December 31, 2014 (zero, zero nonrecourse, at December 31, 2013).

Amounts presented in the consolidated balance sheets and the table above as restricted assets or nonrecourse obligations relating to consolidated VIEs at December 31, 2014 and 2013 are adjusted for intercompany eliminations, parental guarantees and residual value guarantees.

#### Nonconsolidated Variable Interest Entity

The Company holds a variable interest in a joint venture that manufactures crude acrylic acid in the United States and Germany on behalf of the Company and the other joint venture partner. The variable interest relates to a cost-plus arrangement between the joint venture and each joint venture partner. The Company is not the primary beneficiary, as a majority of the joint venture's output is committed to the other joint venture partner; therefore, the entity is accounted for under the equity method of accounting. At December 31, 2014, the Company's investment in the joint venture was \$162 million (\$159 million at December 31, 2013), classified as "Investment in nonconsolidated affiliates" in the consolidated balance sheets, representing the Company's maximum exposure to loss.

#### NOTE 20 – STOCK-BASED COMPENSATION

The Company provides stock-based compensation in the form of the Employee Stock Purchase Plan ("ESPP"), which grants eligible employees the right to purchase shares of the Company's common stock at a discounted price. The Company also grants stock-based compensation to employees and non-employee directors in the form of stock incentive plans, which include stock options, deferred stock, performance deferred stock and restricted stock. Information regarding these plans is provided below.

#### Accounting for Stock-Based Compensation



The Company grants stock-based compensation awards that vest over a specified period or upon employees meeting certain performance and/or retirement eligibility criteria. The fair value of equity instruments issued to employees is measured on the grant date. The fair value of liability instruments issued to employees (specifically, performance deferred stock awards, which are granted to executive employees subject to stock ownership requirements, that provide the recipient the option to elect to receive a cash payment equal to the value of the stock award on the date of delivery) is measured at the end of each quarter. The fair value of equity and liability instruments is expensed over the vesting period or, in the case of retirement, from the grant date to the date on which retirement eligibility provisions have been met and additional service is no longer required.

Table of Contents

The Company uses a lattice-based option valuation model to estimate the fair value of stock options, the Black-Scholes option valuation model for subscriptions to purchase shares under the ESPP and Monte Carlo simulation for the market portion of performance deferred stock awards. The weighted-average assumptions used to calculate total stock-based compensation are included in the following table:

Weighted-Average Assumptions	2014		2013		2012	
Dividend yield	3.08	%	3.89	%	3.34	%
Expected volatility	28.11	%	29.93	%	38.39	%
Risk-free interest rate	1.11	%	1.08	%	0.95	%
Expected life of stock options granted during period (years)	7.7		7.8		7.6	
Life of Employee Stock Purchase Plan (months)	6		5		6	

The dividend yield assumption for 2014 was equal to the dividend yield on the grant date, which for stock options was the most recent quarterly dividend declared at the grant date of \$0.37 per share and for the ESPP was the first quarter dividend payment of \$0.32 per share. The dividend yield assumption for 2013 was equal to the dividend yield on the grant date, which reflected the most recent quarterly dividend payment of \$0.32 per share. The dividend yield assumption for 2012 was based on a 10 percent/90 percent blend of the Company's current declared dividend as a percentage of the stock price on the grant date and a 10-year dividend yield average. The expected volatility assumption was based on an equal weighting of the historical daily volatility and current implied volatility from exchange-traded options for the contractual term of the options. The risk-free interest rate was based on the weighted-average of U.S. Treasury strip rates over the contractual term of the options. The expected life of stock options granted was based on an analysis of historical exercise patterns.

**Employee Stock Purchase Plan**

On February 9, 2012, the Board of Directors authorized The Dow Chemical Company 2012 Employee Stock Purchase Plan which was approved by stockholders at the Company's annual meeting on May 10, 2012. Under the 2014 annual offering, most employees were eligible to purchase shares of common stock of the Company valued at up to 10 percent of their annual base salary. The value is determined using the plan price multiplied by the number of shares subscribed to by the employee. The plan price of the stock is set at an amount equal to: the lower of at least 85 percent of the fair market value (closing price) of the common stock on a date, or the average fair market value (closing price) of the common stock over a period, in each case, specified by the plan administrator.

Employee Stock Purchase Plan	2014	
Shares in thousands	Shares	Exercise Price
Outstanding at January 1, 2014	—	—
Granted	3,634	\$38.13
Exercised	(3,615	) \$38.13
Forfeited/Expired	(3	) \$38.13
Outstanding and exercisable at December 31, 2014	16	\$38.13

Additional Information about Employee Stock Purchase Plan	2014	2013	2012
In millions, except per share amounts			
Weighted-average fair value per share of purchase rights granted	\$5.45	\$7.20	\$8.32
Total compensation expense for ESPP	\$20	\$60	\$79
Related tax benefit	\$7	\$22	\$29
Total amount of cash received from the exercise of purchase rights	\$138	\$198	\$166
Total intrinsic value of purchase rights exercised (1)	\$42	\$68	\$41
Related tax benefit	\$15	\$25	\$15

(1) Difference between the market price at exercise and the price paid by the employee to exercise the purchase rights.

Table of Contents

## Stock Incentive Plan

The Company has historically granted equity awards under various plans (the "Prior Plans"). On February 9, 2012, the Board of Directors authorized The Dow Chemical Company 2012 Stock Incentive Plan (the "2012 Plan"), which was approved by stockholders at the Company's annual meeting on May 10, 2012 ("Original Effective Date") and became effective on that date. On February 13, 2014, the Board of Directors adopted The Dow Chemical Company Amended and Restated 2012 Stock Incentive Plan (the "2012 Restated Plan"). The 2012 Restated Plan was approved by stockholders at the Company's annual meeting on May 15, 2014 and became effective on that date. The Prior Plans were superseded by the 2012 Plan and the 2012 Restated Plan (collectively, the "2012 Plan"). Under the 2012 Plan, the Company may grant options, deferred stock, performance deferred stock, restricted stock, stock appreciation rights and stock units to employees and non-employee directors until the tenth anniversary of the Original Effective Date, subject to an aggregate limit and annual individual limits. The terms of the grants are fixed at the grant date. At December 31, 2014, there were 62,725,432 shares available for grant under the 2012 Plan.

## Stock Options

The Company grants stock options to certain employees, subject to certain annual and individual limits, with terms of the grants fixed at the grant date. The exercise price of each stock option equals the market price of the Company's stock on the grant date. Options vest from one to three years, and have a maximum term of 10 years. The following table summarizes stock option activity for 2014:

Stock Options	2014	
Shares in thousands	Shares	Exercise Price (1)
Outstanding at January 1, 2014	76,298	\$35.93
Granted	3,152	\$46.71
Exercised	(23,951)	) \$36.60
Forfeited/Expired	(1,852)	) \$41.96
Outstanding at December 31, 2014	53,647	\$36.05
Remaining contractual life in years		5.51
Aggregate intrinsic value in millions	\$544	
Exercisable at December 31, 2014	35,330	\$36.57
Remaining contractual life in years		4.28
Aggregate intrinsic value in millions	\$348	

(1) Weighted-average per share.

## Additional Information about Stock Options

In millions, except per share amounts	2014	2013	2012
Weighted-average fair value per share of options granted	\$11.49	\$6.99	\$9.38
Total compensation expense for stock option plans	\$65	\$101	\$106
Related tax benefit	\$24	\$37	\$39
Total amount of cash received from the exercise of options	\$810	\$188	\$137
Total intrinsic value of options exercised (1)	\$300	\$102	\$64
Related tax benefit	\$111	\$38	\$24

(1) Difference between the market price at exercise and the price paid by the employee to exercise the options.

Total unrecognized compensation cost related to unvested stock option awards of \$40 million at December 31, 2014 is expected to be recognized over a weighted-average period of 0.68 years.



Table of Contents

## Deferred Stock

The Company grants deferred stock to certain employees. The grants vest after a designated period of time, generally one to three years. The following table shows changes in nonvested deferred stock:

Deferred Stock	2014	Grant Date
Shares in thousands	Shares	Fair Value (1)
Nonvested at January 1, 2014	10,588	\$34.38
Granted	2,344	\$46.88
Vested	(3,311)	) \$37.32
Canceled	(269)	) \$35.34
Nonvested at December 31, 2014	9,352	\$36.45

(1) Weighted-average per share.

Additional Information about Deferred Stock	2014	2013	2012
In millions, except per share amounts			
Weighted-average fair value per share of deferred stock granted	\$46.88	\$32.13	\$33.81
Total fair value of deferred stock vested and delivered (1)	\$156	\$137	\$252
Related tax benefit	\$58	\$51	\$93
Total compensation expense for deferred stock awards	\$99	\$104	\$129
Related tax benefit	\$37	\$39	\$48

(1) Includes the fair value of shares vested in prior years and delivered in the reporting year.

Total unrecognized compensation cost related to deferred stock awards of \$87 million at December 31, 2014 is expected to be recognized over a weighted-average period of 0.86 years. At December 31, 2014, approximately 44,941 deferred shares with a grant date weighted-average fair value per share of \$36.52 had previously vested, but were not issued. These shares are scheduled to be issued to employees within one to three years or upon retirement.

## Performance Deferred Stock

The Company grants performance deferred stock to certain employees. The grants vest when the Company attains specified performance targets, such as return on capital and relative total shareholder return, over a predetermined period, generally one to three years. Compensation expense related to performance deferred stock awards is recognized over the lesser of the service or performance period. Changes in the fair value of liability instruments are recognized as compensation expense each quarter. The following table shows the performance deferred stock awards granted:

Performance Deferred Stock Awards	Target	Grant Date
Shares in thousands	Shares	Fair Value (2)
Year	Performance Period	Granted (1)
2014	January 1, 2014 – December 31, 2016	2,425
2013	January 1, 2013 – December 31, 2015	1,321
2012	January 1, 2012 – December 31, 2014	1,205

At the end of the performance period, the actual number of shares issued can range from zero to 250 percent of the (1) target shares granted in the 2012 and 2013 grant years, and zero to 200 percent of target shares granted in the 2014 grant year.

