GLATFELTER P H CO
Form 10-K
February 25, 2019

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, 2018

or

Transition Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934
For the transition period from to

96 South George Street, Suite 520

York, Pennsylvania 17401

(Address of principal executive offices)

(717) 225-4711

(Registrant's telephone number, including area code)

Commission file number	Exact name of registrant as specified in its charter	IRS Employer Identification No.	State or other jurisdiction of incorporation or organization
1-03560	P. H. Glatfelter Company	23-0628360	Pennsylvania

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 $.01 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 every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes No .

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, or a small 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 Small reporting company (Do not check if a smaller reporting company).

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

Based on the closing price as of June 30, 2018, the aggregate market value of the Common Stock of the Registrant held by non affiliates was $834.8 million.

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.

Common Stock outstanding on February 20, 2019 totaled 44,014,253 shares.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the following documents are incorporated by reference in this Annual Report on Form 10 K:

Portions of the registrant's Proxy Statement to be dated on or about March 29, 2019 are incorporated by reference to Part III.

P. H. GLATFELTER COMPANY

ANNUAL REPORT ON FORM 10-K

For the Year Ended

DECEMBER 31, 2018

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PART I

P. H. Glatfelter Company makes regular filings with the Securities and Exchange Commission ("SEC"), including this Annual Report on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K. These filings are available, free of charge, on our website, www.glatfelter.com, and the SEC's website at www.sec.gov. We also provide copies of our SEC filings at no charge upon request to Investor Relations at (717) 225-2719, ir@glatfelter.com, or by mail to Investor Relations, 96 South George Street, Suite 520, York, PA, 17401. In this filing, unless the context indicates otherwise, the terms "we," "our," "us," "the Company," or "Glatfelter" refer to P. H. Glatfelter Company and subsidiaries.

ITEM 1 BUSINESS

Overview Glatfelter began operations in 1864, and over the past few years a key component of our strategy has been a focus on growing our engineered materials businesses. In connection with this strategy, in 2018 we divested the former Specialty Papers business unit, acquired Georgia Pacific's European nonwovens business based in Steinfurt, Germany ("Steinfurt") and completed the start-up of our new airlaid production facility in Fort Smith, Arkansas. As a leading global supplier of engineered materials for consumer and industrial applications, we maintain leading positions in key segments serving markets that are growing commensurate with or in excess of gross domestic product ("GDP"). We are headquartered in York, Pennsylvania, and our net sales approximate $950 million annually with customers in over 100 countries. Operations include eleven manufacturing facilities located in the United States, Canada, Germany, France, the United Kingdom and the Philippines. Our business is managed as two separate business units: Composite Fibers and Advanced Airlaid Materials.

We partner with leading consumer product companies and other market leaders to provide innovative solutions delivering outstanding performance to meet market requirements. Over the past several years, we have made investments to increase production capacity and improve our technical capabilities to ensure we are best positioned to serve the market demands and grow our revenue. We are committed to growing in our key markets and will make appropriate investments to support our customers and satisfy market demands.

In the first quarter of 2018, we produced and delivered our first commercial shipment of Airlaid product from our new $90 million facility in Arkansas. This 20,000 metric-ton facility was built to meet the growing demands of the North American market. Throughout 2018, this facility continued to ramp up production and shipments of wipes and table top products. This investment together with the Steinfurt acquisition

increases our total global airlaid materials capacity to approximately 150,000 metric tons.

Our high-quality, innovative and customizable solutions are found in health and hygiene products, tea and single-serve coffee filtration, and other home, building, electrical, and industrial applications. Our goal is to be the global supplier of choice for innovation and solutions designed to meet the demands of our customers and the markets they serve.

Our goals are to maintain and grow our leading market positions, expand product margins, partner with customers to provide innovative solutions for new markets, and generate strong free cash flows. We are committed to ensuring our cost structure is competitive driven by delivering on cost reduction and continuous improvement initiatives to maintain our leading market positions.

Recent Developments On October 1, 2018, we acquired Georgia-Pacific's European nonwovens business for $181 million. The acquisition consisted of Georgia-Pacific's operations located in Steinfurt, Germany, along with sales offices located in France and Italy. Steinfurt is a state-of-the-art, 32,000-metric-ton-capacity manufacturing facility that employs approximately 220 people.

On October 31, 2018, we completed the sale of the Specialty Papers Business Unit to Pixelle Specialty Solutions LLC, an affiliate of Lindsay Goldberg, for $360 million. For financial reporting purposes, Specialty Papers is presented as a discontinued operation.

Business Units Consolidated net sales and the relative net sales contribution of each of our two business units for the past three years are summarized below:

Dollars in thousands	2018	2017	2016
Net sales	$866,286	$800,362	$761,216
Business unit contribution			
Composite Fibers	64.1 %	68.0 %	67.9 %
Advanced Airlaid Materials	35.9	32.0	32.1
Total	100.0 %	100.0 %	100.0 %

Net tons sold by each business unit for the past three years were as follows:

Metric tons	2018	2017	2016
Composite Fibers	143,777	150,388	137,680
Advanced Airlaid Materials	104,774	92,633	89,847
Total	248,551	243,021	227,527

COMPOSITE FIBERS Our Composite Fibers business unit ("Composite Fibers" or "CFBU") serves customers globally and focuses on higher value-added products in the following markets:

- Food & Beverage filtration paper primarily used for single-serve coffee and tea products;
- Wallcover base materials used by the world's largest wallpaper manufacturers;
- Technical Specialties a diverse line of special paper products used in applications such as electrical energy storage, transport and transmission, wipes, and other highly-engineered fiber-based applications;
- Composite Laminates paper used in production of decorative laminates, furniture, and flooring applications; and
- Metallized products used in labels, packaging liners, gift wrap, and other consumer product applications.

We believe Composite Fibers maintains a market leadership position in the single-serve coffee and tea filtration markets, wallcover base material and many other products it produces. We believe many of the markets served by Composite Fibers present attractive growth opportunities due to evolving consumer preferences, new or emerging geographic markets, new product innovation and increased market share through superior products and quality.

This business unit's revenue composition by market consisted of the following for the years indicated:

In thousands	2018	2017	2016
Food & beverage	$279,515	$268,474	$258,463
Wallcovering	103,686	103,011	90,767
Technical specialties	81,281	76,991	71,558
Metallized	52,174	57,088	61,059
Composite laminates	38,213	38,696	35,107
Total	$554,869	$544,260	$516,954

A significant portion of this business unit's revenue is transacted in currencies other than the U.S. dollar and therefore the comparison from period to period reflects the impact of changes in currency exchange rates. Changes in exchange rates favorably affected the comparison of 2018 to 2017 by $18.9 million and by $2.0 million in the comparison of 2017 to 2016.

Composite Fibers business unit is comprised of five paper making facilities (Germany, France and England), two metallizing operations (Wales and Germany) and a

pulp mill (the Philippines). The combined attributes of the facilities are summarized as follows (in metric tons):

Production Capacity	Principal Raw Material ("PRM")	Estimated Annual Quantity of PRM
142,000 lightweight and other paper	Abaca pulp	15,800
	Wood pulp	99,000
	Synthetic fiber	24,400
21,600 metallized	Base stock	24,000
15,000 abaca pulp	Abaca fiber	23,400

Composite Fibers’ lightweight products are produced using highly specialized inclined wire paper machine technology.

