Owens Corning

Form 10-K

February 20, 2019

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

þANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 For the fiscal year ended December 31, 2018

or

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF $^{\rm r}$ 1934

For the transition period from to Commission File Number: 1-33100

Owens Corning

(Exact name of registrant as specified in its charter)

Delaware 43-2109021 (State or other jurisdiction of incorporation or organization) Identification No.)

One Owens Corning Parkway,

Toledo, OH

43659

(Address of principal executive offices) (Zip Code)

(419) 248-8000

(Registrant's telephone number, including area code) Securities registered pursuant to Section 12(b) of the Act:

Title of each class Name of each exchange on which registered

Common Stock, par value \$0.01 per share New York Stock Exchange

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

None

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

Act. Yes b No r

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

Act. Yes r No b

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 þ No r Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted 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 such files). Yes þ No r

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of 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, a 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. (Check one):

Large accelerated filer b Accelerated filer r Non-accelerated filer r Smaller reporting

company r Emerging growth company r

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. r

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

On June 29, 2018, the last business day of the registrant's most recently completed second fiscal quarter, the aggregate market value of \$0.01 par value common stock (the voting stock of the registrant) held by non-affiliates (assuming for purposes of this computation only that the registrant had no affiliates) was approximately \$7,029,117,335.

As of February 15, 2019, 109,579,002 shares of the registrant's common stock, par value \$0.01 per share, were outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of Owens Corning's proxy statement to be delivered to stockholders in connection with the Annual Meeting of Stockholders to be held on or about April 18, 2019 (the "2019 Proxy Statement") are incorporated by reference into Part III hereof.

		Page
PART I		
ITEM 1.	Business Overview Segment overview General Availability of information	1 1 1 3 4
ITEM 1A	a. Risk factors	<u>5</u>
ITEM 1B	s. <u>Unresolved staff comments</u>	<u>13</u>
ITEM 2.	<u>Properties</u>	<u>14</u>
ITEM 3.	<u>Legal proceedings</u>	<u>15</u>
ITEM 4.	Mine safety disclosures	<u>15</u>
	Executive officers of Owens Corning	<u>16</u>
PART II		
ITEM 5.	Market for Owens Corning's common equity, related stockholder matters and issuer purchases of equity securities	<u>17</u>
ITEM 6.	Selected financial data	<u>19</u>
ITEM 7.	Management's discussion and analysis of financial condition and results of operations	<u>21</u>
ITEM 7A	. Quantitative and qualitative disclosures about market risk	<u>38</u>
ITEM 8.	Financial statements and supplementary data	<u>40</u>
ITEM 9.	Changes in and disagreements with accountants on accounting and financial disclosure	<u>40</u>
ITEM 9A	Controls and procedures	<u>40</u>
ITEM 9B	3. Other information	<u>40</u>
PART III	•	
ITEM 10	. Directors, executive officers and corporate governance	<u>41</u>
ITEM 11	. Executive compensation	<u>41</u>
ITEM 12	. Security ownership of certain beneficial owners and management and related stockholder matters	<u>41</u>
ITEM 13	. Certain relationships and related transactions, director independence	<u>41</u>

ITEM 14. Principal accountant fees and services	<u>41</u>
PART IV	
ITEM 15. Exhibits and financial statement schedules	<u>42</u>
ITEM 16. Form 10-K Summary Signatures Index to Consolidated Financial Statements Management's Report on Internal Control Over Financial Reporting Report of Independent Registered Public Accounting Firm Consolidated Financial Statements Notes to Consolidated Financial Statements Index to Consolidated Financial Statement Schedule Schedule II	47 48 51 52 53 55 60 104 105

Table of Contents

-1-

PART I

ITEM 1.BUSINESS OVERVIEW

Owens Corning is a global leader in insulation, roofing, and fiberglass composite materials. Its insulation products conserve energy and improve acoustics, fire resistance and air quality in the spaces where people live, work and play. Its roofing products and systems add to the curb appeal of people's homes and protect homes and commercial buildings alike. Its fiberglass composites make thousands of products lighter, stronger, and more durable. In short, the Company provides innovative products and solutions that deliver a material difference to its customers and, ultimately, make the world a better place.