(2) Weighted-average per share.



Table of Contents

The following table shows changes in nonvested performance deferred stock:

Performance Deferred Stock	2014	
Shares in thousands	Target Shares Granted (1)	Grant Date Fair Value (2)
Nonvested at January 1, 2014	2,504	\$33.03
Granted	2,425	\$46.72
Vested (3)	(1,185)	) \$34.00
Canceled	(24)	) \$38.60
Nonvested at December 31, 2014	3,720	\$41.61

At the end of the performance period, the actual number of shares issued can range from zero to 250 percent of the (1) target shares granted in the 2012 and 2013 grant years, and zero to 200 percent of target shares granted in the 2014 grant year.

(2) Weighted-average per share.

Vested shares for the 2012 - 2014 performance period that were earned (i.e., performance conditions were satisfied and the target shares granted for the performance period vested) during the applicable fiscal year. Shares earned (3) will be delivered in February 2015 at the applicable pay-out percentage. Certain executive employees may opt to receive a cash payment equal to the value of the stock award on the date of delivery.

#### Additional Information about Performance Deferred Stock

In millions	2014	2013	2012
Total fair value of performance deferred stock vested and delivered (1)	\$12	\$14	\$68
Related tax benefit	\$5	\$5	\$25
Total compensation expense for performance deferred stock awards	\$67	\$62	\$21
Related tax benefit	\$25	\$23	\$8
Shares of performance deferred stock settled in cash (2)	0.1	0.2	1
Total cash paid to settle performance deferred stock awards (3)	\$6	\$6	\$34

(1) Includes the fair value of shares vested in prior years and delivered in the reporting year.

(2) Performance deferred stock awards vested in prior years and delivered in the reporting year.

(3) Cash paid to certain employees for performance deferred stock awards vested in prior periods and delivered in the reporting year, equal to the value of the stock award on the date of delivery.

Total unrecognized compensation cost related to performance deferred stock awards of \$63 million at December 31, 2014 is expected to be recognized over a weighted-average period of 0.90 years. At December 31, 2014, approximately 0.8 million performance deferred shares with a grant date weighted-average fair value of \$34.00 per share were vested, but not issued. These shares are scheduled to be issued in February 2015.

#### Restricted Stock

Under the 2012 Plan, the Company may grant shares (including options, stock appreciation rights, stock units and restricted stock) to non-employee directors over the 10-year duration of the program, subject to the plan's aggregate limit as well as annual individual limits. In 2014, 24,840 shares of restricted stock with a weighted-average fair value of \$48.98 per share were issued under this plan. The restricted stock issued under this plan cannot be sold, assigned, pledged or otherwise transferred by the non-employee director, until the director is no longer a member of the Board.

#### NOTE 21 – STOCKHOLDERS' EQUITY



Cumulative Convertible Perpetual Preferred Stock, Series A

Equity securities in the form of Cumulative Convertible Perpetual Preferred Stock, Series A (“preferred series A”) were issued on April 1, 2009 to Berkshire Hathaway Inc. in the amount of \$3 billion (3 million shares) and the Kuwait Investment Authority in the amount of \$1 billion (1 million shares). The Company will pay cumulative dividends on preferred series A at a rate of 8.5 percent per annum in either cash, shares of common stock, or any combination thereof, at the option of the Company. Dividends may be deferred indefinitely, at the Company’s option. If deferred, common stock dividends must also be deferred. Any past due and unpaid dividends will accrue additional dividends at a rate of 10 percent per annum, compounded quarterly. If dividends are deferred for any six quarters, the preferred series A shareholders may elect two directors to the Company’s Board

## Table of Contents

of Directors until all past due dividends are paid. Ongoing dividends related to preferred series A are \$85 million per quarter; no dividends had been deferred at December 31, 2014.

Shareholders of preferred series A may convert all or any portion of their shares, at their option, at any time, into shares of the Company's common stock at an initial conversion rate of 24.2010 shares of common stock for each share of preferred series A. Under certain circumstances, the Company will be required to adjust the conversion rate. On or after the fifth anniversary of the issuance date, if the common stock price exceeds \$53.72 per share for any 20 trading days in a consecutive 30-day window, the Company may, at its option, at any time, in whole or in part, convert preferred series A into common stock at the then applicable conversion rate. Upon conversion, accrued and unpaid dividends will be payable, at the option of the Company, in either cash, shares of common stock, or any combination thereof.

### Common Stock

The Company may issue common stock shares out of treasury stock or as new common stock shares for purchases under the Employee Stock Purchase Plan, for options exercised and for the release of deferred, performance deferred and restricted stock. The number of new common stock shares issued to employees and non-employee directors under the Company's stock-based compensation programs was 21.2 million in 2014, 18.3 million in 2013 and 18.7 million in 2012.

### Retained Earnings

There are no significant restrictions limiting the Company's ability to pay dividends.

Undistributed earnings of nonconsolidated affiliates included in retained earnings were \$2,703 million at December 31, 2014 and \$2,563 million at December 31, 2013.

### Employee Stock Ownership Plan

The Company has the Dow Employee Stock Ownership Plan (the "ESOP"), which is an integral part of The Dow Chemical Company Employees' Savings Plan (the "Plan"). A significant majority of full-time employees in the United States are eligible to participate in the Plan. The Company uses the ESOP to provide the Company's matching contribution in the form of the Company's stock to Plan participants.

In connection with the acquisition of Rohm and Haas on April 1, 2009, the Rohm and Haas Employee Stock Ownership Plan (the "Rohm and Haas ESOP") was merged into the Plan, and the Company assumed the \$78 million balance of debt at 9.8 percent interest with final maturity in 2020 that was used to finance share purchases by the Rohm and Haas ESOP in 1990. The outstanding balance of the debt was \$37 million at December 31, 2014 and \$44 million at December 31, 2013.

Dividends on unallocated shares held by the ESOP are used by the ESOP to make debt service payments and to purchase additional shares if dividends exceed the debt service payments. Dividends on allocated shares are used by the ESOP to make debt service payments to the extent needed; otherwise, they are paid to the Plan participants. Shares are released for allocation to participants based on the ratio of the current year's debt service to the sum of the principal and interest payments over the life of the loan. The shares are allocated to Plan participants in accordance with the terms of the Plan.

Compensation expense for allocated shares is recorded at the fair value of the shares on the date of allocation. ESOP shares that have not been released or committed to be released are not considered outstanding for purposes of computing basic and diluted earnings per share.

Compensation expense for ESOP shares was \$163 million in 2014, \$132 million in 2013 and \$107 million in 2012. At December 31, 2014, 15.0 million shares out of a total 35.0 million shares held by the ESOP had been allocated to participants' accounts; 1.8 million shares were released but unallocated; and 18.2 million shares, at a fair value of \$831 million, were considered unearned.

#### Treasury Stock

On February 13, 2013, the Board of Directors approved a share buy-back program, authorizing up to \$1.5 billion to be spent on the repurchase of the Company's common stock over a period of time. On January 29, 2014, the Board of Directors announced an expansion of the Company's share buy-back authorization, authorizing an additional amount not to exceed \$3 billion to be spent on the repurchase of the Company's common stock over a period of time. On November 12, 2014, the Board of Directors announced a new \$5 billion tranche to its share buy-back program, with the repurchase of the Company's common stock timed to proceeds received from portfolio management actions and increases in operating cash flows. As a result of these actions, the total authorized amount of the share repurchase program is \$9.5 billion. At December 31, 2014, \$5 billion of the share buy-back authorization remained for repurchases. The total number of treasury shares purchased by the Company was 84.1 million in 2014, 8.2 million in 2013 and zero in 2012.

Table of Contents

The Company may issue shares for purchases under the Employee Stock Purchase Plan, for options exercised as well as for the release of deferred, performance deferred and restricted stock out of treasury stock or as new common stock shares. The number of treasury shares issued to employees under the Company's stock-based compensation programs was 7.1 million in 2014, zero in 2013 and zero in 2012.

## NOTE 22 – INCOME TAXES

## Domestic and Foreign Components of Income Before Income Taxes

In millions	2014	2013 (1)	2012 (2)
Domestic	\$1,652	\$3,979	\$(401 )
Foreign	3,613	2,825	2,066
Total	\$5,265	\$6,804	\$1,665

In 2013, the domestic component of "Income Before Income Taxes" included a gain of \$2.195 billion related to the (1)K-Dow arbitration and a \$451 million gain related to the sale of Dow's Polypropylene Licensing and Catalysts business.

(2) In 2012, the domestic component of "Income Before Income Taxes" was significantly impacted by the Company's 1Q12 and 4Q12 restructuring charges.

## Provision for Income Taxes

	2014			2013			2012		
In millions	Current	Deferred	Total	Current	Deferred	Total	Current	Deferred	Total
Federal (1)	\$(161 )	\$442	\$281	\$805	\$278	\$1,083	\$241	\$(312 )	\$(71 )
State and local	(4 )	43	39	42	(73 )	(31 )	9	(10 )	(1 )
Foreign	1,125	(19 )	1,106	1,028	(92 )	936	780	(143 )	637
Total	\$960	\$466	\$1,426	\$1,875	\$113	\$1,988	\$1,030	\$(465 )	\$565

(1)Reflects the 2014 impact of accelerated deductions.