The primary raw materials used in the production of our lightweight papers are softwood pulps, abaca pulp, and other specialty fibers. Sufficient quantities of abaca pulp and its source, abaca fiber, are important to support growth in this business unit. Abaca pulp, a specialized pulp with limited sources of availability, is produced by our Philippine mill, providing a unique advantage to our Composite Fibers business unit. In the event the supply of abaca fiber becomes constrained or when production demands exceed the capacity of the Philippines mill, alternative sources and/or substitute fibers are used to meet customer demands.

In addition to critical raw materials, Composite Fibers’ production cost is influenced by the price of electricity and natural gas. The business unit generates all of its steam needed for production by burning natural gas. However, in 2018 it purchased approximately 75% of its electricity needs the cost of which is influenced by the natural gas markets.

In Composite Fibers’ markets, competition is product line specific as the necessity for technical expertise and specialized manufacturing equipment limits the number of companies offering multiple product lines. The following chart summarizes key competitors by market segment:

Market segment	Competitor
Single serve coffee & tea	Ahlstrom, Purico, Miquel y Costas and Zhejiang Kan
Wallcovering	Technocell, Neu Kaliss, Goznak, Kämmerer and Ahlstrom
Technical specialties	Nippon Kodoshi Corp ("NKK"), Kan Kyo Technology, Burrows and Suominen Oyj
Composite laminates	Schweitzer-Maudit, Purico, Miquel y Costas and Oi Feng
Metallized	AR Metallizing, Torras Papel Novelis, Vaassen, Galileo Nanotech, and Wenzhou Protec Vacuum Metallizing Co.

Our strategy in Composite Fibers is focused on:

- optimizing our product portfolio and capitalizing on growing global markets in beverage filtration, and building, electrical and consumer products;
- making targeted investments to create incremental capacity to serve growth markets;
- leveraging innovation resources to drive new product and new business development;
- maximize continuous improvement methodologies to increase productivity, reduce costs and expand capacity; and
- ensuring readily available access to specialized raw material requirements or suitable alternatives to support projected growth.

ADVANCED AIRLAID MATERIALS Our Advanced Airlaid Materials business unit (“Advanced Airlaid” or “AMBU”) is a leading global supplier of highly absorbent and very thin profile cellulose-based airlaid nonwoven materials primarily used to manufacture consumer products for growing global end-user markets. The markets served by Advanced Airlaid include:

- feminine hygiene;
- specialty wipes;
- table top;
- adult incontinence;
- home care; and
- other consumer products.

AMBU’s customers are industry leading consumer product companies as well as private label converters. We believe this business unit holds leading market share positions in the majority of the markets it serves. Advanced Airlaid has developed long-term customer relationships through superior quality, customer service, and a reputation for quickly bringing product and process innovations to market.

Advanced Airlaid Materials’ revenue composition by market consisted of the following for the years indicated:

In thousands	2018	2017	2016
Feminine hygiene	$195,686	$179,671	$173,902
Specialty wipes	45,375	29,519	25,206
Table top	21,600	6,707	6,718
Adult incontinence	19,734	14,425	12,281
Home care	16,010	13,029	12,630
Other	13,012	12,751	13,525
Total	$311,417	$256,102	$244,262

A significant portion of this business unit’s revenue is transacted in currencies other than the U.S. dollar and therefore the comparison from period to period reflects

the impact of changes in currency exchange rates. Changes in exchange rates favorably affected the comparison of 2018 to 2017 by $6.5 million and by $2.8 million.

The feminine hygiene category accounted for 63% and 70% of Advanced Airlaid Material’s revenue in 2018 and 2017, respectively, reflecting the Steinfurt acquisition, and growth in sales of wipes and table top products from additional capacity at the Fort Smith facility. Most feminine hygiene sales are to a small group of large, leading global consumer products companies. These markets are considered to be more growth oriented due to population growth in certain geographic regions and changing consumer preferences. In developing regions, demand is also influenced by increases in disposable income and cultural preferences.

AMBU operates state-of-the-art facilities in Falkenhagen and Steinfurt, Germany, Gatineau, Canada and Fort Smith, Arkansas. During 2018, this business unit's capacity increased by a combined 52,000 metric tons from the Steinfurt acquisition and from the new Fort Smith facility.

On October 1, 2018, we completed the Steinfurt acquisition for $181 million. The Steinfurt facility produces high-quality airlaid products for the table-top, wipes, hygiene, food pad, and other nonwoven materials markets, competing in the marketplace with nonwoven technologies and substrates, as well as other materials focused primarily on consumer based end-use applications. The state-of-the art facility has 32,000-metric-ton-capacity and in 2017, net sales totaled $99 million.

The business unit's four facilities operate with the following combined attributes (in metric tons):

Airlaid Production Capacity	Principal Raw Material ("PRM")	Estimated Annual Quantity of PRM
150,000	Fluff pulp	113,200

Key raw material inputs other than fluff pulp include synthetic fibers, super absorbent polymers and latex. The cost to produce is influenced by the cost of critical raw materials and by energy prices. Advanced Airlaid purchases substantially all the electricity and natural gas used in its operations. Approximately 72% of this business unit's revenue is earned under contracts with pass-through provisions directly related to the cost of key raw materials.

Advanced Airlaid continues to be a technology and product innovation leader in technically demanding segments of the airlaid market. This business unit's airlaid material production employs multi-bonded and thermal-bonded airlaid technologies as opposed to other methods such as hydrogen-bonding. We believe that its facilities are among the most modern and flexible airlaid facilities in the world, allowing it to produce at industry leading operating rates. Its proprietary single-lane festooning technology provides converting and product packaging which supports efficiency optimization by the customers converting processes. This business unit's in-house technical expertise combined with significant capital investment requirements and rigorous customer expectations creates large barriers to entry for new competitors.

The following summarizes this business unit's key competitors:

Market segment	Competitor
Hygiene and other absorbent products	Fitesa, McAirlaid's GmbH, Domtar, Georgia-Pacific
Table top	Georgia-Pacific, SharpCell, Duni AB, Ascutec
Wipes	Jacob Holmes, Suominen Oyj, Georgia-Pacific, Kimberly Clark

The global markets served by this business unit are characterized by attractive growth opportunities. To take advantage of this, our strategy is focused on:

- maintaining and expanding relationships with customers that are market-leading consumer product companies as well as companies distributing through private label arrangements;
- capitalizing on our product and process innovation capabilities;
- expanding geographic reach of markets served;
- optimizing the use of existing production capacity; and
- employing continuous improvement methodologies and initiatives to reduce costs, improve efficiencies and create additional capacity.

Additional financial information for each of our business units, including geographic revenue and amounts of long-lived asset, is included in Item 7 – Management's Discussion and Analysis of Financial Condition and Results of Operations and in Item 8 – Financial Statements and Supplementary Data, Note 22.

Concentration of Customers Approximately 16% of our consolidated net revenue in each of the past three years was from sales to Procter & Gamble Company, a customer of the Advanced Airlaid Materials business unit.