The business is global in scope, with operations in 33 countries, and human in scale, with approximately 20,000 employees and longstanding, local relationships with its customers. Based in Toledo, Ohio, Owens Corning recorded net sales in 2018 of \$7.1 billion. Founded in 1938, it has been a Fortune 500® company for 64 consecutive years. Unless the context indicates otherwise, the terms "Owens Corning," "Company," "we" and "our" in this report refer to Owens Corning and its subsidiaries. References to a particular year mean the Company's year commencing on January 1 and ending on December 31 of that year.

SEGMENT OVERVIEW

The Company has three reportable segments: Composites, Insulation and Roofing. Our Composites, Insulation and Roofing reportable segments accounted for approximately 28%, 38% and 34% of our total reportable segment net sales, respectively, in 2018.

Composites

Owens Corning glass fiber materials can be found in over 40,000 end-use applications within five primary markets: building and construction, transportation, consumer, industrial, and power and energy. Such end-use applications include pipe, roofing shingles, sporting goods, consumer electronics, telecommunications cables, boats, aviation, automotive, industrial containers and wind-energy. Our products are manufactured and sold worldwide. We primarily sell our products directly to parts molders and fabricators. Within the building and construction market, our Composites segment sells glass fiber and/or glass mat directly to a small number of major shingle manufacturers, including our own Roofing segment.

Our Composites segment includes vertically integrated downstream activities. The Company manufactures, fabricates and sells glass reinforcements in the form of fiber. Glass reinforcement materials are also used downstream by the Composites segment to manufacture and sell glass fiber products in the form of fabrics, non-wovens and other specialized products.

Demand for composites is driven by general global economic activity and, more specifically, by the increasing replacement of traditional materials such as aluminum, wood and steel with composites that offer lighter weight, improved strength, lack of conductivity and corrosion resistance. We estimate that over the last 35 years, on average, annual global demand for composite materials grew at about 1.6 times global industrial production growth. We compete with composite manufacturers worldwide. According to various industry reports and Company estimates, our Composites segment is a world leader in the production of glass fiber reinforcement materials. Primary methods of competition include innovation, quality, customer service and global geographic reach. Significant competitors to the Composites segment include China Jushi Group Co., Ltd., Chongqing Polycom International Corporation Ltd (CPIC), Johns Manville, Nippon Electric Glass Co. Ltd. (NEG) and Taishan Glass Fiber Co., Ltd.

Typically, our composites plants run continuously throughout the year, and we warehouse much of our production prior to sale since we operate primarily with short delivery cycles.

Insulation

Our insulating products help customers conserve energy, provide improved acoustical performance and offer convenience of installation and use. Our Insulation segment includes a diverse portfolio of high, mid and low-temperature products with a geographic mix of United States, Canada, Europe, Asia-Pacific and Latin America, a market mix of residential, commercial, industrial and other markets, and a channel mix of retail, contractor and distribution.

Our products in the residential channel include thermal and acoustical batts, loosefill insulation, foam sheathing and accessories, and are sold under well-recognized brand names and trademarks such as Owens Corning PINK $^{\textcircled{\tiny{B}}}$ FIBERGLAS $^{\text{TM}}$ Insulation. Our