## Reconciliation to U.S. Statutory Rate

In millions	2014	2013	2012
Taxes at U.S. statutory rate	\$1,843	\$2,381	\$583
Equity earnings effect	(307 )	(276 )	(115 )
Foreign income taxed at rates other than 35% (1)	(195 )	(76 )	(76 )
U.S. tax effect of foreign earnings and dividends	54	102	13
Goodwill impairment losses	—	—	77
Discrete equity earnings (2)	26	—	48
Change in permanent reinvestment assertions	—	—	(236 )
Change in valuation allowances	33	(197 )	135
Unrecognized tax benefits	(30 )	243	122
Federal tax accrual adjustments	(3 )	29	4
Gain from K-Dow arbitration (3)	—	(212 )	—
Other – net	5	(6 )	10
Total tax provision	\$1,426	\$1,988	\$565
Effective tax rate	27.1 %	29.2 %	33.9 %

(1) Includes the tax provision for statutory taxable income in foreign jurisdictions for which there is no corresponding amount in "Income Before Income Taxes."

(2) Includes nonrecurring charges related to equity in earnings of nonconsolidated affiliates.

(3) In 2013, the K-Dow arbitration award generated a tax rate benefit of \$212 million due to the tax treatment of certain components of the award. See Note 14 for further information.

The tax rate for 2014 was favorably impacted by the geographic mix of earnings, with the most notable components being improved profitability in Europe and Asia Pacific as well as equity earnings providing additional favorable impact on the tax rate. The tax rate was also favorably impacted by a reduction in the tax on remittances by foreign subsidiaries to the United States. The tax rate was unfavorably impacted by a continued increase in statutory income in Latin America due to local currency devaluations, and increases in valuation allowances, primarily in Asia Pacific. These factors resulted in an effective tax rate of 27.1 percent for 2014.

Table of Contents

The tax rate for 2013 was favorably impacted by increased equity earnings; the K-Dow arbitration award, due to favorable tax treatment of certain components of the award; and changes in valuation allowances in the United States on state income tax attributes and capital loss carryforwards. The tax rate was unfavorably impacted by adjustments to uncertain tax positions related to court rulings on two separate tax matters as well as the establishment of valuation allowances outside the United States. Additionally, the tax rate was unfavorably impacted by an increase in statutory taxable income in Latin America, primarily due to local currency devaluation. These factors resulted in an effective tax rate of 29.2 percent for 2013.

The tax rate for 2012 was negatively impacted by a change in the geographic mix of earnings, notably a decrease in earnings in Europe and an increase in earnings in the United States, as well as reductions in equity earnings. Equity earnings were further impacted by asset impairment and restructuring charges at Dow Corning. Additionally, the Company's impairment of Dow Formulated Systems goodwill and the impairment of the long-lived assets of Dow Kokam LLC received minimal tax relief. The tax rate was favorably impacted by a change in the permanent reinvestment assertions of certain affiliates in Europe and Asia Pacific; however, this was primarily offset by unfavorable adjustments to uncertain tax positions and valuation allowances. These factors resulted in an effective tax rate of 33.9 percent for 2012.

Deferred Tax Balances at December 31	2014		2013	
In millions	Deferred Tax Assets (1)	Deferred Tax Liabilities	Deferred Tax Assets (1)	Deferred Tax Liabilities
Property	\$63	\$2,005	\$62	\$2,165
Tax loss and credit carryforwards	1,843	—	2,012	—
Postretirement benefit obligations	4,526	1,220	3,619	1,150
Other accruals and reserves (2)	1,213	411	1,901	392
Intangibles	217	691	113	827
Inventory	412	177	217	197
Long-term debt	—	673	—	600
Investments	103	102	137	111
Other – net	999	771	1,143	794
Subtotal	\$9,376	\$6,050	\$9,204	\$6,236
Valuation allowances	(1,106)	) —	(1,112)	) —
Total	\$8,270	\$6,050	\$8,092	\$6,236

(1) Included in current deferred tax assets are prepaid tax assets totaling \$358 million in 2014 and \$205 million in 2013.

(2) The reduction in deferred tax assets in 2014 reflects the impact of accelerated deductions.

Gross operating loss carryforwards amounted to \$11,080 million at December 31, 2014 and \$11,435 million at December 31, 2013. At December 31, 2014, \$1,520 million of the operating loss carryforwards were subject to expiration in 2015 through 2019. The remaining operating loss carryforwards expire in years beyond 2019 or have an indefinite carryforward period. Tax credit carryforwards at December 31, 2014 amounted to \$130 million (\$124 million at December 31, 2013), net of uncertain tax positions, of which \$22 million is subject to expiration in 2015 through 2019. The remaining tax credit carryforwards expire in years beyond 2019 or have an indefinite carryforward period.

The Company had valuation allowances that primarily related to the realization of recorded tax benefits on tax loss carryforwards from operations in the United States, Brazil and Asia Pacific of \$1,106 million at December 31, 2014 and \$1,112 million at December 31, 2013.

Undistributed earnings of foreign subsidiaries and related companies that are deemed to be permanently invested amounted to \$18,037 million at December 31, 2014, \$16,139 million at December 31, 2013 and \$14,504 million at December 31, 2012. It is not practicable to calculate the unrecognized deferred tax liability on undistributed earnings.

Total Gross Unrecognized Tax Benefits

In millions	2014	2013	2012
Balance at January 1	\$266	\$409	\$339
Increases related to positions taken on items from prior years	42	385	66
Decreases related to positions taken on items from prior years	(57)	) (137	) (32 )
Increases related to positions taken in the current year	10	10	53
Settlement of uncertain tax positions with tax authorities	(13	) (393	) (9 )
Decreases due to expiration of statutes of limitations	(8	) (8	) (8 )
Balance at December 31	\$240	\$266	\$409

Table of Contents

At December 31, 2014, the total amount of unrecognized tax benefits was \$240 million (\$266 million at December 31, 2013), of which \$233 million would impact the effective tax rate, if recognized (\$257 million at December 31, 2013).

Interest and penalties associated with uncertain tax positions, including the matters that resulted in the adjustment of uncertain tax positions, are recognized as components of the "Provision for income taxes," and totaled a charge of \$15 million in 2014, a benefit of \$71 million in 2013 and a charge of \$92 million in 2012. The Company's accrual for interest and penalties was \$109 million at December 31, 2014 and \$81 million at December 31, 2013.

During 2013, court rulings on two separate tax matters resulted in the adjustment of uncertain tax positions. In February 2013, the U.S. District Court for the Middle District of Louisiana issued a ruling that disallowed, for tax purposes, transactions and partnerships associated with Chemtech, a wholly owned subsidiary. In March 2013, the U.S. Supreme Court denied certiorari in Union Carbide's research tax credit case. Through denial of certiorari, the decision issued by the U.S. Court of Appeals denying Union Carbide's tax credit claim for supplies used in process-related research and development at its manufacturing facilities became final. As a result of these rulings, the Company adjusted uncertain tax positions related to these matters, resulting in a tax charge of \$276 million in 2013.

Tax years that remain subject to examination for the Company's major tax jurisdictions are shown below:

Tax Years Subject to Examination by Major Tax  
Jurisdiction at December 31

Jurisdiction	Earliest Open Year	
	2014	2013
Argentina	2007	2007
Brazil (1)	2008	2009
Canada	2010	2009
France	2012	2011
Germany	2006	2006
Italy	2009	2008
The Netherlands	2013	2012
Spain	2009	2008
Switzerland	2011	2009
United Kingdom	2012	2011
United States:		
Federal income tax	2004	2004
State and local income tax	2004	2004

(1) Amended returns filed in 2014 for years 2008 and 2009.

The Company is currently under examination in a number of tax jurisdictions. It is reasonably possible that some of these examinations may be resolved within twelve months. As a result, it is reasonably possible that the total gross unrecognized tax benefits of the Company at December 31, 2014 may range from an increase of \$60 million to a decrease of \$135 million in the next twelve months as a result of these resolved examinations. The impact on the Company's results of operations is not expected to be material.

The reserve for non-income tax contingencies related to issues in the United States and foreign locations was \$93 million at December 31, 2014 and \$105 million at December 31, 2013. This is management's best estimate of the potential liability for non-income tax contingencies. Inherent uncertainties exist in estimates of tax contingencies due to changes in tax law, both legislated and concluded through the various jurisdictions' tax court systems. It is the opinion of the Company's management that the possibility is remote that costs in excess of those accrued will have a material impact on the Company's consolidated financial statements.





Table of Contents

## NOTE 23 – ACCUMULATED OTHER COMPREHENSIVE LOSS

The following table provides an analysis of the changes in accumulated other comprehensive loss for the years ended December 31, 2014, 2013 and 2012:

## Accumulated Other Comprehensive Loss

In millions	2014	2013	2012
Unrealized Gains on Investments at beginning of year	\$160	\$147	\$78
Net change in unrealized gains (net of tax of \$22, \$25, \$29)	41	55	84
Reclassification to earnings - Net sales (net of tax of \$(32), \$(20), \$(8)) (1)	(59)	(42)	(13)
Reclassification to earnings - Sundry income (expense) - net (net of tax of \$(1), \$-, \$(1)) (1)	(1)	—	(2)
Balance at end of period	\$141	\$160	\$147
Cumulative Translation Adjustments at beginning of year	476	328	72
Translation adjustments (net of tax of \$28, \$(6), \$97)	(1,239)	169	256
Reclassification to earnings - Sundry income (expense) - net (2)	12	(21)	—
Balance at end of period	\$(751)	\$476	\$328
Pension and Other Postretirement Benefit Plans at beginning of year	(5,460)	(7,995)	(6,134)
Net gain (loss) arising during period (net of tax of \$(1,228), \$876, \$(1,037)) (3)	(2,516)	1,984	(2,222)
Prior service credit arising during period (net of tax of \$185, \$1, \$-) (3)	315	5	—
Amortization of prior service cost included in net periodic pension costs (net of tax of \$6, \$6, \$7) (3)	14	15	15
Amortization of net loss included in net periodic pension costs (net of tax of \$158, \$266, \$174) (3)	326	531	346
Balance at end of period	\$(7,321)	\$(5,460)	\$(7,995)
Accumulated Derivative Gain (Loss) at beginning of year	(3)	4	(12)
Net hedging results (net of tax of \$(25), \$5, \$(9))	(91)	10	(7)
Reclassification to earnings - Cost of sales (net of tax of \$2, \$(8), \$13) (1) (4)	8	(17)	23
Balance at end of period	\$(86)	\$(3)	\$4
Total accumulated other comprehensive loss	\$(8,017)	\$(4,827)	\$(7,516)

(1) Tax amounts are included in "Provision for income taxes" in the consolidated statements of income.