Capital Expenditures Our business requires expenditures for equipment enhancements to support growth strategies, research and development initiatives, and for normal upgrades or replacements. During the past three years, we incurred significant expenditures for Advanced Airlaid Materials' capacity expansion project. Capital expenditures totaled $42.1 million, $80.8 million and $61.2 million in 2018, 2017 and 2016, respectively. Capital expenditures in 2019 are estimated to total between approximately $23 million and $28 million.

Environmental Matters We are subject to various federal, state and local laws and regulations intended to protect the environment as well as human health and safety. At various times, we have incurred costs to comply with these regulations and we could incur additional costs as new regulations are developed or regulatory priorities change.

We are a party in the Fox River environmental site, a complex and significant matter. For a more complete discussion of this matter and our exposure to potential additional costs, see Item 8 – Financial Statements and Supplementary Data

– Note 21.

Employees As of December 31, 2018, we employed approximately 2,600 people worldwide, of whom approximately 60% are represented by labor works councils. We consider the overall relationship with our employees to be satisfactory.

Other Available Information The Corporate Governance page of our website includes the Company's Governance Principles, Code of Business Conduct, and biographies of our Board of Directors and Executive Officers. In addition, the website includes charters of the Audit, Compensation, and Nominating and Corporate Governance Committees of the Board of Directors. The Corporate Governance page also includes the Code of Business Ethics for the CEO and Senior Financial Officers of Glatfelter, our "whistle-blower" policy and other related material. We satisfy the disclosure requirement for any future amendments to, or waivers from, our Code of Business Conduct or Code of Business Ethics for the CEO and Senior Financial Officers by posting such information on our website. We will provide a copy of the Code of Business Conduct or Code of Business Ethics for the CEO and Senior Financial Officers, without charge, to any person who requests one, by contacting Investor Relations at (717) 225-2719, ir@glatfelter.com or by mail to 96 South George Street, Suite 520, York, PA, 17401.

ITEM 1A RISK FACTORS

Our business and financial performance may be adversely affected by a weak global economic environment or downturns in the target markets that we serve.

Adverse global economic conditions could impact our target markets resulting in decreased demand for our products. Our results could be adversely affected if economic conditions weaken. In the event of significant currency weakening in the countries into which our products are sold, demand for or pricing of our products could be adversely impacted. Also, there may be periods during which demand for our products is insufficient to enable us to operate our production facilities in an economical manner. As a result, we may be forced to take machine downtime to curtail production to match demand. The economic environment may also cause customer insolvencies which may result in their inability to satisfy their financial obligations to us. These conditions are beyond our control and may have a significant impact on our sales and results of operations.

Approximately $88 million of our net sales in 2018 was earned from customers located in Ukraine, Russia and members of the Commonwealth of Independent States (also known as "CIS"). Uncertain geo-political conditions, this region's economic environment and volatile currencies may cause demand for our products to be volatile and cause abrupt changes in our customers buying patterns.

Approximately 58% of our net sales in 2018 were shipped to customers in Europe, the demand for which is dependent on economic conditions in this area, or to the extent such customers do business outside of Europe, in other regions of the world. Uncertain economic conditions in this region may cause weakness in demand for our products as well as volatility in our customers buying patterns.

Foreign currency exchange rate fluctuations could adversely affect our results of operations.

A significant proportion of our revenue and earnings is generated from operations outside of the United States. In addition, we own and operate manufacturing facilities in Canada, Germany, France, the United Kingdom and the Philippines. A significant portion of our business is transacted in currencies other than the U.S. dollar including the euro, British pound, Canadian dollar and Philippine peso, among others. Our euro denominated revenue exceeds euro expenses by an estimated €160 million. With respect to the British pound, Canadian dollar and Philippine peso, we have greater outflows than inflows of these currencies, although to a lesser degree than the euro. As a result, we are exposed to changes in currency exchange rates and such changes could be significant.

In the event that one or more European countries were to replace the euro with another currency, business may be adversely affected until stable exchange rates are established.

Our ability to maintain our products' price competitiveness is reliant, in part, on the relative strength of the currency in which the product is denominated compared to the currency of the market into which it is sold and the functional currency of our competitors. Changes in the rate of exchange of foreign currencies in relation to the U.S. dollar, and other currencies, may adversely impact our results of operations and our ability to offer products in certain markets at acceptable prices. For example, approximately $88 million of our revenue in 2018 was earned from shipments to customers located in Ukraine, Russia and members of the CIS. Although these sales are denominated in euros, a significant weakening of the customers' local currencies may adversely affect our revenue, our customers' credit risk and our results of operation.

The cost of raw materials and energy used to manufacture our products could increase or the availability of certain raw materials could become constrained.

We require access to sufficient, and reasonably priced, quantities of pulps, pulp substitutes, abaca fiber, synthetic fibers, and certain other raw materials, as well as access to reliable and abundant supplies of water to support many of our production facilities. We require significant quantities of wood pulps and, therefore, the volatility of wood pulp prices can have a significant impact on our results of operations.

Our Philippine mill purchases abaca fiber to produce abaca pulp, a key material used to manufacture paper for single-serve coffee, tea and technical specialty products at Composite Fibers' facilities. At certain times, the supply of abaca fiber has been constrained or the quality diminished due to factors such as weather-related damage to the source crop as well as decisions by land owners to produce alternative crops in lieu of those used to produce abaca fiber. These factors have contributed to volatility in fiber prices or limited available supply.

Advanced Airlaid requires access to sufficient quantities of fluff pulp, the supply of which is subject to availability of certain softwoods.

The cost of many of our production materials, including petroleum-based chemicals and freight charges, are influenced by the cost of oil. Natural gas is the principal source of fuel for each of our facilities worldwide and has historically been more volatile than other fuels. More recently, Europe has experienced a sharp rise in the price of electricity.

Government rules, regulations and policies have an impact on the cost of certain energy sources, particularly for our European operations. In Europe, we currently benefit from a number of government-sponsored programs related to, among others, green energy or renewable energy initiatives designed to mitigate the cost of electricity to larger industrial consumers of power. Any reduction in the extent of government sponsored incentives may adversely affect the cost ultimately borne by our operations. Furthermore, the European Commission is investigating certain energy programs in Germany from which we benefit as to whether the programs comply with European Union rules on state aid. The outcome of these investigations could require us to return certain benefits previously earned or reduce such benefits in the future and could impact our results of operations.

Although we have contractual arrangements with certain Advanced Airlaid customers pursuant to which our product's selling price is adjusted for changes in the cost of certain raw materials, we may not be able to fully pass increased raw materials or energy costs on to all customers if the market will not bear the higher price or if existing agreements limit price increases. If price adjustments significantly trail increases in raw materials or energy prices, our operating results could be adversely affected.

Our industry is highly competitive and increased competition could reduce our sales and profitability.

The global markets in which we compete, although growing, are served by a variety of competitors. As a result, our ability to compete is sensitive to, and may be adversely impacted by, the following:

- the entry of new competitors into the markets we serve;
- the aggressiveness of our competitors' pricing strategies, which could force us to decrease prices in order to maintain market share;
- our failure to anticipate and respond to changing customer preferences; and
- technological advances or changes that impact production or cost competitiveness of our products.

The impact of any significant changes may result in our inability to effectively compete in the markets in which we operate, and as a result our sales and operating results would be adversely affected.