Table of Contents

-2-

ITEM 1. BUSINESS (continued)

products in the commercial and industrial channel include glass fiber pipe insulation, energy efficient flexible duct media, bonded and granulated mineral wool insulation, cellular glass insulation and foam insulation used in above-and below-grade construction applications, and are sold under well-recognized brand names and trademarks such as Thermafiber®, FOAMGLAS® and Paroc®. We sell our insulation products primarily to insulation installers, home centers, lumberyards, retailers and distributors in the United States, Canada, Europe, Asia-Pacific and Latin America. Demand for Owens Corning's insulating products is driven by commercial and industrial construction activity, new residential construction, remodeling and repair activity, increasingly stringent building codes and the growing need for energy efficiency. Demand in the segment typically follows seasonal home improvement, remodeling and renovation and residential, commercial and industrial construction industry patterns. Demand for new residential construction in North America typically follows housing starts on a three-month lagged basis, although the new residential construction cycle can elongate due to labor availability and other factors beyond our control. The peak season for home construction and remodeling in our geographic markets generally corresponds with the second and third calendar quarters. Demand for commercial and industrial applications is more heavily tied to industrial production growth and overall economic conditions in the global markets we serve.

Our Insulation segment competes primarily with manufacturers in the United States, with a growing international presence due to our recent acquisitions of Pittsburgh Corning Corporation and Pittsburgh Corning Europe NV (collectively, "Pittsburgh Corning") in 2017 and Paroc Group Oy ("Paroc") in 2018. According to industry reports and Company estimates, Owens Corning is North America's largest producer of residential, commercial and industrial insulation. Principal methods of competition include innovation and product design, service, location, quality, price and compatibility of systems solutions. Significant competitors in this segment include CertainTeed Corporation, Dow Chemical, Johns Manville, Knauf Insulation and ROCKWOOL International.

Working capital practices for this segment historically have followed a seasonal cycle. Typically, our insulation plants run continuously throughout the year. This production plan, along with the seasonal nature of portions of the segment, generally results in higher finished goods inventory balances in the first half of the year. Since sales increase during the second half of the year, our accounts receivable balances are typically higher during this period.

Roofing

Our primary products in the Roofing segment are laminate and strip asphalt roofing shingles. Other products include roofing components, synthetic packaging materials and oxidized asphalt. We have been able to meet the growing demand for longer lasting, aesthetically attractive laminate products with modest capital investment.

We sell shingles and roofing components primarily through distributors, home centers, lumberyards, retailers and contractors in the United States. Our synthetic packaging materials are used primarily in the construction industry for lumber and metal packaging. Oxidized asphalt is a significant input used in the production of our asphalt roofing shingles. We are vertically integrated and have manufacturing facilities that process asphalt for use in our roofing shingles manufacturing process. In addition, we sell processed asphalt to other shingle manufacturers, to roofing contractors for built-up roofing asphalt systems and to manufacturers in a variety of other industries, including automotive, chemical, rubber and construction. Asphalt input costs and third-party asphalt sales prices are correlated to crude oil prices. As a result, third-party asphalt sales are largely a cost-plus business.

Demand for products in our Roofing segment is generally driven by both residential repair and remodeling activity and by new residential construction. Roofing damage from major storms can significantly increase demand in this segment. As a result, sales in this segment do not always follow seasonal home improvement, remodeling and new construction industry patterns as closely as our Insulation segment.

Our Roofing segment competes primarily with manufacturers in the United States. According to various industry reports and Company estimates, Owens Corning's Roofing segment is the second largest producer of asphalt roofing shingles in the United States. Principal methods of competition include innovation and product design, proximity to customers, quality and price. Significant competitors in the Roofing segment include CertainTeed Corporation, GAF and TAMKO.

Our manufacturing operations are generally continuous in nature, and we warehouse much of our production prior to sale since we operate with relatively short delivery cycles. One of the raw materials important to this segment is sourced from a sole supplier. We have a long-term supply contract for this material, and have no reason to believe that any availability issues will exist. If this supply was to become unavailable, our production could be interrupted until such time as the supplies again became available or the Company reformulated its products. Additionally, the supply of asphalt, another significant raw material in this segment, has been constricted at times. Although this has not caused an interruption of our production in the past, prolonged asphalt shortages would restrict our ability to produce products in this segment.