(2) In 2014, reclassification resulted from the liquidation and divestiture of subsidiaries. In 2013, reclassification resulted from the divestiture of a nonconsolidated affiliate.

(3) See Note 17 for additional information.

(4) Accumulated Derivative Gain (Loss) for 2012 was presented in accordance with ASU 2013-02.

Table of Contents

## NOTE 24 – NONCONTROLLING INTERESTS

Ownership interests in the Company's subsidiaries held by parties other than the Company are presented separately from the Company's equity in the consolidated balance sheets as "Redeemable Noncontrolling Interest" and "Non-redeemable noncontrolling interests." The amount of consolidated net income attributable to the Company and the noncontrolling interests are both presented on the face of the consolidated statements of income. See Note 19 for additional information related to the redeemable noncontrolling interest.

The following table summarizes the activity for equity attributable to non-redeemable noncontrolling interests for the years ended December 31, 2014, 2013 and 2012:

Non-redeemable Noncontrolling Interests In millions	2014	2013	2012
Balance at January 1	\$1,026	\$990	\$1,010
Net income (loss) attributable to noncontrolling interests	67	29	(82)
Distributions to noncontrolling interests (1)	(64)	(55)	(73)
Capital contributions (noncash - 2014: \$-; 2013: \$-; 2012: \$97)	36	58	97
Consolidation of variable interest entities (2)	—	—	37
Purchases of noncontrolling interests (2)	(56)	—	—
Transfers of redeemable noncontrolling interest	(46)	(9)	—
Cumulative translation adjustments	(29)	(43)	—
Deconsolidation of noncontrolling interests	—	52	—
Other	(3)	4	1
Balance at December 31	\$931	\$1,026	\$990

(1) The 2014 impact is net of \$27 million in dividends paid to a joint venture which were reclassified to "Equity in earnings of nonconsolidated affiliates."

(2) See Note 19 for additional information on variable interest entities.

## NOTE 25 – OPERATING SEGMENTS AND GEOGRAPHIC AREAS

Beginning in the fourth quarter of 2014, the Company changed its reportable segments as a result of changes in the Company's organization, including executive leadership appointments. The new operating segments reflect the Company's strategy to be low-cost and fully integrated in key value chains while adding value through technology and end-market orientation. The new operating segments also reflect either integrated value chain alignment, such as acrylic, chlorine, ethylene and propylene within a segment, or the segment's innovation-driven market focus.

Following are the new segments:

- ▲gricultural Sciences
- onsumer Solutions
- ▲nfrastructure Solutions
- erformance Materials & Chemicals
- erformance Plastics

The Company also changed the assignment of certain expenses previously aligned with the Corporate segment to better reflect operating segment results and profitability. All leveraged functional costs (i.e., information systems, finance, human resources, legal, supply chain, etc.) are now fully allocated to the segments. In addition, long-term performance-based compensation expense, including the Employee Stock Purchase Plan, stock options, deferred stock

and performance deferred stock, are now allocated to the segments based primarily on employee alignment.

The reporting changes are retrospectively reflected in segment results for all periods presented.

Dow is a diversified, worldwide manufacturer and supplier of products used primarily as raw materials in the manufacture of customer products and services. The Company serves the following industries: appliance; automotive; agricultural; building and construction; chemical processing; electronics; furniture; housewares; oil and gas; packaging; paints, coatings and adhesives; personal care; pharmaceutical; processed foods; pulp and paper; textile and carpet; utilities; and water treatment.

## Table of Contents

Dow conducts its worldwide operations through global businesses, which are reported in five operating segments. Corporate contains the reconciliation between the totals for the reportable segments and the Company's totals and includes research and other expenses related to new business development activities, and other corporate items not allocated to the reportable operating segments.

The Company uses EBITDA (which Dow defines as earnings (i.e., "Net Income") before interest, income taxes, depreciation and amortization) as its measure of profit/loss for segment reporting purposes. EBITDA by operating segment includes all operating items relating to the businesses; items that principally apply to the Company as a whole are assigned to Corporate. See table toward the end of this footnote for depreciation and amortization by segment, as well as a reconciliation of EBITDA to "Income Before Income Taxes."

### Corporate Profile

Dow combines the power of science and technology to passionately innovate what is essential to human progress. The Company is driving innovations that extract value from the intersection of chemical, physical and biological sciences to help address many of the world's most challenging problems such as the need for clean water, clean energy generation and conservation, and increasing agricultural productivity. Dow's integrated, market-driven, industry-leading portfolio of specialty chemical, advanced materials, agrosiences and plastics businesses delivers a broad range of technology-based products and solutions to customers in approximately 180 countries and in high growth sectors such as packaging, electronics, water, coatings and agricultural. In 2014, Dow had annual sales of more than \$58 billion and employed approximately 53,000 people worldwide. The Company's more than 6,000 products are manufactured at 201 sites in 35 countries across the globe. The Company conducts its worldwide operations through global businesses, which are reported in five operating segments: Agricultural Sciences, Consumer Solutions, Infrastructure Solutions, Performance Materials & Chemicals and Performance Plastics.

### Agricultural Sciences

The Agricultural Sciences segment is a global leader in providing crop protection and seed/plant biotechnology products and technologies, urban pest management solutions and healthy oils. The business invents, develops, manufactures and markets products for use in agricultural, industrial and commercial pest management, and food service. Agricultural Sciences consists of two businesses - Crop Protection and Seeds.

### Consumer Solutions

The Consumer Solutions segment consists of three global businesses: Consumer Care, Dow Automotive Systems and Dow Electronic Materials. These global businesses develop and market customized materials using advanced technology and unique chemistries for specialty applications - including semiconductors and organic light-emitting diodes, adhesives and foams used by the transportation industry, and cellulose for innovative pharmaceutical formulations and food solutions. These businesses serve the needs of market segments as diverse as: automotive; electronics and entertainment; healthcare and medical; and, personal and home care goods. The Consumer Solutions segment also includes a portion of the Company's share of the results of Dow Corning Corporation, a joint venture that manufactures silicone and silicone products, which is owned 50 percent by the Company.

### Infrastructure Solutions

The Infrastructure Solutions segment is comprised of an industry-leading portfolio of businesses utilizing advanced technology to deliver products such as architectural and industrial coating applications, building insulation, adhesives, microbial protection for the oil and gas industry, and water technologies. Infrastructure Solutions consists of four global businesses: Dow Building & Construction, Dow Coating Materials, Energy & Water Solutions and Performance Monomers. The Infrastructure Solutions segment also includes a portion of the Company's share of the results of Dow Corning Corporation, a joint venture that manufactures silicone and silicone products, which is owned 50 percent by the Company.

#### Performance Materials & Chemicals

The Performance Materials & Chemicals segment is comprised of five technology-driven, customer-centric global businesses that are advantaged through integration and driven by innovative technology and solutions: Chlor-Alkali and Vinyl, Chlorinated Organics, Epoxy, Industrial Solutions and Polyurethanes. Products produced by this segment are back-integrated into feedstocks, supporting a low-cost manufacturing base and consistent, reliable supply.

Performance Materials & Chemicals has a diverse product line that serves customers in a large number of industries including appliance, construction and industrial. The Performance Materials & Chemicals segment also includes the results of MEGlobal and a portion of the results of EQUATE Petrochemicals Company K.S.C., The Kuwait Olefins Company K.S.C., Map Ta Phut Olefins Company Limited, and Sadara Chemical Company, all joint ventures of the Company.

Table of Contents

## Performance Plastics

The Performance Plastics segment is the world's leading plastics franchise, and is a market-oriented portfolio composed of five global businesses: Dow Elastomers, Dow Electrical and Telecommunications, Dow Packaging and Specialty Plastics, Energy and Hydrocarbons. The segment is advantaged through its low cost position into key feedstocks and benefits from Dow's R&D expertise to deliver leading-edge technology that provides a competitive benefit to customers in key strategic markets. The Performance Plastics segment also includes the results of Univation Technologies, LLC, The Kuwait Styrene Company K.S.C. and The SCG-Dow Group as well as a portion of the results of EQUATE Petrochemicals Company K.S.C., The Kuwait Olefins Company K.S.C., Map Ta Phut Olefins Limited and the Sadara Chemical Company, all joint ventures of the Company.

## Divestiture:

On December 2, 2013, the Company sold its Polypropylene Licensing and Catalysts business to W. R. Grace & Co. This business was reported in the Performance Plastics segment through the date of divestiture. See Note 5 for additional information on this divestiture.

## Corporate

Corporate includes certain enterprise and governance activities (including insurance operations, geographic management, risk management such as foreign currency hedging activities, audit fees, donations, Company branding initiatives, etc.); the results of Ventures (including business incubation platforms, non-business aligned joint ventures, and venture capital); environmental operations; gains and losses on the sales of financial assets; severance costs; non-business aligned litigation expenses (including asbestos-related defense costs and reserve adjustments); and, foreign exchange results.

The Company operates 201 manufacturing sites in 35 countries. The United States is home to 73 of these sites, representing 59 percent of the Company's long-lived assets. Sales are attributed to geographic areas based on customer location; long-lived assets are attributed to geographic areas based on asset location.

## Geographic Area Information (1)

In millions	United States	Europe, Middle East, Africa and India	Rest of World	Total
2014				
Sales to external customers	\$19,449	\$19,671	\$19,047	\$58,167
Long-lived assets	\$10,605	\$2,628	\$4,818	\$18,051
2013				
Sales to external customers	\$18,712	\$19,208	\$19,160	\$57,080
Long-lived assets	\$9,320	\$3,256	\$4,878	\$17,454
2012				
Sales to external customers	\$18,391	\$20,038	\$18,357	\$56,786
Long-lived assets	\$8,953	\$3,426	\$5,141	\$17,520

(1) The Indian subcontinent, previously reported with Rest of World, is now aligned with Europe, Middle East, Africa and India; prior period sales and long-lived assets have been adjusted to reflect this realignment.