We may not be able to develop new products acceptable to our existing or potential customers.

Our business strategy is market focused and includes investments in developing new products to meet the changing needs of our customers, serve new customers and to maintain our market share. Our success will depend, in part, on our ability to develop and introduce new and enhanced products that keep pace with introductions by our competitors and changing customer preferences. If we fail to anticipate or respond adequately to these factors, we may lose opportunities for business with both current and potential customers. The success of our new product offerings will depend on several factors, including our ability to:

- anticipate and properly identify our customers' needs and industry trends;
- develop and commercialize new products and applications in a timely manner;
- price our products competitively;
- differentiate our products from our competitors' products; and
- invest efficiently in research and development activities.

Our inability to develop new products or new business opportunities could adversely impact our business and ultimately harm our profitability.

We are subject to substantial costs and potential liability for environmental matters.

We are subject to various environmental laws and regulations that govern our operations, including discharges into the environment, and the handling and disposal of hazardous substances and wastes. We are also subject to laws and regulations that impose liability and clean-up responsibility for releases of hazardous substances. To comply with environmental laws and regulations, we have incurred, and will continue to incur, substantial capital and operating expenditures.

We may incur obligations to remove or mitigate any adverse effects on the environment, such as air and water quality, resulting from mills we operate or have operated. Potential obligations include compensation for the restoration of natural resources, personal injury and property damages.

We have exposure to potential liability for remediation and other costs related to the presence of polychlorinated biphenyls (PCBs) in the lower Fox River on which our former Neenah, Wisconsin mill was located. As more fully discussed in Item 8 – Financial Statements and Supplementary Data – Note 21, this is a complex matter and has involved several years of litigation. In January 2019, we entered into a consent decree with government agencies which we believe resolves our liability for the site.

Advanced Airlaid generates a substantial portion of its revenue from one customer serving the hygiene products market, the loss of which could have a material adverse effect on our results of operations.

The majority of Advanced Airlaid Materials' sales of hygiene products are to one customer. In addition, sales to the feminine hygiene market accounted for 63% of Advanced Airlaid Materials' net sales in 2018 and sales are concentrated within a small group of large customers. The loss of the large customer or a decline in sales of hygiene products could have a material adverse effect on this business's operating results. Our ability to effectively compete could be affected by technological production alternatives which could provide substitute products into this market segment. Customers in the airlaid nonwoven fabric material market, including the hygiene market, may also switch to less expensive products, change preferences or otherwise reduce demand for Advanced Airlaid Materials' products, thus reducing the size of the markets in which it currently sells its products. Any of the foregoing could have a material adverse effect on our financial performance and business prospects.

Our operations may be impaired and we may be exposed to potential losses and liability as a result of natural disasters, acts of terrorism or sabotage or similar events.

If we have a catastrophic loss or unforeseen operational problem at any of our facilities, we could suffer significant lost production which could impair our ability to satisfy customer demands.

Natural disasters, such as earthquakes, hurricanes, typhoons, flooding or fire, and acts of terrorism or sabotage affecting our operating activities and major facilities could materially and adversely affect our operations, operating results and financial condition.

In addition, many of our operations require a reliable and abundant supply of water. Such mills rely on a local water body or water source for their water needs and, therefore, are particularly sensitive to drought conditions or other natural or manmade interruptions to water supplies. At various times and for differing periods, we have had to modify operations at certain of our mills due to water shortages, water clarity, or low flow conditions in its principal water supplies. Any interruption or curtailment of operations at any of our production facilities due to drought or low flow conditions at the principal water source or another cause could materially and adversely affect our operating results and financial condition.

Our pulp mill in Lanao del Norte on the Island of Mindanao in the Republic of the Philippines is located along the Pacific Rim, one of the world's hazard belts. By virtue of its geographic location, this mill is subject to similar types of natural disasters discussed above, cyclones, typhoons, and volcanic activity. Moreover, the area of Lanao del Norte has been a target of suspected terrorist activities. Our pulp mill in Mindanao is located in a rural portion of the island and is susceptible to attacks and/or power interruptions. The Mindanao mill supplies the abaca pulp used by our Composite Fibers business unit to manufacture paper for single serve coffee and tea products and certain technical specialties products. Any interruption, loss or extended curtailment of operations at our Mindanao mill could affect our ability to meet customer demands for our products and materially affect our operating results and financial condition.

We have operations in a potentially politically and economically unstable location.

Our pulp mill in the Philippines is located in a region that is unstable and subject to political unrest. As discussed above, our Philippine pulp mill produces abaca pulp, a significant raw material used by our Composite Fibers business unit and is currently our main provider of abaca pulp. There are limited suitable alternative sources of readily available abaca pulp in the world. In the event of a disruption in supply from our Philippine mill, there is no guarantee that we could obtain adequate amounts of abaca pulp, if at all, from alternative sources at a reasonable price. Further, there is no assurance the performance of such alternative materials will satisfy customer performance requirements. As a consequence, any civil disturbance, unrest, political instability or other event that causes a disruption in supply could limit the availability of abaca pulp and would increase our cost of obtaining abaca pulp. Such occurrences could adversely impact our sales volumes, revenues and operating results.

Our international operations pose certain risks that may adversely impact sales and earnings.

We have significant operations and assets located in Canada, Germany, France, the United Kingdom, and the Philippines. Our international sales and operations are subject to a number of unique risks, in addition to the risks in our domestic sales and operations, including, but not limited to, economic and trade disruptions resulting from geopolitical developments such as “Brexit,” differing protections of intellectual property, trade barriers, labor unrest, exchange controls, regional economic uncertainty, differing (and possibly more stringent) labor regulation, risk of governmental expropriation, domestic and foreign customs and tariffs, differing regulatory environments, difficulty in managing widespread operations and political instability. These factors may adversely affect our future profits. Also, in some foreign jurisdictions, we may be subject to laws limiting the right and ability of entities organized or operating therein to pay dividends or remit earnings to affiliated companies unless specified conditions are met. Any such limitations would restrict our flexibility in using funds generated in those jurisdictions.

We are subject to cyber-security risks related to unauthorized or malicious access to sensitive customer, vendor, company or employee information as well as to the technology that supports our operations and other business processes.

Our business operations rely upon secure systems for mill operations, and data capture, processing, storage and reporting. Although we maintain appropriate data security and controls, our information technology systems, and those of our third-party providers, could become subject to cyberattacks. Systems such as ours are inherently exposed to cyber-security risks and potential attacks. The result of such attacks could result in a breach of data security and controls. Such a breach of our network, systems, applications or data could result in operational disruptions or damage or information misappropriation including, but not limited to, interruption to systems availability, denial of access to and misuse of applications required by our customers to conduct business with us, denial of access to the applications we use to plan our operations, procure materials, manufacture and ship products and account for orders, theft of intellectual knowhow and trade secrets, and inappropriate disclosure of confidential company, employee, customer or vendor information, could stem from such incidents.

Any of these operational disruptions and/or misappropriation of information could adversely affect our results of operations, create negative publicity and could have a material effect on our business.

We operate in and are subject to taxation from numerous U.S. and foreign jurisdictions.