Table of Contents

-3-

ITEM 1. BUSINESS (continued)

GENERAL

Major Customers

No one customer accounted for more than 10% of our consolidated net sales for 2018, 2017 or 2016. A significant portion of the net sales in our Insulation and Roofing segments are generated from large United States home improvement retailers.

Intellectual Property

The Company relies on a combination of intellectual property laws, as well as confidentiality procedures and contractual provisions, to protect our intellectual property, proprietary technology and our brands. Through continuous and extensive use of the color PINK since 1956, Owens Corning became the first owner of a single color trademark registration. In addition to our Owens Corning and PINK brands, the Company has registered, and applied for the registration of, U.S. and international trademarks, service marks, and domain names. Additionally, the Company has filed U.S. and international patent applications, including numerous issued patents, covering certain of our proprietary technology resulting from research and development efforts. Over time, the Company has assembled a portfolio of intellectual property rights including patents, trademarks, service marks, copyrights, domain names, know-how and trade secrets covering our products, services and manufacturing processes. Our proprietary technology is not dependent on any single or group of intellectual property rights and the Company does not expect the expiration of existing intellectual property to have a material adverse affect on the business as a whole. The Company believes the duration of our patents is adequate relative to the expected lives of our products. Although the Company protects its intellectual property rights could harm our business or our ability to compete.

Backlog

Our customer volume commitments are generally short-term, and the Company does not have a significant backlog of orders.

Environmental Control

Owens Corning has established policies and procedures to ensure that its operations are conducted in compliance with all relevant laws and regulations and that enable the Company to meet its high standards for corporate sustainability and environmental stewardship. Our manufacturing facilities are subject to numerous foreign, federal, state and local laws and regulations relating to the presence of hazardous materials, pollution and protection of the environment, including emissions to air, discharges to water, management of hazardous materials, handling and disposal of solid wastes, and remediation of contaminated sites. All Company manufacturing facilities operate using an ISO 14001 or equivalent environmental management system. The Company's 2020 Sustainability Goals require significant global reductions in energy use, water consumption, waste to landfill, emissions of greenhouse gases, fine particulate matter and toxic air emissions. The Company is dedicated to continuous improvement in our environmental, health and safety performance and to achieving its 2020 Sustainability Goals.

The Company has not experienced a material adverse effect upon our capital expenditures or competitive position as a result of environmental control legislation and regulations. Operating costs associated with environmental compliance were approximately \$40 million in 2018. The Company continues to invest in equipment and process modifications to remain in compliance with applicable environmental laws and regulations worldwide.

Our manufacturing facilities are subject to numerous national, state and local environmental protection laws and regulations. Regulatory activities of particular importance to our operations include those addressing air pollution, water pollution, waste disposal and chemical control. It is possible that new laws and regulations will specifically address climate change, toxic air emissions, ozone forming emissions and fine particulate matter. New environmental

and chemical regulations could impact our ability to expand production or construct new facilities in every geographic region in which we operate. However, based on information known to the Company, including the nature of our manufacturing operations and associated air emissions, at this time we do not expect any of these new laws, regulations or activities to have a material adverse effect on our results of current operations, financial condition or long-term liquidity.

Owens Corning is involved in remedial response activities and is responsible for environmental remediation at a number of sites, including certain of its currently owned or formerly owned plants. These responsibilities arise under a number of laws, including, but not limited to, the Federal Resource Conservation and Recovery Act, and similar state or local laws pertaining to the management and remediation of hazardous materials and petroleum. The Company has also been named a potentially responsible party under the United States Federal Superfund law, or state equivalents, at a number of disposal sites. The Company became involved in these sites as a result of government action or in connection with business acquisitions. At the end of 2018, the Company was

Table of Contents

-4-

ITEM 1. BUSINESS (continued)

involved with a total of 22 sites worldwide, including 8 Superfund sites and 14 owned or formerly owned sites. None of the liabilities for these sites are individually significant to the Company.

