

DOW CHEMICAL CO /DE/
Form 10-K
February 15, 2018
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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, 2017

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: None

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, smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer Accelerated filer

Non-accelerated filer (Do not check if a smaller reporting company) Smaller reporting company

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes No
At February 15, 2018, 100 shares of common stock were outstanding, all of which were held by the registrant's parent, DowDuPont Inc.

The registrant meets the conditions set forth in General Instructions I(1)(a) and (b) for Form 10-K and is therefore filing this form with a reduced disclosure format.

DOCUMENTS INCORPORATED BY REFERENCE

None

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The Dow Chemical Company and Subsidiaries

Throughout this Annual Report on Form 10-K, except as otherwise noted by the context, the terms "Company" or "Dow" as used herein mean The Dow Chemical Company and its consolidated 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," "plan," "project," "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.

On December 11, 2015, Dow and E.I. du Pont de Nemours and Company ("DuPont") entered into an Agreement and Plan of Merger, as amended on March 31, 2017 (the "Merger Agreement"), under which the companies would combine in an all-stock merger of equals transaction (the "Merger"). Effective August 31, 2017, the Merger was completed and each of Dow and DuPont became subsidiaries of DowDuPont Inc. ("DowDuPont").

Some of the important risks associated with the Merger and the intended separation of DowDuPont's materials science business under the Dow brand as well as the intended separation of DowDuPont's agriculture and specialty products businesses in one or more tax efficient transactions on anticipated terms (the "Intended Business Separations") that could cause Dow's actual results to differ materially from those projected in any such forward-looking statements include, but are not limited to: (i) costs to achieve and achieving successful integration of the respective agriculture, materials science and specialty products businesses of Dow and DuPont, anticipated tax treatment, unforeseen liabilities, future capital expenditures, revenues, expenses, earnings, productivity actions, economic performance, indebtedness, financial condition, losses, future prospects, business and management strategies for the management, expansion and growth of the combined operations; (ii) costs to achieve and achievement of the anticipated synergies by the combined agriculture, materials science and specialty products businesses; (iii) risks associated with the Intended Business Separations, including conditions which could delay, prevent or otherwise adversely affect the proposed transactions, including possible issues or delays in obtaining required regulatory approvals or clearances related to the Intended Business Separations, associated costs, disruptions in the financial markets or other potential barriers; (iv) disruptions or business uncertainty, including from the Intended Business Separations, could adversely impact Dow's business (either directly or indirectly in connection with disruptions to DowDuPont or DuPont); (v) risks to DowDuPont's, Dow's and DuPont's business, operations and results of operations from: the availability of and fluctuations in the cost of energy and feedstocks; balance of supply and demand and the impact of balance on prices; failure to develop and market new products and optimally manage product life cycles; ability, cost and impact on business operations, including the supply chain, of responding to changes in market acceptance, rules, regulations and policies and failure to respond to such changes; outcome of significant litigation, environmental matters and other commitments and contingencies; failure to appropriately manage process safety and product stewardship issues; global economic and capital market conditions, including the continued availability of capital and financing, as well as inflation, interest and currency exchange rates; changes in political conditions, business or supply disruptions; security threats, such as acts of sabotage, terrorism or war, natural disasters and weather events and patterns which could result in a significant operational event for the Company or adversely impact demand or production; ability to discover, develop and protect new technologies and to protect and enforce the Company's intellectual property rights; failure to

effectively manage acquisitions, divestitures, alliances, joint ventures and other portfolio changes; unpredictability and severity of catastrophic events, including, but not limited to, acts of terrorism or outbreak of war or hostilities, as well as management's response to any of the aforementioned factors. These risks are and will be more fully discussed in the current, quarterly and annual reports filed with the U.S. Securities and Exchange Commission by DowDuPont. While the list of factors presented here is considered representative, no such list should be considered to be a complete statement of all potential risks and uncertainties. Unlisted factors may present significant obstacles to the realization of forward-looking statements. Consequences of material differences in results as compared with those anticipated in the forward-looking statements could include, among other things, business disruption, operational problems, financial loss, legal liability to third parties and similar risks, any of which could have a material adverse effect on Dow's consolidated financial condition, results of operations, credit rating or liquidity. Neither Dow nor DowDuPont assumes any obligation to publicly provide revisions or updates to any forward-looking statements whether as a result of new information, future developments or otherwise, should circumstances change, except as otherwise required by securities and other applicable laws.

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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.

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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.