The multinational nature of our business subjects us to taxation in the U.S and numerous foreign jurisdictions. Due to economic and political conditions, tax rates in various jurisdictions may be subject to significant change. Our effective tax rates could be affected by changes in tax laws or their interpretation or changes in the mix of earnings in jurisdictions with differing statutory tax rates, changes in the valuation of deferred tax assets and liabilities. For example, the European Commission has opened formal investigations to examine whether decisions by the tax authorities in certain European countries comply with European Union rules on state aid. The outcome of the European Commission's investigations could require changes to existing tax rulings that, in turn, could have an impact on our income taxes and results of operations.

In the event any of the above risk factors impact our business in a material way or in combination during the same period, we may be unable to generate sufficient cash flow to simultaneously fund our operations, finance capital expenditures, satisfy obligations and make dividend payments on our common stock.

In addition to debt service obligations, our business requires expenditures to support growth strategies, research and development initiatives, and for normal upgrades or replacements. We expect to meet all of our near and long-term cash needs from a combination of operating cash flow, cash and cash equivalents, availability under our credit facility or other long-term debt. If we are unable to generate sufficient cash flow from these sources, we could be unable to fund our operations, finance capital expenditures, satisfy our near and long-term cash needs or make dividend payments.

ITEM 1B UNRESOLVED STAFF COMMENTS

None.

ITEM 2 PROPERTIES

We own substantially all of the land and buildings comprising our manufacturing facilities located in Arkansas; Canada; the United Kingdom; Germany; France; and the Philippines; as well as substantially all of the equipment used in our manufacturing and related operations. Certain of our operations are under lease arrangements including our metallized paper production facility located in Caerphilly, Wales, office and warehouse space in the United States, Moscow, Russia, Souzou, China and our corporate offices in York, Pennsylvania. All our properties, other than those that are leased, are free from any material liens or encumbrances. We consider all our buildings to be in good structural condition and well maintained and our properties to be suitable and adequate for present operations.

ITEM 3 LEGAL PROCEEDINGS

We are involved in various lawsuits that we consider to be ordinary and incidental to our business. The ultimate outcome of these lawsuits cannot be predicted with certainty; however, we do not expect such lawsuits, individually or in the aggregate, will have a material adverse effect on our consolidated financial position, liquidity or results of operations.

We are involved in litigation of a significant environmental matter relating to contamination in the Fox River and Bay of Green Bay in Wisconsin. For a discussion this matter, see Item 8 – Financial Statements and Supplementary Data – Note 21.

EXECUTIVE OFFICERS

The following table sets forth certain information with respect to our executive officers and other senior management members of February 25, 2019

Name	Age	Office with the Company
Dante C. Parrini	54	Chairman and Chief Executive Officer
John P. Jacunski	53	Executive Vice President, Chief Financial Officer
Christopher W. Astley	46	Senior Vice President & Business Unit President, Advanced Airlaid Materials
Martin Rapp	59	Senior Vice President & Business Unit President, Composite Fibers
Eileen L. Beck	56	Vice President, Human Resources
David C. Elder	50	Vice President, Finance
Samuel L. Hillard	37	Vice President, Corporate Development & Strategy
Joseph J. Zakutney	56	Vice President, Chief Information Officer

Dante C. Parrini became Chief Executive Officer effective January 1, 2011 and Chairman of the Board in May 2011. Prior to this, he was Executive Vice President and Chief Operating Officer, a position he held since February 2005. Mr. Parrini joined us in 1997 and previously served as Senior Vice President and General Manager, a position he held beginning in January 2003 and prior to that as Vice President responsible for Sales and Marketing.

John P. Jacunski was promoted to Executive Vice President and Chief Financial Officer in February 2014. From April 2016 through January 2017, Mr. Jacunski also served as President of the Specialty Papers business unit. He joined us in October 2003 and served as Vice President and Corporate Controller. In July 2006 he was promoted to Senior Vice President and Chief Financial Officer. Mr. Jacunski was previously Vice President and Chief Financial Officer at WCI Steel, Inc. from June 1999 to October 2003. Prior to joining WCI, Mr. Jacunski was with KPMG, an international accounting and consulting firm, where he served in various capacities.

Christopher W. Astley was named Senior Vice President & Business Unit President, Advanced Airlaid Materials in January 2015. He joined us in August 2010 as Vice President, Corporate Strategy and was promoted to Senior Vice President in February 2014. Prior to joining us, he was an entrepreneur leading a privately held business from 2004 until 2010. Prior to that Mr. Astley held positions with Accenture, a global management consulting firm, and The Coca-Cola Company.

Martin Rapp serves as Senior Vice President & Business Unit President, Composite Fibers. Mr. Rapp joined us in August 2006 and has led the Composite Fibers business unit since that time. Prior to this, he was Vice President and General Manager of Avery Dennison's Roll Materials Business in Central and Eastern Europe since August 2002.

Eileen L. Beck was promoted to Vice President Human Resources in April 2017. She joined us in 2012 as Director, Global Compensation and Benefits and was promoted to Vice President in September 2015. Ms. Beck previously held various Human Resources roles at Armstrong World Industries.

David C. Elder was named Vice President, Finance in December 2011 and serves as our chief accounting officer. Prior to his promotion, he was our Vice President, Corporate Controller, a position held since joining Glatfelter in January 2006. Mr. Elder was previously Corporate Controller for YORK International Corporation.

Samuel L. Hillard joined us in March 2016 as Vice President, Corporate Development & Strategy. Prior to joining us, Mr. Hillard was Vice President – Business Development for Dover Corporation from July 2014 until 2016 where he was responsible for strategy and mergers & acquisitions within the Fluids Business Segment. From February 2011 to 2014, he served as Vice President – Business Development for SPX Corporation where he was responsible for all M&A related strategy activity within the Flow Technology Segment. Additionally, he previously worked for Blackstone in their M&A group.

Joseph J. Zakutney joined us in September 2015 as Vice President and Chief Information Officer. Prior to joining Glatfelter, he spent 17 years with The Hershey Company where he held a broad spectrum of IT roles including Vice President and CIO.

ITEM 4 MINE SAFETY DISCLOSURES
Not Applicable

PART II

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

Our common stock is traded on the New York Stock Exchange under the symbol “GLT”

Our Board of Directors declared quarterly cash dividends of $0.13 per common share in each of the four quarters of both 2018 and 2017.

As of February 20, 2019, we had 951 shareholders of record.

STOCK PERFORMANCE GRAPH

The following stock performance graph compares the cumulative 5-year total return of our common stock with the cumulative total returns of both a broad market index and a peer group. We compare our stock performance to the S&P Small Cap 600 index and to the S&P Small Cap 600 Paper Products index comprised of us, Clearwater Paper Corp., Neenah Paper Inc., and Schweitzer-Mauduit International.

We previously charted our stock compared to the Russell 2000; however, in 2018 we changed the comparison to the S&P Small Cap 600 index to be consistent with certain executive compensation performance metrics. The following graph assumes that the value of the investment in our common stock, in each index, and in the peer group (including reinvestment of dividends) was $100 on December 31, 2013 and charts it through December 31, 2018.