Table of Contents

## Operating Segment Information

In millions	Agri-cultural Sciences	Consumer Solutions	Infra-structure Solutions	Perf Materials & Chemicals	Perf Plastics	Corp	Total
2014							
Sales to external customers	\$ 7,290	\$ 4,639	\$ 8,429	\$ 15,114	\$ 22,386	\$ 309	\$ 58,167
Intersegment revenues (1)	—	—	—	100	—	(100 )	—
Equity in earnings (losses) of nonconsolidated affiliates	4	281	(6 )	322	257	(23 )	835
Goodwill and other intangible asset impairment losses (2)	—	50	—	—	—	—	50
Restructuring charges (credits) (3)	—	—	—	(3 )	—	—	(3 )
Asbestos-related charge (4)	—	—	—	—	—	78	78
EBITDA (5)	962	1,130	817	2,193	4,422	(580 )	8,944
Total assets	7,292	9,629	12,245	12,179	13,459	13,992	68,796
Investment in nonconsolidated affiliates	83	691	922	698	705	1,102	4,201
Depreciation and amortization	208	396	510	780	759	94	2,747
Capital expenditures	383	114	269	315	2,490	1	3,572
2013							
Sales to external customers	\$ 7,137	\$ 4,562	\$ 8,339	\$ 14,824	\$ 21,910	\$ 308	\$ 57,080
Intersegment revenues (1)	—	—	—	137	—	(137 )	—
Equity in earnings (losses) of nonconsolidated affiliates	5	107	126	480	355	(39 )	1,034
Restructuring charges (credits) (3)	—	—	(1 )	(15 )	(6 )	—	(22 )
EBITDA (5)	894	933	941	1,913	4,503	1,361	10,545
Total assets	7,059	10,171	12,844	12,085	13,788	13,554	69,501
Investment in nonconsolidated affiliates	88	541	1,178	827	772	1,095	4,501
Depreciation and amortization	189	414	528	743	707	100	2,681
Capital expenditures	319	105	198	409	1,271	—	2,302
2012							
Sales to external customers	\$ 6,382	\$ 4,518	\$ 8,071	\$ 14,981	\$ 22,588	\$ 246	\$ 56,786
Intersegment revenues (1)	—	—	—	150	—	(150 )	—
Equity in earnings (losses) of nonconsolidated affiliates	1	87	58	362	130	(102 )	536
Goodwill and other intangibles impairment losses (2)	—	—	—	220	—	—	220
Restructuring charges (credits) (3)	—	136	61	299	33	814	1,343
EBITDA (5)	923	773	963	1,603	2,924	(1,595 )	5,591
Total assets	6,368	10,597	13,104	13,164	13,560	12,812	69,605
Investment in nonconsolidated affiliates	86	422	1,081	790	744	998	4,121
Depreciation and amortization	176	416	542	783	672	109	2,698
Capital expenditures	321	244	292	759	951	47	2,614

(1) Includes revenues generated by transfers of product to Agricultural Sciences from other segments, generally at market-based prices. Other transfers of products between operating segments are generally valued at cost.

(2) See Note 11 for information regarding intangible asset impairment losses and Note 9 for information regarding the goodwill impairment loss.



(3) See Note 3 for information regarding restructuring charges and credits.

(4) See Note 14 for information regarding the asbestos-related charge.

(5) A reconciliation of EBITDA to "Income Before Income Taxes" is provided below.

Reconciliation of EBITDA to "Income Before Income Taxes"	2014	2013	2012
In millions			
EBITDA	\$8,944	\$10,545	\$5,591
- Depreciation and amortization	2,747	2,681	2,698
+ Interest income	51	41	41
- Interest expense and amortization of debt discount	983	1,101	1,269
Income Before Income Taxes	\$5,265	\$6,804	\$1,665

Table of ContentsThe Dow Chemical Company and Subsidiaries  
Selected Quarterly Financial DataIn millions, except per share amounts  
(Unaudited)

2014	1st	2nd	3rd	4th	Year
Net sales	\$ 14,461	\$ 14,917	\$ 14,405	\$ 14,384	\$ 58,167
Cost of sales	11,733	12,344	11,776	11,611	47,464
Gross margin	2,728	2,573	2,629	2,773	10,703
Goodwill and other intangible asset impairment losses	—	—	—	50	50
Restructuring credits	—	—	—	(3	) (3
Asbestos-related charge	—	—	—	78	78
Net income	1,066	970	964	839	3,839
Net income available for common stockholders	964	882	852	734	3,432
Earnings per common share - basic (1)	0.80	0.74	0.72	0.64	2.91
Earnings per common share - diluted (1)	0.79	0.73	0.71	0.63	2.87
Dividends declared per share of common stock	0.37	0.37	0.37	0.42	1.53
Market price range of common stock:					
(2)					
High	50.96	53.35	54.97	53.80	54.97
Low	41.82	46.56	50.34	41.45	41.45

In millions, except per share amounts  
(Unaudited)

2013	1st	2nd	3rd	4th	Year
Net sales	\$ 14,383	\$ 14,577	\$ 13,734	\$ 14,386	\$ 57,080
Cost of sales	11,707	12,103	11,716	12,068	47,594
Gross margin	2,676	2,474	2,018	2,318	9,486
Restructuring credits	—	—	—	(22	) (22
Net income	660	2,443	685	1,028	4,816
Net income available for common stockholders	550	2,340	594	963	4,447
Earnings per common share - basic (1)	0.46	1.96	0.50	0.80	3.72
Earnings per common share - diluted (1)	0.46	1.87	0.49	0.79	3.68
(3)					
Dividends declared per share of common stock	0.32	0.32	0.32	0.32	1.28
Market price range of common stock:					
(2)					
High	34.83	36.00	41.08	44.99	44.99
Low	30.63	29.81	32.05	38.04	29.81

See Notes to the Consolidated Financial Statements.

(1)

Due to changes in the share count and the allocation of income to participating securities, the sum of the four quarters may not equal the earnings per share amount calculated for the year.

(2) Composite price as reported by the New York Stock Exchange.

For the quarter ended June 30, 2013 and the year ended December 31, 2013, an assumed conversion of the

(3) Company's Cumulative Convertible Perpetual Preferred Stock, Series A into shares of the Company's common stock was included in the calculation of earnings per common share - diluted. See Note 13 for additional information.

Table of Contents

The Dow Chemical Company and Subsidiaries

PART II, Item 9. Changes in and Disagreements with Accountants on Accounting and  
Financial Disclosure.

CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL  
DISCLOSURE

Not applicable.

135

---

## Table of Contents

The Dow Chemical Company and Subsidiaries

PART II, Item 9A. Controls and Procedures.

### CONTROLS AND PROCEDURES

#### Evaluation of Disclosure Controls and Procedures

As of the end of the period covered by this Annual Report on Form 10-K, the Company carried out an evaluation, under the supervision and with the participation of the Company's Disclosure Committee and the Company's management, including the Chief Executive Officer and the Chief Financial Officer, of the effectiveness of the design and operation of the Company's disclosure controls and procedures pursuant to paragraph (b) of Exchange Act Rules 13a-15 and 15d-15. Based upon that evaluation, the Chief Executive Officer and the Chief Financial Officer concluded that the Company's disclosure controls and procedures were effective.

#### Changes in Internal Control Over Financial Reporting

During 2014, the Company completed the implementation of a new enterprise resource planning ("ERP") system that delivered a new generation of information systems and work processes for all Dow businesses. The Company has updated the internal control processes and procedures that have been affected by the ERP system implementation and believes that controls remain effective.

Other than as described above, there were no changes in the Company's internal control over financial reporting identified in connection with the evaluation required by paragraph (d) of Exchange Act Rules 13a-15 and 15d-15 that was conducted during the last fiscal quarter that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

#### Management's Report on Internal Control Over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting. The Company's internal control framework and processes are designed to provide reasonable assurance to management and the Board of Directors regarding the reliability of financial reporting and the preparation of the Company's consolidated financial statements in accordance with accounting principles generally accepted in the United States of America.

The Company's internal control over financial reporting includes those policies and procedures that:

- pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Company;
- 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
- 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 consolidated financial statements.

Because of its inherent limitations, any system of internal control over financial reporting can provide only reasonable assurance and may not prevent or detect misstatements.

Management assessed the effectiveness of the Company's internal control over financial reporting and concluded that, as of December 31, 2014, such internal control is effective. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO") in Internal Control—Integrated Framework (2013).



Table of Contents

The Company's independent auditors, Deloitte & Touche LLP, with direct access to the Company's Board of Directors through its Audit Committee, have audited the consolidated financial statements prepared by the Company. Their report on the consolidated financial statements is included in Part II, Item 8. Financial Statements and Supplementary Data. Deloitte & Touche LLP's report on the Company's internal control over financial reporting is referenced therein and included herein.

February 13, 2015

/s/ ANDREW N. LIVERIS

Andrew N. Liveris  
President, Chief Executive Officer and  
Chairman of the Board

/s/ HOWARD I. UNGERLEIDER

Howard I. Ungerleider  
Chief Financial Officer and  
Executive Vice President

/s/ RONALD C. EDMONDS

Ronald C. Edmonds  
Vice President and Controller

137

---

Table of Contents

The Dow Chemical Company and Subsidiaries

PART II

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of

The Dow Chemical Company:

We have audited the internal control over financial reporting of The Dow Chemical Company and subsidiaries (the "Company") as of December 31, 2014, based on criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed by, or under the supervision of, the company's principal executive and principal financial officers, or persons performing similar functions, and effected by the company's board of directors, management, and other personnel to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of the inherent limitations of internal control over financial reporting, including the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may not be prevented or detected on a timely basis. Also, projections of any evaluation of the effectiveness of internal control over financial reporting to future periods are subject to the risk that the controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2014, based on the criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated financial statements of the Company and the financial statement schedule listed in the Index at Item 15(a)2 as of and for the year ended December 31, 2014 and our report dated February 13, 2015 expressed an unqualified opinion on those financial statements and financial statement schedule.