Merger with DuPont

On December 11, 2015, Dow and E. I. du Pont de Nemours and Company ("DuPont") entered into an Agreement and Plan of Merger, as amended on March 31, 2017 (the "Merger Agreement") to effect an all-stock, merger of equals strategic combination resulting in a newly formed corporation named DowDuPont Inc. ("DowDuPont"). On August 31, 2017, pursuant to the terms of the Merger Agreement, Dow and DuPont each merged with subsidiaries of DowDuPont (the "Mergers") and, as a result of the Mergers, became subsidiaries of DowDuPont (collectively, the "Merger").

Effective with the Merger, Dow's business activities are components of its parent company's business operations. Dow's business activities, including the assessment of performance and allocation of resources, ultimately are reviewed and managed by DowDuPont. Information used by the chief operating decision maker of Dow relates to the Company in its entirety. Accordingly, there are no separate reportable business segments for the Company under Accounting Standards Codification Topic 280 "Segment Reporting" and the Company's business results are reported in this Form 10-K as a single operating segment.

Also effective with the Merger, DowDuPont owns all of the common stock of Dow, and Dow has met the conditions set forth in General Instructions I(1)(a) and (b) of Form 10-K "Omission of Information by Certain Wholly-Owned Subsidiaries." As a result, the Company is filing this Form 10-K with a reduced disclosure format. In addition, the Company has elected to make certain changes in the presentation of its Consolidated Financial Statements and Notes to the Consolidated Financial Statements to conform with the presentation adopted for DowDuPont. See Note 1 to the Consolidated Financial Statements for further discussion of these changes and Note 3 for additional information on the Merger.

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 at www.dow-dupont.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. The Company's and DowDuPont's website and their content are not deemed incorporated by reference into this report.

Principal Product Groups

Dow combines science and technology knowledge to develop premier materials science solutions that are essential to human progress. Dow has one of the strongest and broadest toolkits in the industry, with robust technology, asset integration, scale and competitive capabilities that enable it to address complex global issues. Dow's market-driven,

industry-leading portfolio of advanced materials, industrial intermediates and plastics deliver a broad range of differentiated technology-based products and solutions to customers in approximately 175 countries in high-growth markets such as packaging, infrastructure and consumer care. The Company's more than 7,000 product families are manufactured at 178 sites in 35 countries across the globe. In 2017, Dow had annual sales of approximately \$56 billion. The following is a description of the Company's principal product groups:

Coatings & Performance Monomers

Coatings & Performance Monomers leads innovation in technologies that help advance the performance of paints and coatings and also provides critical building blocks needed for the production of coatings, textiles and home and personal care products. Its water-based acrylic emulsion technology revolutionized the global paint industry. This product grouping offers innovative and sustainable product solutions to accelerate paint and coatings performance across diverse market segments, including architectural paints and coatings, as well as industrial coatings applications used in paper, leather, wood, metal packaging, traffic markings, maintenance and protective industries. Coatings & Performance Monomers is a worldwide supplier of plastics additives used in a large variety of applications ranging from packaging to consumer appliances and office equipment.

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Construction Chemicals

Construction Chemicals combines its deep application know-how, materials science and formulation competence to offer manufacturers key building blocks for formulating efficient and differentiated building and construction materials. With a broad range of technologies - including cellulose ethers, redispersible latex powders, silicones and acrylic emulsions - Construction Chemicals is a leading supplier to customers around the world and addresses the specific requirements of the industry across many market segments and applications, from roofing to flooring, and gypsum-, cement-, concrete- or dispersion-based building materials. Construction Chemicals' chemistries are designed to help advance the performance, durability and aesthetics of buildings and infrastructure.

Consumer Solutions

Consumer Solutions collaborates closely with global and regional brand owners to deliver innovative solutions for creating new and unrivaled consumer benefits and experiences; provides standalone silicone and acrylic-based materials that are used in a wide range of applications including adhesion promoters, coupling agents, crosslinking agents, dispersing agents and surface modifiers; and uses innovative, versatile silicone-based technology to provide solutions and ingredients to customers in personal care, consumer goods, silicone elastomers and the pressure sensitive industry.

Crop Protection

Crop Protection serves the global production agriculture industry with crop protection products for field crops such as wheat, corn, soybean and rice, and specialty crops such as trees, fruits and vegetables. Principal crop protection products are weed control, disease control and insect control offerings for foliar or soil application or as a seed treatment.