ITEM 6 SELECTED FINANCIAL DATA

As of or for the year ended December 31

Dollars in thousands, except per share	2018	2017	2016	2015	2014
Net sales	$866,286	$800,362	$761,216	$786,058	$899,519
Income (loss) from continuing operations	(448)	(5,612)	(14,177)	30,406	12,924
Income (loss) from discontinued operations	(177,156)	13,526	35,731	34,170	56,322
Net income (loss)	(177,604)	7,914	21,554	64,576	69,246
Earnings (loss) per share from continuing operations					
Basic	$(0.01)	$(0.13)	$(0.33)	$0.70	$0.30
Diluted	(0.01)	(0.13)	(0.33)	0.69	0.29
Total assets	$1,339,754	$1,730,795	$1,521,259	$1,500,416	$1,561,504
Total debt	411,747	481,396	372,608	360,662	404,612
Shareholders' equity	538,898	708,928	653,826	663,247	649,109
Cash dividends declared per common share	0.52	0.52	0.50	0.48	0.44
Depreciation, depletion and amortization	47,525	42,078	39,287	37,284	40,655
Capital expenditures	42,129	80,783	61,162	36,387	33,946
Net tons sold	248,551	243,021	227,527	226,546	233,152
Number of employees	2,600	2,360	2,355	2,345	2,410

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

Forward-Looking Statements This Annual Report on Form 10-K includes forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. All statements other than statements of historical fact, including statements regarding industry prospects and future consolidated financial position or results of operations, made in this Report on Form 10-K are forward looking. We use words such as “anticipates”, “believes”, “expects”, “future”, “intends” and similar expressions to identify forward-looking statements. Forward-looking statements reflect management’s current expectations and are inherently uncertain. Our actual results may differ significantly from such expectations. The following discussion includes forward-looking statements regarding expectations of, among others, environmental costs, capital expenditures and liquidity, all of which are inherently difficult to predict. Although we make such statements based on assumptions that we believe to be reasonable, there can be no assurance that actual results will not differ materially from our expectations. Accordingly, we identify the following important factors, among others, which could cause our results to differ from any results that might be projected, forecasted or estimated in any such forward-looking statements:

i. variations in demand for our products including variations in product pricing, or product substitution or the impact of unplanned market-related downtime;
ii. the impact of competition, both domestic and international, changes in industry production capacity, including the construction of new machines or mills, idling of machines or the closing of mills and incremental changes due to capital expenditures or productivity increases;
iii. risks associated with our international operations, including local/regional economic and political environments and fluctuations in currency exchange rates;
iv. geopolitical events, including Russia, Ukraine and Philippines;
v. our ability to develop new, high value-added products;
vi. changes in the price or availability of raw materials we use, particularly pulp, pulp substitutes, synthetic pulp, specialty fibers and abaca fiber;
vii. changes in energy-related prices and the price of commodity raw materials with an energy component;
viii. the impact of unplanned production interruptions at our facilities or at any of our key suppliers;
ix. disruptions in production and/or increased costs due to labor disputes;
x. the gain or loss of significant customers and/or on-going viability of such customers;
xi. unfavorable outcomes from any unforeseen challenges to our pending consent decree with government agencies relating to the Fox River environmental matter;
xii. the impact of war and terrorism;
xiii. the impact of unfavorable outcomes of audits by various state, federal or international tax authorities or changes in pre-tax income and its impact on the valuation of deferred tax assets;
xiv. enactment of adverse state, federal or foreign tax or other legislation or changes in government policy or regulation; and
xv. our ability to finance, consummate and integrate future acquisitions.

Introduction We manufacture a wide array of engineered materials and manage our company along two business units:

- Composite Fibers with revenue from the sale of single-serve tea and coffee filtration papers, wallcovering base materials, composite laminate papers, technical specialties including substrates for electrical applications, and metallized products; and
- Advanced Airlaid Materials with revenue from the sale of airlaid nonwoven fabric-like materials used in feminine hygiene, adult incontinence products, table top, specialty wipes, home care products and other airlaid applications.

Specialty Papers’ results of operations and financial condition are reported as discontinued operations. Following is a discussion and analysis primarily of the financial results of operations and financial condition of our continuing operations.

RESULTS OF OPERATIONS

2018 versus 2017

Overview For the year ended December 31, 2018 we reported a net loss of $177.6 million, or $4.06 per share compared with net income of $7.9 million, or $0.18 per diluted share in 2017. As part of our strategic transformation to becoming a leading global supplier of engineered materials, on October 31, 2018, we completed the sale of the Specialty Papers business unit. Accordingly, Specialty Papers' results are classified as discontinued operations for all periods presented including the recognition of an impairment charge of $144.1 million, in connection with the sale of the business unit. In addition, on October 1, 2018, we completed our acquisition of Georgia-Pacific's European nonwovens business based in Steinfurt, Germany ("Steinfurt"), with annual revenues of approximately $99 million.

The results in accordance with generally accepted accounting principles in the United States ("GAAP") reflect the impact of significant unusual and non-recurring items including, among others, the results of Specialty Papers, a discontinued operation, costs of strategic initiatives, capacity expansion, cost optimization actions and, timberland sales. Our results in 2017 reflect the impact of the Tax Cuts and Jobs Act (the "TCJA") signed into law on December 22, 2017.

Excluding these items from reported results, adjusted earnings, a non-GAAP measure, was $9.2 million, or $0.21 per diluted share for 2018, compared with $26.4 million, or $0.59 per diluted share, a year ago.

We used $6.0 million of cash from operations in 2018 compared with $53.2 million generated a year ago. During 2018 and 2017, capital expenditures totaled $42.1 million and $80.8 million, respectively, reflecting the completion in early 2018 of the airlaid capacity expansion project.

The following table sets forth summarized consolidated results of operations:

	Year ended December 31	
In thousands, except per share	2018	2017
Net sales	$866,286	$800,362
Gross profit	130,407	143,589
Operating income	21,942	33,252
Continuing operations		
Loss	(448)	(5,612)
Loss per share	(0.01)	(0.13)
Discontinued operations		
Income (loss) from discontinued operations	(177,156)	13,526
Earnings (loss) per share	(4.05)	0.31
Net income (loss)	(177,604)	7,914
Earnings (loss) per share	$(4.06)	$0.18

In addition to the results reported in accordance with GAAP, we evaluate our performance using adjusted earnings and adjusted earnings per diluted share. We disclose this information to allow investors to evaluate our performance exclusive of certain items that impact the comparability of results from period to period and we believe it is helpful in understanding underlying operating trends and cash flow generation. Adjusted earnings consist of net income determined in accordance with GAAP adjusted to exclude the impact of the following:

Discontinued Operations. In connection with the sale of the Specialty Papers business unit, its results of operations, including the loss recorded in connection with the sale, are reported as discontinued operations for all periods presented. This adjustment reflects the net results of this discontinued operation.

Strategic initiatives. These adjustments primarily reflect one-time professional and legal fees incurred directly related to evaluating and executing certain strategic initiatives, acquisition transaction costs and a currency translation gain on acquisition financing.

Airlaid capacity expansion costs. This adjustment reflects non-capitalized, one-time costs incurred related to the start-up of a new airlaid production facility in Fort Smith, Arkansas and the implementation of a new business system.

Cost optimization actions. This adjustment reflects charges incurred in connection with initiatives to optimize the cost structure of certain business units in response to changes in business conditions. The costs are primarily related to headcount reduction efforts, write-offs of production assets and certain contract termination costs.