/S/ DELOITTE & TOUCHE LLP

Deloitte & Touche LLP

Midland, Michigan

February 13, 2015





Table of Contents

The Dow Chemical Company and Subsidiaries

PART II, Item 9B. Other Information.

OTHER INFORMATION

None.

139

---

Table of Contents

The Dow Chemical Company and Subsidiaries

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Information relating to Directors, certain executive officers and certain corporate governance matters (including identification of Audit Committee members and financial expert(s)) is contained in the definitive Proxy Statement for the Annual Meeting of Stockholders of The Dow Chemical Company to be held on May 14, 2015, and is incorporated herein by reference. See also the information regarding executive officers of the registrant set forth in Part I, Item 1. Business under the caption "Executive Officers of the Registrant" in reliance on General Instruction G to Form 10-K.

On July 10, 2003, the Board of Directors of the Company adopted a code of ethics that applies to its principal executive officer, principal financial officer and principal accounting officer, and is incorporated herein by reference to Exhibit 14 to the Company's Annual Report on Form 10-K for the year ended December 31, 2003.

ITEM 11. EXECUTIVE COMPENSATION

Information relating to executive compensation and the Company's equity compensation plans is contained in the definitive Proxy Statement for the Annual Meeting of Stockholders of The Dow Chemical Company to be held on May 14, 2015, and is incorporated herein by reference.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

Information with respect to beneficial ownership of Dow common stock by each Director and all Directors and executive officers of the Company as a group is contained in the definitive Proxy Statement for the Annual Meeting of Stockholders of The Dow Chemical Company to be on held May 14, 2015, and is incorporated herein by reference.

Information relating to any person who beneficially owns in excess of 5 percent of the total outstanding shares of Dow common stock is contained in the definitive Proxy Statement for the Annual Meeting of Stockholders of The Dow Chemical Company to be on held May 14, 2015, and is incorporated herein by reference.

Information with respect to compensation plans under which equity securities are authorized for issuance is contained in the definitive Proxy Statement for the Annual Meeting of Stockholders of The Dow Chemical Company to be held on May 14, 2015, and is incorporated herein by reference.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

Reportable relationships and related transactions, if any, as well as information relating to director independence are contained in the definitive Proxy Statement for the Annual Meeting of Stockholders of The Dow Chemical Company to be held on May 14, 2015, and are incorporated herein by reference.

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

Information with respect to fees and services related to the Company's independent auditors, Deloitte & Touche LLP, and the disclosure of the Audit Committee's pre-approval policies and procedures are contained in the definitive Proxy Statement for the Annual Meeting of Stockholders of The Dow Chemical Company to be held on May 14, 2015, and are incorporated herein by reference.



Table of Contents

The Dow Chemical Company and Subsidiaries

PART IV, Item 15. Exhibits, Financial Statement Schedules.

EXHIBITS, FINANCIAL STATEMENT SCHEDULES

(a) The following documents are filed as part of this report:

- (1) The Company's 2014 Consolidated Financial Statements and the Report of Independent Registered Public Accounting Firm are included in Part II, Item 8. Financial Statements and Supplementary Data.

Financial Statement Schedules – The following Financial Statement Schedule should be read in conjunction with the (2) Consolidated Financial Statements and Report of Independent Registered Public Accounting Firm included in Part II, Item 8. Financial Statements and Supplementary Data:

Schedule II Valuation and Qualifying Accounts

Schedules other than the one listed above are omitted due to the absence of conditions under which they are required or because the information called for is included in the Consolidated Financial Statements or the Notes to the Consolidated Financial Statements.

- (3) Exhibits – See the Exhibit Index for the exhibits filed with this Annual Report on Form 10-K or incorporated by reference. The following exhibits are filed with this Annual Report on Form 10-K:

Exhibit No.	Description of Exhibit
10(dd)(ii)	An Amendment to The Dow Chemical Company Elective Deferral Plan, effective for deferrals after January 1, 2005, dated December 11, 2014.
12.1	Computation of Ratio of Earnings to Fixed Charges and Combined Fixed Charges and Preferred Stock Dividend Requirements.
21	Subsidiaries of The Dow Chemical Company.
23(a)	Consent of Independent Registered Public Accounting Firm.
23(b)	Analysis, Research & Planning Corporation's Consent.
31(a)	Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31(b)	Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32(a)	Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32(b)	Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS	XBRL Instance Document.
101.SCH	XBRL Taxonomy Extension Schema Document.
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document.
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document.
101.LAB	XBRL Taxonomy Extension Label Linkbase Document.
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document.

A copy of any exhibit can be obtained via the Internet through the Investor Relations section of the Company's website ([www.dow.com/investors](http://www.dow.com/investors)), or the Company will provide a copy of any exhibit upon receipt of a written request for the particular exhibit or exhibits desired. All requests should be addressed to the Vice President and Controller of the Company at the address of the Company's principal executive offices. The Company's website and its content are not deemed incorporated by reference into this report.

Table of Contents

The Dow Chemical Company and Subsidiaries  
Valuation and Qualifying Accounts  
For the Years Ended December 31

## Schedule II

In millions

COLUMN A	COLUMN B	COLUMN C - Additions		COLUMN D	COLUMN E
Description	Balance at Beginning of Year	Charged to Costs and Expenses	Charged to Other Accounts	Deductions from Reserves	Balance at End of Year
2014					
RESERVES DEDUCTED FROM ASSETS TO WHICH THEY APPLY:					
For doubtful receivables	\$148	\$53	\$8	(1) \$99	(2) \$110
Other investments and noncurrent receivables	\$454	\$62	\$—	\$39	\$477
Deferred tax assets	\$1,112	\$126	\$—	\$132	\$1,106
2013					
RESERVES DEDUCTED FROM ASSETS TO WHICH THEY APPLY:					
For doubtful receivables	\$121	\$65	\$—	\$38	(2) \$148
Other investments and noncurrent receivables	\$467	\$39	\$—	\$52	\$454
Deferred tax assets	\$1,399	\$214	\$—	\$501	\$1,112
2012					
RESERVES DEDUCTED FROM ASSETS TO WHICH THEY APPLY:					
For doubtful receivables	\$121	\$81	\$11	(1) \$92	(2) \$121
Other investments and noncurrent receivables	\$458	\$25	\$—	\$16	\$467
Deferred tax assets	\$1,152	\$335	\$—	\$88	\$1,399

Additions to reserves for doubtful receivables charged to other accounts were classified as "Accounts and notes receivable - Other" in the consolidated balance sheets. These reserves relate to the Company's sale of trade

(1) accounts receivable. Anticipated credit losses in the portfolio of receivables sold are used to fair value the Company's interests held in trade accounts receivable conduits. See Notes 11 and 15 to the Consolidated Financial Statements for further information.

(2)	2014	2013	2012
Deductions represent:			
Notes and accounts receivable written off	\$32	\$28	\$62
Reclassification of reserve for cash discounts and returns to accounts receivable	—	—	21
Credits to profit and loss	38	7	1
Sale of trade accounts receivable (see Note 15 to the Consolidated Financial Statements)	—	1	3
Miscellaneous other	29	2	5
	\$99	\$38	\$92

Table of Contents

The Dow Chemical Company and Subsidiaries  
Signatures

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

THE DOW CHEMICAL COMPANY

By /s/ R. C. EDMONDS  
R. C. Edmonds, Vice President and Controller  
Date February 12, 2015

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

By /s/ A. A. ALLEMANG  
A. A. Allemang, Director  
Date February 12, 2015

By /s/ R. J. MILCHOVICH  
R. J. Milchovich, Director  
Date February 12, 2015

By /s/ A. BANGA  
A. Banga, Director  
Date February 12, 2015

By /s/ R. S. MILLER  
R. S. Miller, Director  
Date February 12, 2015

By /s/ J. K. BARTON  
J. K. Barton, Director  
Date February 12, 2015

By /s/ P. POLMAN  
P. Polman, Director  
Date February 12, 2015

By /s/ J. A. BELL  
J. A. Bell, Director  
Date February 12, 2015

By /s/ D. H. REILLEY  
D. H. Reilley, Director  
Date February 12, 2015

By /s/ R. C. EDMONDS  
R. C. Edmonds, Vice President and  
Controller  
Date February 12, 2015

By /s/ J. M. RINGLER  
J. M. Ringler, Director  
Date February 12, 2015

By /s/ J. M. FETTIG  
J. M. Fettig, Lead Director  
Date February 12, 2015

By /s/ R. G. SHAW  
R. G. Shaw, Director  
Date February 12, 2015

By /s/ A. N. LIVERIS  
A. N. Liveris, Director, President, Chief  
Executive Officer and Chairman of the  
Board

By /s/ H. I. UNGERLEIDER  
H. I. Ungerleider, Chief Financial Officer  
and Executive Vice President

Date February 12, 2015

Date February 12, 2015

By /s/ M. LOUGHRIDGE  
M. Loughridge, Director

Date February 12, 2015

143

---



Table of Contents

The Dow Chemical Company and Subsidiaries

Trademark Listing

The following trademarks or service marks of The Dow Chemical Company and certain affiliated companies of Dow appear in this report: ACRY SOL, ADSORBSIA, AFFINITY, AMBERJET, AMBERLYST, AQUASET, AQUACAR, AVANSE, BETAMATE, BIOBAN, DOW, DOWEX, EDI, ELITE, EVOQUE, FILMTEC, FORMASHIELD, FROTH-PAK, GREAT STUFF, HARVISTA, LIQUID ARMOR, NEPTUNE, NORDEL, OPTIPORE, POWERHOUSE, PRIMAL, RHOPLEX, RIPELOCK, SAFE-CHEM, SAFE-TAINER, SILVADUR, STYROFOAM, TAMOL, TEQUATIC, TERA FORCE, UNIPOL, WALOCCEL, XENERGY