Remediation activities generally involve a potential range of activities and costs related to soil and groundwater contamination. This can include pre-cleanup activities such as fact finding and investigation, risk assessment, feasibility studies, remedial action design and implementation (where actions may range from monitoring to removal of contaminants, to installation of longer-term remediation systems). A number of factors affect the cost of environmental remediation, including the number of parties involved in a particular site, the determination of the extent of contamination, the length of time the remediation may require, the complexity of environmental regulations, variability in clean-up standards, the need for legal action, and changes in remediation technology. Taking these factors into account, Owens Corning has predicted the costs of remediation reasonably estimated to be paid over a period of years. The Company accrues an amount on an undiscounted basis, consistent with the reasonable estimates of these costs when it is probable that a liability has been incurred. Actual cost may differ from these estimates for the reasons mentioned above.

At December 31, 2018, the Company had an accrual totaling \$16 million for its environmental liabilities, of which the current portion is \$8 million. Changes in required remediation procedures or timing of those procedures at existing legacy sites, or discovery of contamination at additional sites, could result in material increases to the Company's environmental obligations.

Number of Employees

As of December 31, 2018, Owens Corning had approximately 20,000 employees. Approximately 8,000 of such employees are subject to collective bargaining agreements. The Company believes that its relations with employees are good.

AVAILABILITY OF INFORMATION

Owens Corning makes available, free of charge, through its website, the Company's Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and all amendments to those reports as soon as reasonably practicable after such material is electronically filed with or furnished to the Securities and Exchange Commission. These documents are available through the Investor Relations page of the Company's website at www.owenscorning.com.

Table of Contents

-5-

ITEM 1A.RISK FACTORS

RISKS RELATED TO OUR BUSINESS AND OUR INDUSTRY

Low levels of residential, commercial or industrial construction activity can have a material adverse impact on our business and results of operations.

A large portion of our products are used in the markets for residential and commercial construction and repair and remodeling. Demand for certain of our products is affected in part by the level of new residential construction in the United States and elsewhere, although typically not until a number of months after the change in the level of construction. Lower demand in the regions and markets where our products are sold could result in lower revenues and lower profitability. Historically, construction activity has been cyclical and is influenced by prevailing economic conditions, including the level of interest rates and availability of financing, inflation, employment levels, consumer spending habits, consumer confidence and other macroeconomic factors outside our control.

Some of our products, particularly in our insulation business, are used in industrial applications. Lower levels of industrial production and other macroeconomic factors affecting industrial construction activity could lessen demand for those products and lead to lower revenues or profitability.

We face significant competition in the markets we serve and we may not be able to compete successfully. All of the markets we serve are highly competitive. We compete with manufacturers and distributors, both within and outside the United States, in the sale of building products and composite products. Some of our competitors may have superior financial, technical, marketing and other resources than we do. In some cases, we face competition from manufacturers in countries able to produce similar products at lower costs. We also face competition from the introduction by competitors of new products or technologies that may address our customers' needs in a better manner, whether based on considerations of pricing, usability, effectiveness, sustainability, quality or other features or benefits. If we are not able to successfully commercialize our innovation efforts, we may lose market share. Price competition or overcapacity may limit our ability to raise prices for our products when necessary, may force us to reduce prices and may also result in reduced levels of demand for our products and cause us to lose market share. In addition, in order to effectively compete, we must continue to develop new products that meet changing consumer preferences and successfully develop, manufacture and market these new products. Our inability to effectively compete could result in the loss of customers and reduce the sales of our products, which could have a material adverse impact on our business, financial condition and results of operations.

Our sales may fall rapidly in response to declines in demand because we do not operate under long-term volume agreements to supply our customers and because of customer concentration in certain segments.