Timberland sales and related costs. This adjustment excludes gains from the sales of timberlands as these items are not considered to be part of our core business, ongoing results of operations or cash flows.

U.S. Tax Reform. This adjustment reflects amounts recorded estimating the impact of the TCJA which was signed into law on December 22, 2017. The TCJA includes, among many provisions, a tax on the mandatory repatriation of earnings of the Company’s non-U.S. subsidiaries and a change in the corporate tax rate from 35% to 21%.

These adjustments are each unique and not considered to be on-going in nature. The transactions are irregular in timing and amount and may significantly impact our operating performance. As such, these items may not be indicative of our past or future performance and therefore are excluded for comparability purposes.

Adjusted earnings and adjusted earnings per diluted share are considered measures not calculated in accordance with GAAP, and therefore are non-GAAP measures. The non-GAAP financial information should not be considered in isolation from, or as a substitute for, measures of financial performance prepared in accordance with GAAP. The following table sets forth the reconciliation of net income to adjusted earnings for the years ended December 31, 2018 and 2017 :

	Year ended December 31			
	2018		2017	
In thousands, except per share	Amount	EPS	Amount	EPS
Net income	$(177,604)	$(4.06)	7,914	$0.18
Exclude: Net loss (income) from discontinued operations	177,156	4.05	(13,526)	(0.30)
Loss from continuing operations	(448)	(0.01)	(5,612)	(0.13)
Adjustments (pre-tax)				
Strategic initiatives	5,898		—	
Airlaid capacity expansion costs	7,072		10,854	
Cost optimization actions	440		2,592	
Timberland sales and related costs	(3,225)		(188)	
Total adjustments (pre-tax)	10,185		13,258	
Income taxes (1)	6		(2,152)	
U.S. Tax Reform	(545)		20,922	
Total after-tax adjustments	9,646	0.22	32,028	0.72
Adjusted earnings	$9,198	$0.21	$26,416	$0.59

(1) Tax effect on adjustments calculated based on the incremental effective tax rate of the jurisdiction in which each adjustment originated and the related impact of valuation allowances.

Business Unit Performance

Year ended December 31 Dollars in millions	Composite Fibers		Advanced Airlaid Materials		Other and Unallocated		Total	
	2018	2017	2018	2017	2018	2017	2018	2017
Net sales	$554.9	$544.3	$311.4	$256.1	$—	$—	$866.3	$800.4
Cost of products sold	462.3	437.6	269.3	216.7	4.3	2.5	735.9	656.8
Gross profit (loss)	92.6	106.7	42.1	39.4	(4.3)	(2.5)	130.4	143.6
SG&A	44.2	44.4	12.2	9.3	55.3	56.8	111.7	110.5
(Gains) losses on dispositions of plant, equipment and timberlands, net	—	—	—	—	(3.3)	(0.2)	(3.3)	(0.2)
Total operating income (loss)	48.4	62.3	29.9	30.1	(56.3)	(59.1)	21.9	33.3

Non-operating expense	—	—	—	—	(14.7)	(13.8)	(14.7)	(13.8)
Income (loss) before income taxes	$48.4	$62.3	$29.9	$30.1	$(71.0)	$(72.9)	$7.3	$19.5
Supplementary Data								
Net tons sold (thousands)	143.8	150.4	104.8	92.6	—	—	248.6	243.0
Depreciation, depletion and amortization	$28.3	$28.3	$14.9	$9.6	$4.3	$4.2	$47.5	$42.1
Capital expenditures	15.7	15.9	21.6	50.6	4.8	14.3	42.1	80.8

The sum of individual amounts set forth above may not agree to the consolidated financial statements included herein due to rounding.

Business Units Results of individual business units are presented based on our management accounting practices and management structure. There is no comprehensive, authoritative body of guidance for management accounting equivalent to accounting principles generally accepted in the United States of America; therefore, the financial results of individual business units are not necessarily comparable with similar information for any other company. The management accounting process uses assumptions and allocations to measure performance of the business units. Methodologies are refined from time to time as management accounting practices are enhanced and

businesses change. The costs incurred by support areas not directly aligned with the business unit are allocated primarily based on an estimated utilization of support area services or are included in “Other and Unallocated” in the Business Unit Performance table.

Management evaluates results of operations of the business units before certain corporate level costs and the effects of certain gains or losses not considered to be related to the core business operations. Management believes that this is a more meaningful representation of the operating performance of its core businesses, the profitability of business units and the extent of cash flow generated from these core operations. Such amounts are presented under the caption “Other and Unallocated.” In the evaluation of business unit results, management does not use any measures of total assets. This presentation is aligned with the management and operating structure of our company. It is also on this basis that the Company’s performance is evaluated internally and by the Company’s Board of Directors.

Sales and Costs of Products Sold

In thousands	Year ended December 31 2018	2017	Change
Net sales	$866,286	$800,362	$65,924
Costs of products sold	735,879	656,773	79,106
Gross profit	$130,407	$143,589	$(13,182)
Gross profit as a percent of Net sales	15.1 %	17.9 %	

The following table sets forth the contribution to consolidated net sales by each business unit:

Percent of Total	Year ended December 31 2018	2017
Business Unit		
Composite Fibers	64.1 %	68.0 %
Advanced Airlaid Material	35.9	32.0
Total	100.0%	100.0%

Net sales on a consolidated basis totaled $866.3 million and $800.4 million in 2018 and 2017, respectively. The $65.9 million increase was primarily driven by $25.4 million of favorable currency translation, $23.1 million from the Steinfurt acquisition and $11.7 million of higher selling prices. Shipping volumes increased 2.3%.

Composite Fibers’ net sales increased $10.6 million, or 1.9%, and totaled $554.9 million in 2018. The increase was primarily due to $18.9 million from favorable currency translation and $5.5 million of higher average selling prices. Shipping volumes in this business unit decreased 4.4%.

Composite Fibers’ operating income for the year ended December 31, 2018 decreased $13.9 million to $48.4 million compared to a year ago primarily due to significantly higher raw material and energy prices particularly wood pulp, which outpaced higher selling

prices. The primary drivers are summarized in the following chart (in millions):

Advanced Airlaid Materials' net sales totaled $311.4 million in 2018. Net sales increased $55.3 million in the year-over-year comparison primarily due higher shipping volumes which increased 13.2% reflecting organic growth of 5.6% and the Steinfurt acquisition. Favorable currency translation accounted for $6.5 million and higher selling prices contributed $6.2 million.

Advanced Airlaid Materials' operating income totaled $29.9 million, a decrease of $0.2 million, or 0.7% compared to a year ago. The primary drivers are summarized in the following chart (in millions):

Other and Unallocated The amount of net operating expenses not allocated to a business unit and reported as "Other and Unallocated" in our table of Business Unit Performance, totaled $56.3 million for 2018 compared with $59.1 million in 2017. The amounts presented in this category include costs of strategic initiatives, airlaid capacity expansion, and cost optimization actions, all of which are presented previously in the reconciliation of GAAP results to Adjusted earnings. These charges are not allocated to a business unit and are recorded in the accompanying consolidated statements of income (loss) under the caption "Selling, general and administrative expenses." Corporate shared services costs of $23.1 million and $26.7 million for 2018 and 2017, respectively, were previously included in Specialty Papers' results and, in accordance with generally accepted accounting principles are required to be included in income from continuing operations.