The following trademarks or service marks of Dow AgroSciences LLC and certain affiliated companies of Dow AgroSciences LLC appear in this report: ARYLEX, BROADWAY, BRODBECK, CLINCHER, CLOSER, DAIRYLAND SEED, DITHANE, DURANGO, ENLIST, ENLIST DUO, FENCER, GARLON, HYLAND, ISOCLAST, LONTREL, LORSBAN, MILESTONE, MYCOGEN, N-SERVE, NEXERA, PANZER, PFISTER, PHYTOGEN, PRAIRIE BRAND SEEDS, PRIMUS, RADIANT, REFUGE ADVANCED, SENTRICON, SPIDER, STARANE, SURESTART, TELONE, TORDON, TRACER, TRANSFORM, TRIUMPH

The following trademark of Agromen Sementes Agricolas Ltda appears in this report: AGROMEN

The following registered service mark of American Chemistry Council appears in this report: Responsible Care

The following registered trademark of Monsanto Technology LLC appears in this report: SmartStax, POWERCORE. SmartStax and POWERCORE multi-event technology developed by Dow AgroSciences LLC and Monsanto

® <sup>TM</sup>Trademark of The Dow Chemical Company (“Dow”) or an affiliated company of Dow

Table of Contents

The Dow Chemical Company and Subsidiaries  
Exhibit Index

EXHIBIT NO. DESCRIPTION

Agreement and Plan of Merger, dated as of July 10, 2008, among The Dow Chemical Company, Ramses 2(b) Acquisition Corp. and Rohm and Haas Company, incorporated by reference to Exhibit 2.1 to The Dow Chemical Company Current Report on Form 8-K filed on July 10, 2008.

Joint Venture Formation Agreement, dated November 28, 2008, between The Dow Chemical Company and 2(c) Petroleum Industries Company (K.S.C.), incorporated by reference to Exhibit 2.1 to The Dow Chemical Company Current Report on Form 8-K filed on February 19, 2009.

Deed Regarding Arbitration Award Payment, dated as of May 6, 2013, between The Dow Chemical Company 2(c)(i) and Petroleum Industries Company (K.S.C.), incorporated by reference to Exhibit 2(c)(i) to The Dow Chemical Quarterly Report on Form 10-Q for the quarter ended June 30, 2013.

Shareholders' Agreement, dated as of October 8, 2011, between Dow Saudi Arabia Holding B.V. and 2(e) Performance Chemicals Holding Company, incorporated by reference to Exhibit 99.1 to The Dow Chemical Company Current Report on Form 8-K/A filed on June 27, 2012.

First Amendment, effective June 1, 2012, to the Shareholders' Agreement, dated as of October 8, 2011, between 2(e)(i) Performance Chemicals Holding Company, Dow Saudi Arabia Holding B.V., Saudi Arabian Oil Company, Dow Europe Holding B.V. and The Dow Chemical Company, incorporated by reference to Exhibit 99.1 to The Dow Chemical Company Current Report on Form 8-K filed on February 14, 2013.

The Restated Certificate of Incorporation of The Dow Chemical Company as filed with the Secretary of 3(i) State, State of Delaware on May 17, 2010, incorporated by reference to Exhibit 3(i) to The Dow Chemical Company Quarterly Report on Form 10-Q for the quarter ended September 30, 2010.

Certificate of Designations for the Cumulative Convertible Perpetual Preferred Stock, Series A, as originally 3(i)(a) filed with the Secretary of State, State of Delaware on March 31, 2009, incorporated by reference to Exhibit 3.1 to The Dow Chemical Company Current Report on Form 8-K filed on April 1, 2009; and as re-filed with the Secretary of State, State of Delaware on May 17, 2010.

The Bylaws of The Dow Chemical Company, as amended and re-adopted in full on October 12, 2011, effective 3(ii) October 12, 2011, incorporated by reference to Exhibit 99.1 to The Dow Chemical Company Current Report on Form 8-K filed on October 13, 2011.

4 Indenture, dated as of April 1, 1992, between The Dow Chemical Company and the First National Bank of Chicago, as trustee (incorporated by reference to Exhibit 4.1 to The Dow Chemical Company's Registration Statement on Form S-3, File No. 333-88617 (the "S-3 Registration Statement")), as amended by the Supplemental Indenture, dated as of January 1, 1994, between The Dow Chemical Company and The First National Bank of Chicago, as trustee (incorporated by reference to Exhibit 4.2 to the S-3 Registration Statement), as amended by the Second Supplemental Indenture, dated as of October 1, 1999, between The Dow Chemical Company and Bank One Trust Company, N.A. (formerly The First National Bank of Chicago), as trustee (incorporated by reference to Exhibit 4.3 to the S-3 Registration Statement), as amended by the Third Supplemental Indenture, dated as of May 15, 2001, between The Dow Chemical Company and Bank One Trust Company, N.A. (formerly The First National Bank of Chicago), as trustee (incorporated by reference to Exhibit 4.4 to The Dow Chemical Company's Registration

Statement on Form S-4, File No. 333-67368); and all other such indentures that define the rights of holders of long-term debt of The Dow Chemical Company and its consolidated subsidiaries as shall be requested to be furnished to the Securities and Exchange Commission pursuant to Item 601(b)(4)(iii)(A) of Regulation S-K.

Indenture, dated May 1, 2008, between The Dow Chemical Company and The Bank of New York Trust 4(a) Company, N.A., as trustee, incorporated by reference to Exhibit 4.1 to Post-Effective Amendment No. 1 to The Dow Chemical Company's Registration Statement on Form S-3, File No. 333-140859.

Table of Contents

The Dow Chemical Company and Subsidiaries  
Exhibit Index

EXHIBIT NO. DESCRIPTION

The Dow Chemical Company Executives' Supplemental Retirement Plan, as amended, restated and effective as 10(a) of April 14, 2010, incorporated by reference to Exhibit 10.1 to The Dow Chemical Company Current Report on Form 8-K filed on May 3, 2010.

An Amendment to The Dow Chemical Company Executives' Supplemental Retirement Plan, effective as of 10(a)(i) April 14, 2010, incorporated by reference to Exhibit 10.4 to The Dow Chemical Company Current Report on Form 8-K filed on May 3, 2010.

An Amendment to The Dow Chemical Company Executives' Supplemental Retirement Plan, effective as of 10(a)(ii) July 19, 2013, incorporated by reference to Exhibit 10(a)(ii) to The Dow Chemical Company Annual Report on Form 10-K for the year ended December 31, 2013.

10(b) Support Agreement, dated November 20, 2014, by and among The Dow Chemical Company and Third Point LLC, Third Point Partners Qualified L.P., Third Point Partners L.P., Third Point Offshore Master Fund L.P., Third Point Ultra Master Fund L.P. and Third Point Reinsurance Co., Ltd., incorporated by reference to Exhibit 10.1 to the Dow Chemical Company Current Report on Form 8-K filed on November 21, 2014.

10(c) The Dow Chemical Company Voluntary Deferred Compensation Plan for Outside Directors (for deferrals made through December 31, 2004), as amended effective as of July 1, 1994, incorporated by reference to Exhibit 10(f) to The Dow Chemical Company Annual Report on Form 10-K for the year ended December 31, 1994, as amended in the manner described in the definitive Proxy Statement for the Annual Meeting of Stockholders of The Dow Chemical Company held on May 14, 1998, incorporated by reference.

10(e) The Dow Chemical Company Dividend Unit Plan, incorporated by reference to Exhibit 10(e) to The Dow Chemical Company Quarterly Report on Form 10-Q for the quarter ended March 31, 2009.

10(f) The Dow Chemical Company 1988 Award and Option Plan, as amended and restated on December 10, 2008, effective as of January 1, 2009, incorporated by reference to Exhibit 10(f) to The Dow Chemical Company Annual Report on Form 10-K for the year ended December 31, 2008.

10(g) Employment Offer Letter for Joe Harlan, President, Performance Materials and Executive Vice President of The Dow Chemical Company, incorporated by reference to Exhibit 10.3 to The Dow Chemical Company Current Report on Form 8-K filed on February 14, 2012.

10(h) The Dow Chemical Company 1994 Executive Performance Plan, as amended and restated on December 10, 2008, effective as of January 1, 2009, incorporated by reference to Exhibit 10(h) to The Dow Chemical Company Annual Report on Form 10-K for the year ended December 31, 2008.

10(i) A written description of compensation for Directors of The Dow Chemical Company, incorporated by reference to the definitive Proxy Statement for the Annual Meeting of Stockholders of The Dow Chemical Company to be held on May 14, 2015.

10(m) A written description of the manner in which compensation is set for the Executive Officers of The Dow Chemical Company, incorporated by reference to the definitive Proxy Statement for the Annual Meeting of

Stockholders of The Dow Chemical Company to be held on May 14, 2015.

Table of Contents

The Dow Chemical Company and Subsidiaries  
Exhibit Index

EXHIBIT NO. DESCRIPTION

The template used for The Dow Chemical Company Key Employee Insurance Program (“KEIP”), which provides benefits using insurance policies that replace benefits otherwise payable under The Dow Chemical Company Executives' Supplemental Retirement Plan and Company-Paid Life Insurance Plan, incorporated by reference to 10(o) Exhibit 10(o) to The Dow Chemical Company Annual Report on Form 10-K for the year ended December 31, 2002. KEIP is a component of the annual pension benefits listed in and incorporated by reference to the definitive Proxy Statement for the Annual Meeting of Stockholders of The Dow Chemical Company to be held on May 14, 2015.

The Dow Chemical Company Elective Deferral Plan (for deferrals made through December 31, 2004), as 10(p) amended, restated and effective as of April 14, 2010, incorporated by reference to Exhibit 10.2 to The Dow Chemical Company Current Report on Form 8-K filed on May 3, 2010.