Electronics & Imaging

Electronics & Imaging is a leading global supplier of differentiated materials and systems for a broad range of consumer electronics including mobile devices, television monitors, personal computers and electronics used in a variety of industries. Dow offers a broad portfolio of semiconductor and advanced packaging materials including chemical mechanical planarization ("CMP") pads and slurries, photoresists and advanced coatings for lithography, metallization solutions for back-end-of-line advanced chip packaging, and silicones for light emitting diode ("LED") packaging and semiconductor applications. This product line also includes innovative metallization processes for metal finishing, decorative, and industrial applications and cutting-edge materials for the manufacturing of rigid and flexible displays for liquid crystal displays and quantum dot applications.

Energy Solutions

Energy Solutions supplies smart, innovative and customized solutions to enhance productivity and efficiency in the oil, gas and mining markets. This product grouping is aligned with all markets of the oil and gas industry - including exploration, production (including enhanced oil recovery), refining, gas processing and gas transmission.

Hydrocarbons & Energy

Hydrocarbons & Energy is one of the largest global producers of ethylene, an internal feedstock; and a leading producer of propylene and aromatics products that are used to manufacture materials that consumers use every day. It also produces and procures the power used by the Company's manufacturing sites. Hydrocarbons & Energy leverages its global scale, operational discipline and feedstock flexibility to create a cost-advantaged foundation for the Company. In the U.S. & Canada, the increased supplies of natural gas and natural gas liquids ("NGLs") remain a key cost-competitive advantage for the Company's ethane- and propane-based production. The Company's U.S. and European ethylene production facilities have the flexibility to use different feedstocks in response to price conditions.

Industrial Biosciences

Industrial Biosciences is an innovator that works with customers to improve the performance, productivity and sustainability of their products and processes through advanced microbial control technologies such as advanced diagnostics and biosensors, ozone delivery technology and biological microbial control.

Industrial Solutions

Industrial Solutions provides a broad portfolio of sustainable solutions that address world needs by enabling and improving the manufacture of consumer and industrial goods and services, including products and innovations that minimize friction and heat in mechanical processes, manage the oil and water interface, deliver active ingredients for maximum effectiveness, facilitate dissolvability, enable product identification and provide the foundational building blocks for the development of chemical technologies. Industrial Solutions supports manufacturers associated with a large variety of end-markets, notably better crop protection offerings in agriculture, coatings, detergents and cleaners, solvents for electronics processing, inks and textiles. Dow is also the world's largest producer of purified ethylene oxide.

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Nutrition & Health

Nutrition & Health uses cellulose and other technologies to improve the functionality and delivery of food and the safety and performance of pharmaceutical products.

Packaging and Specialty Plastics

Packaging and Specialty Plastics serves high-growth, high-value sectors using world-class technology and a rich innovation pipeline that creates competitive advantages for customers and the entire value chain. Dow is also the leader in polyolefin elastomers and ethylene propylene diene monomer elastomers. 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 functionality; global efforts to reduce food waste; growth in telecommunications networks; global development of electrical transmission and distribution infrastructure; and renewable energy applications.

Polyurethanes & CAV

Polyurethanes & Chlor-Alkali & Vinyl ("CAV") is the world's largest producer of propylene oxide and propylene glycol, a leading producer of polyether polyols and aromatic isocyanates that serve energy efficiency, consumer comfort and industrial market sectors, and an industry leader in the development of fully formulated polyurethane systems. Propylene oxide is produced using the chlorohydrin process as well as hydrogen peroxide to propylene oxide manufacturing technology. The product group also provides cost advantaged chlorine and caustic soda supply and markets caustic soda, a valuable co-product of the chlor-alkali manufacturing process, and ethylene dichloride and vinyl chloride monomer.

Safety & Construction

Safety & Construction unites market-driven science with the strength of highly regarded brands such as STYROFOAM™ brand insulation products, GREAT STUFF™ insulating foam sealants and adhesives, and DOW FILMTEC™ reverse osmosis and nanofiltration elements to deliver products to a broad array of markets including industrial, building and construction, consumer and water processing. Safety & Construction is a leader in the construction space, delivering insulation, air sealing and weatherization systems to improve energy efficiency, reduce energy costs and provide more sustainable buildings. Safety & Construction is also 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 and making more potable drinking water.

Seed

Seed provides seed/plant biotechnology products and technologies to improve the productivity and profitability of its customers. Seed develops, produces and markets canola, cereals, corn, cotton, rice, soybean and sunflower seeds.