Many of our customer volume commitments are short-term; therefore, we do not have a significant manufacturing backlog. As a result, we do not benefit from the visibility provided by long-term volume contracts against downturns in customer demand and sales. Further, we are not able to immediately adjust our costs in response to declines in sales. In addition, although no single customer represents more than 10% of our annual sales, our ability to sell some of the products in Insulation and Roofing are dependent on a limited number of customers, who account for a significant portion of such sales. The loss of key customers for these products, a consolidation of key customers or a significant reduction in sales to those customers, could significantly reduce our revenues from these products. In addition, if key customers experience financial pressure or consolidate, they could attempt to demand more favorable contractual terms, which would place additional pressure on our margins and cash flows. Lower demand for our products, loss of key customers and material changes to contractual terms could materially and adversely impact our business, financial condition and results of operations. Furthermore, some of our sales are concentrated in certain geographic areas, and market growth that is skewed to other geographic areas may negatively impact our rate of growth or market share.

Worldwide economic conditions and credit tightening could have a material adverse impact on the Company.

The Company's business may be materially and adversely impacted by changes in United States or global economic conditions, including global industrial production rates, inflation, deflation, interest rates, availability of capital, consumer spending rates, energy availability and commodity prices, trade laws, and the effects of governmental initiatives to manage economic conditions. Changes in and/or new laws, regulations and policies that may be enacted in the United States or elsewhere could also materially impact economic conditions and the Company's business and results of operations. Volatility in financial markets and the

Table of Contents

-6-

ITEM 1A. RISK FACTORS (continued)

deterioration of national and global economic conditions could materially adversely impact the Company's operations, financial results and/or liquidity including as follows:

the financial stability of our customers or suppliers may be compromised, which could result in reduced demand for our products, additional bad debts for the Company or non-performance by suppliers;

one or more of the financial institutions syndicated under the credit agreement governing our revolving credit facility may cease to be able to fulfill their funding obligations, which could materially adversely impact our liquidity;

•t may become more costly or difficult to obtain financing or refinance the Company's debt in the future;

the value of the Company's assets held in pension plans may decline; and/or

the Company's assets may be impaired or subject to write-down or write-off.

Uncertainty about global economic conditions may cause consumers of our products to postpone spending in response to tighter credit, negative financial news and/or declines in income or asset values. This could have a material adverse impact on the demand for our products and on our financial condition and operating results. A deterioration of economic conditions would likely exacerbate these adverse effects and could result in a wide-ranging and prolonged impact on general business conditions, thereby negatively impacting our operations, financial results and/or liquidity. Our level of indebtedness could adversely impact our business, financial condition or results of operations.

Our debt level and degree of leverage could have important consequences, including the following:

our ability to obtain additional debt or equity financing for working capital, capital expenditures, debt service requirements, acquisitions and general corporate or other purposes may be limited;

a substantial portion of our cash flow from operations could be required for the payment of principal and interest on our indebtedness, and may not be available for other business purposes;

certain of our borrowings are at variable rates of interest, exposing us to the risk of increased interest rates;

if due to liquidity needs we must replace any indebtedness upon maturity, we would be exposed to the risk that we may not be able to refinance such indebtedness;

our ability to adjust to changing market conditions may be limited and place us at a competitive disadvantage compared to our competitors that have less debt; and

we may be vulnerable in a downturn in general economic conditions or in our business, or we may be unable to carry out important capital spending.

In addition, the credit agreement governing our senior credit facility, the indentures governing our senior notes, the receivables purchase agreement governing our receivables securitization facility and any term loan agreement in place contain various covenants that impose operating and financial restrictions on us and/or our subsidiaries. Additionally, instruments and agreements governing our future indebtedness may impose other restrictive conditions or covenants that could restrict our ability to conduct our business operations or pursue growth strategies.

Adverse weather conditions and the level of severe storms could have a material adverse impact on our results of operations.

Weather conditions and the level of severe storms can have a significant impact on the markets for residential and commercial construction, repair and improvement, which can, in turn, impact our business as follows:

generally, any weather conditions that slow or limit residential or commercial construction activity can adversely impact demand for our products; and

a portion of our annual product demand is attributable to the repair of damage caused by severe storms. In periods with below average level