An Amendment to The Dow Chemical Company Elective Deferral Plan (for deferrals made through 10(p)(i) December 31, 2004), effective as of April 14, 2010, incorporated by reference to Exhibit 10.5 to The Dow Chemical Company Current Report on Form 8-K filed on May 3, 2010.

The Summary Plan Description for The Dow Chemical Company Company-Paid Life Insurance Plan, 10(s) Employee-Paid Life Insurance Plan, and Dependent Life Insurance Plan, amended and restated effective as of January 1, 2014, incorporated by reference to Exhibit 10.1 to The Dow Chemical Company Current Report on Form 8-K filed on February 13, 2014.

The Summary Plan Description for The Dow Chemical Company Retiree Company-Paid Life Insurance Plan, 10(t) Retiree Optional Life Insurance Plan, and Retiree Dependent Life Insurance Plan, amended and restated effective as of January 1, 2014, incorporated by reference to Exhibit 10.2 to The Dow Chemical Company Current Report on Form 8-K filed on February 13, 2014.

Amended and Restated 2003 Non-Employee Directors' Stock Incentive Plan, adopted by the Board of Directors 10(u) of The Dow Chemical Company on December 10, 2007, incorporated by reference to Exhibit 10(u) to The Dow Chemical Company Annual Report on Form 10-K for the year ended December 31, 2007.

Non-Qualified Stock Option Agreement Pursuant to The Dow Chemical Company 1994 Non-Employee 10(v) Directors' Stock Plan, incorporated by reference to Exhibit 10.1 to The Dow Chemical Company Current Report on Form 8-K filed on September 3, 2004.

Non-Qualified Stock Option Agreement Pursuant to The Dow Chemical Company 2003 Non-Employee 10(w) Directors' Stock Incentive Plan, incorporated by reference to Exhibit 10(w) to The Dow Chemical Company Quarterly Report on Form 10-Q for the quarter ended September 30, 2004.

The Performance Shares Deferred Stock Agreement Pursuant to The Dow Chemical Company 1988 Award and 10(x) Option Plan, as amended, restated and effective as of January 1, 2009, incorporated by reference to Exhibit 10(x) to The Dow Chemical Company Annual Report on Form 10-K for the year ended December 31, 2008.

10(y) The Deferred Stock Agreement Pursuant to The Dow Chemical Company 1988 Award and Option Plan, as amended, restated and effective as of January 1, 2009, incorporated by reference to Exhibit 10(y) to The Dow

Chemical Company Annual Report on Form 10-K for the year ended December 31, 2008.

The Non-Qualified Stock Option Agreement Pursuant to The Dow Chemical Company 1988 Award and Option 10(z) Plan, as amended, restated and effective as of January 1, 2009, incorporated by reference to Exhibit 10(z) to The Dow Chemical Company Annual Report on Form 10-K for the year ended December 31, 2008.



Table of Contents

The Dow Chemical Company and Subsidiaries  
Exhibit Index

EXHIBIT NO. DESCRIPTION

10(cc) The Dow Chemical Company Voluntary Deferred Compensation Plan for Non-Employee Directors, effective for deferrals after January 1, 2005, as amended and restated on December 10, 2008, effective as of January 1, 2009, incorporated by reference to Exhibit 10(cc) to The Dow Chemical Company Annual Report on Form 10-K for the year ended December 31, 2008.

10(dd) The Dow Chemical Company Elective Deferral Plan, effective for deferrals after January 1, 2005, as amended, restated and effective as of April 14, 2010, incorporated by reference to Exhibit 10.3 to The Dow Chemical Company Current Report on Form 8-K filed on May 3, 2010.

10(dd)(i) An Amendment to The Dow Chemical Company Elective Deferral Plan, effective for deferrals after January 1, 2005, effective as of April 14, 2010, incorporated by reference to Exhibit 10.6 to The Dow Chemical Company Current Report on Form 8-K filed on May 3, 2010.

10(dd)(ii) An Amendment to The Dow Chemical Company Elective Deferral Plan, effective for deferrals after January 1, 2005, dated December 11, 2014.

10(ii) Employment agreement dated February 14, 2006, between Heinz Haller and The Dow Chemical Company, incorporated by reference to Exhibit 10(ii) to The Dow Chemical Company Annual Report on Form 10-K for the year ended December 31, 2008.

10(jj) Change in Control Executive Severance Agreement - Tier 1, incorporated by reference to Exhibit 10(jj) to The Dow Chemical Company Annual Report on Form 10-K for the year ended December 31, 2007.

10(kk) Change in Control Executive Severance Agreement - Tier 2, incorporated by reference to Exhibit 10(kk) to The Dow Chemical Company Annual Report on Form 10-K for the year ended December 31, 2007.

10(nn) Investment Agreement, dated as of October 27, 2008, between The Dow Chemical Company and Berkshire Hathaway Inc., incorporated by reference to Exhibit 10.1 to The Dow Chemical Company Current Report on Form 8-K filed on October 27, 2008.

10(oo) Investment Agreement, dated as of October 27, 2008, between The Dow Chemical Company and The Kuwait Investment Authority, incorporated by reference to Exhibit 10.2 to The Dow Chemical Company Current Report on Form 8-K filed on October 27, 2008.

10(wv) The Deferred Stock Units Agreement Pursuant to The Dow Chemical Company 1988 Award and Option Plan, as amended, restated and effective as of January 1, 2010, incorporated by reference to Exhibit 10.7 to The Dow Chemical Company Current Report on Form 8-K filed on February 18, 2010.

10(xx) The Special Deferred Stock Agreement Pursuant to The Dow Chemical Company 1988 Award and Option Plan, as amended, restated and effective as of January 1, 2010, incorporated by reference to Exhibit 10.8 to The Dow Chemical Company Current Report on Form 8-K filed on February 18, 2010.

10(yy) The Performance Shares Deferred Stock Units Agreement Pursuant to The Dow Chemical Company 1988 Award and Option Plan, as amended, restated and effective as of January 1, 2010, incorporated by reference to

Exhibit 10.9 to The Dow Chemical Company Current Report on Form 8-K filed on February 18, 2010.

The Special Performance Shares Deferred Stock Agreement Pursuant to The Dow Chemical Company 1988 10(zz) Award and Option Plan, as amended, restated and effective as of January 1, 2010, incorporated by reference to Exhibit 10.10 to The Dow Chemical Company Current Report on Form 8-K filed on February 18, 2010.

Table of Contents

The Dow Chemical Company and Subsidiaries  
Exhibit Index

EXHIBIT NO. DESCRIPTION

10(aaa)	The Stock Appreciation Rights Agreement Relating to a Stock Option Granted Under The Dow Chemical Company 1988 Award and Option Plan, as amended, restated and effective as of January 1, 2010, incorporated by reference to Exhibit 10.11 to The Dow Chemical Company Current Report on Form 8-K filed on February 18, 2010.
10(bbb)	The Dow Chemical Company 2012 Stock Incentive Plan, effective as of May 10, 2012, incorporated by reference to Exhibit 10.1 to The Dow Chemical Company Current Report on Form 8-K filed on May 14, 2012.
10(ccc)	Performance Shares Deferred Stock Agreement Pursuant to The Dow Chemical Company 2012 Stock Incentive Plan, effective as of May 10, 2012, incorporated by reference to Exhibit 10(ccc) to The Dow Chemical Company Quarterly Report on Form 10-Q for the quarter ended June 30, 2012.
10(ddd)	Deferred Stock Agreement Pursuant to The Dow Chemical Company 2012 Stock Incentive Plan, effective as of May 10, 2012, incorporated by reference to Exhibit 10(ddd) to The Dow Chemical Company Quarterly Report on Form 10-Q for the quarter ended June 30, 2012.
10(eee)	Non-Qualified Stock Option Agreement Pursuant to The Dow Chemical Company 2012 Stock Incentive Plan, effective as of May 10, 2012, incorporated by reference to Exhibit 10(eee) to The Dow Chemical Company Quarterly Report on Form 10-Q for the quarter ended June 30, 2012.
10(fff)	The Dow Chemical Company Amended and Restated 2012 Stock Incentive Plan, effective as of May 15, 2014, incorporated by reference to Exhibit 10.1 to The Dow Chemical Company Current Report on Form 8-K filed on May 20, 2014.
12.1	Computation of Ratio of Earnings to Fixed Charges and Combined Fixed Charges and Preferred Stock Dividend Requirements.
14	Code of Ethics for Principal Executive Officer, Principal Financial Officer and Principal Accounting Officer, incorporated by reference to Exhibit 14 to The Dow Chemical Company Annual Report on Form 10-K for the year ended December 31, 2003.
21	Subsidiaries of The Dow Chemical Company.
23(a)	Consent of Independent Registered Public Accounting Firm.
23(b)	Analysis, Research & Planning Corporation's Consent.
31(a)	Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31(b)	Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32(a)	Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

32(b) Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

99.4 Guarantee relating to the 6.00% Notes of Rohm and Haas Company, incorporated by reference to Exhibit 99.5 to The Dow Chemical Company Current Report on Form 8-K filed on April 1, 2009.

99.5 Guarantee relating to the 9.80% Debentures of Rohm and Haas Company, incorporated by reference to Exhibit 99.6 to The Dow Chemical Company Current Report on Form 8-K filed on April 1, 2009.

Table of Contents

The Dow Chemical Company and Subsidiaries  
Exhibit Index

EXHIBIT NO. DESCRIPTION

101.INSXBRL Instance Document.

101.SCHXBRL Taxonomy Extension Schema Document.

101.CALXBRL Taxonomy Extension Calculation Linkbase Document.

101.DEFBRL Taxonomy Extension Definition Linkbase Document.

101.LABXBRL Taxonomy Extension Label Linkbase Document.

101.PREXBRL Taxonomy Extension Presentation Linkbase Document.

150