Transportation & Advanced Polymers

Transportation & Advanced Polymers provides high-performance adhesives, lubricants and fluids to engineers and designers in the transportation, electronics and consumer end-markets. Key products include MOLYKOTE® lubricants, DOW CORNING® silicone solutions for healthcare, MULTIBASE™ TPSiV™ silicones for thermoplastics and BETASEAL™, BETAMATE™ and BETAFORCE™ structural and elastic adhesives.

Corporate

Corporate includes certain enterprise and governance activities (including insurance operations, environmental operations, geographic management, etc.); business incubation platforms; non-business aligned joint ventures; gains and losses on the sales of financial assets; severance costs; non-business aligned litigation expenses; and discontinued or non-aligned businesses.

PRINCIPAL PRODUCT GROUP AND GEOGRAPHIC REGION RESULTS

See Note 25 to the Consolidated Financial Statements for information regarding sales by principal product group as well as sales and total assets by geographic region.

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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 major raw material stream that feeds the production of the Company's finished goods is hydrocarbon-based raw materials. 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. The Company also produces a portion of its electricity needs in Louisiana and Texas; Alberta, Canada; and Germany.

Key raw materials purchased for use in the manufacturing process include: acetone, benzene, butane, condensate, electric power, ethane, hexene, methanol, methyl methacrylate, naphtha, natural gas, propane, pygas, silica and styrene. Key raw materials that are produced internally and procured from external sources for internal consumption include aniline, aqueous hydrochloric acid, butyl acrylate, chlorine, ethylene, octene, propylene and silicon metal. Hydrogen peroxide is produced internally and procured through a consolidated variable interest entity and a joint venture. The Company had adequate supplies of raw materials in 2017, and expects to continue to have adequate supplies of raw materials in 2018.

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 \$1,637 million in 2017, \$1,584 million in 2016 and \$1,598 million in 2015.

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, 2017, the Company owned approximately 6,100 active U.S. patents and 29,100 active foreign patents as follows:

Remaining Life of Patents Owned at Dec 31, 2017	United States	Foreign
Within 5 years	1,400	5,400
6 to 10 years	1,300	9,200
11 to 15 years	2,700	13,300
16 to 20 years	700	1,200
Total	6,100	29,100

Dow's primary purpose in obtaining patents is to protect the results of its research for use in operations and licensing. Dow is party to a substantial number of patent licenses and other technology agreements. 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.

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PRINCIPAL PARTLY OWNED COMPANIES

Dow's principal nonconsolidated affiliates at December 31, 2017, including direct or indirect ownership interest for each, are listed below:

Principal Nonconsolidated Affiliate	Ownership Interest	Business Description
EQUATE Petrochemical Company K.S.C.	42.50 %	A Kuwait-based company that manufactures ethylene, polyethylene and ethylene glycol, and manufactures and markets monoethylene glycol, diethylene glycol and polyethylene terephthalate resins
The HSC Group:		
DC HSC Holdings LLC ¹	50.00 %	A U.S.-based group of companies that manufactures polycrystalline silicon products
Hemlock Semiconductor L.L.C.	50.10 %	A U.S. company that sells polycrystalline silicon products
The Kuwait Olefins Company K.S.C.	42.50 %	A Kuwait-based company that manufactures ethylene and ethylene glycol
The Kuwait Styrene Company K.S.C.	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
Sadara Chemical Company ³	35.00 %	A Saudi Arabian company that manufactures chlorine, ethylene, propylene and aromatics for internal consumption and manufactures and sells polyethylene, ethylene oxide and propylene oxide derivative products and isocyanates
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

¹ DC HSC Holdings LLC holds an 80.5 percent indirect ownership interest in Hemlock Semiconductor Operations LLC.

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 Dow is responsible for marketing the majority of Sadara products outside of the Middle East zone through the Company's established sales channels. Under this arrangement, the Company purchases and sells Sadara products for a marketing fee.

See Note 12 to the Consolidated Financial Statements for additional information regarding nonconsolidated affiliates.

FINANCIAL INFORMATION ABOUT FOREIGN AND DOMESTIC OPERATIONS AND EXPORT SALES

In 2017, the Company derived 65 percent of its sales and had 34 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 foreign 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 region 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 currency 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 21 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 16 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 Science & Sustainability webpage at www.dow.com. The Company's website and its content are not deemed incorporated by reference into this report.

EMPLOYEES

At December 31, 2017, the Company permanently employed approximately 54,000 people on a full-time basis.

OTHER ACTIVITIES

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

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ITEM 1A. RISK FACTORS

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

Global Economic Considerations: 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 n