Gain on Sales of Plant, Equipment and Timberlands, net During each of the past three years, we completed the following sales of assets:

Dollars in thousands	Acres	Proceeds	Gain (loss)
2018			
Timberlands	1,918	$ 3,414	$3,225
Other	n/a	48	31
Total		$ 3,462	$3,256
2017			
Timberlands	332	$ 209	$188
Other	n/a	9	9
Total		$ 218	$197
2016			
Timberlands	—	$ -	$-
Other	n/a	29	(116)
Total		$ 29	$(116)

Income taxes On continuing operations, for the year ended December 31, 2018, we recorded a $7.7 million provision for income taxes on pretax income of $7.3 million. The comparable amounts in 2017 were a provision of $25.1 million and pretax income of $19.5 million. As more fully discussed in Item 8 - Financial Statements and Supplementary Data, Note 9, the Tax Cut and Jobs Act ("TCJA") also known as U.S. Tax Reform, was passed into law on December 22, 2017. In connection with the TCJA, we recorded a charge of $20.9 million during the fourth quarter of 2017. Our effective tax rate for 2018 was unusually high primarily due to losses from lower taxed U.S.-based operations, together with provisions of the TCJA which require us to provide for an additional U.S. tax on international earnings (Global Intangible Low Taxed Income, or GILTI).

Foreign Currency We own and operate facilities in Canada, Germany, France, the United Kingdom and the Philippines. The functional currency of our Canadian operations is the U.S. dollar. However, in Germany and France it is the Euro, in the UK, it is the British Pound Sterling, and in the Philippines the functional currency is the Peso. On an annual basis, our euro denominated revenue exceeds euro expenses by an estimated €160 million. For 2018 compared to 2017, the average currency exchange rate of the euro strengthened relative to the U.S. dollar by approximately 4.6% in the year over year comparison, and the British pound sterling to the dollar strengthened by approximately 3.7%. With respect to the British pound sterling, Canadian dollar, and Philippine peso, we have differing amounts of inflows and outflows of these currencies, although to a lesser degree than the euro. As a result, we are exposed to changes in currency exchange rates and such changes could be significant. The translation of the results from international operations into U.S. dollars is subject to changes in foreign currency exchange rates.

The table below summarizes the translation impact on reported results that changes in currency exchange rates had on our non-U.S. based operations from the conversion of these operation’s results for the period indicated.

In thousands	Year ended December 31, 2018 Favorable (unfavorable)
Net sales	$ 25,399
Costs of products sold	(23,214)
SG&A expenses	(1,950)
Income taxes and other	(301)
Net loss	$ (66)

The above table only presents the financial reporting impact of foreign currency translations assuming currency exchange rates in 2018 were the same as 2017, or “constant currency.” It does not present the impact of certain competitive advantages or disadvantages of operating or competing in multi-currency markets.

Discontinued Operations We completed the sale of the Specialty Papers business unit on October 31, 2018. Its results of operations are reported as discontinued operations for all periods presented. For the years ended December 31, 2018, we reported a net loss from discontinued operations of $177.2 million, including a $144.1 million impairment charge recorded in connection with the sale of the business unit. For the years ended December 31, 2017 and 2016, we reported net income from discontinued operations of $13.5 million and $35.7 million, respectively.

2017 versus 2016

Overview Net income for 2017 was $7.9 million, or $0.18 per diluted share, compared with $21.6 million, or $0.49 per diluted share, in 2016. The GAAP-based results reflect the impact of significant unusual and non-recurring items including, among others, a $7.3 million pension settlement charge, a $40.0 million charge to earnings to increase our reserve in the Fox River environmental matter, costs related to our capacity expansion project and cost optimization actions. Excluding these items from reported results, adjusted earnings, a non-GAAP measure, was $26.4 million, or $0.59 per diluted share for 2016, compared with $19.4 million, or $0.44 per diluted share, a year ago.

The following table sets forth summarized results of operations:

	Year ended December 31	
In thousands, except per share	2017	2016
Net sales	$800,362	$761,216
Gross profit	143,589	131,749
Operating income (loss)	33,252	(21,520)
Continuing operations		
Loss	(5,612)	(14,177)
Loss per share	(0.13)	(0.32)
Discontinued operations		
Income from discontinued operations	13,526	35,731
Earnings per share	0.30	0.81
Net income	7,914	21,554
Earnings per share	$0.18	$0.49

The following table sets forth the reconciliation of net income to adjusted earnings for the years ended December 31, 2017 and 2016.

	Year ended December 31			
	2017		2016	
In thousands, except per share	Amount	EPS	Amount	EPS
Net income	$7,914	$0.18	$21,554	$0.49
Exclude: Net loss (income) from discontinued operations	(13,526)	(0.30)	(35,731)	(0.81)
Loss from continuing operations	$(5,612)	(0.13)	(14,177)	(0.32)

Adjustments (pre-tax)				
Pension settlement charge	-		7,306	
Fox River environmental matter	-		40,000	
Airlaid capacity expansion costs	10,854		2,661	
Cost optimization actions	2,592		3,068	
Timberland sales and related costs	(188)		-	
Total adjustments (pre-tax)	13,258		53,035	
Income taxes (1)	(2,152)		(19,447)	
U.S. Tax Reform	20,922		-	
Total after-tax adjustments	32,028	0.72	33,588	0.76
Adjusted earnings	$26,416	$0.59	$19,411	$0.44

(1) Tax effect for adjustments calculated based on the tax rate of the jurisdiction in which each adjustment originated.

Adjusted earnings consists of net income determined in accordance with GAAP adjusted to exclude the impact of the following (in addition to costs described in the discussion of 2019 versus 2017):

Fox River environmental matter. This adjustment in 2016 reflects charges incurred to increase our reserve for estimated costs related to government oversight, remediation activity and long-term monitoring and maintenance at the Fox River site.

Pension settlement charge. This adjustment reflects the one-time charge incurred during 2016 in connection with the settlement of certain pension liabilities as part of a voluntary offer to vested terminated participants. Our qualified pension plan is overfunded, and this action did not require us to contribute any cash.

Business Unit Performance

Year ended December 31 Dollars in millions	Composite Fibers		Advanced Airlaid Materials		Other and Unallocated		Total	
	2017	2016	2017	2016	2017	2016	2017	2016
Net sales	$ 544.3	$ 517.0	$ 256.1	$ 244.3	$ —	$ —	$ 800.4	$ 761.2
Cost of products sold	437.6	416.4	216.7	209.5	2.5	3.6	656.8	629.5
Gross profit (loss)	106.7	100.6	39.4	34.8	(2.5)	(3.6)	143.6	131.7
SG&A	44.4	46.3	9.3	8.4	56.8	98.4	110.5	153.2
Gains on dispositions of plant, equipment and timberlands, net	—	—	—	—	(0.2)	0.1	(0.2)	0.1
Total operating income (loss)	62.3	54.3	30.1	26.4	(59.1)	(102.2)	33.3	(21.5)
Non-operating expense	—	—	—	—	(13.8)	(21.1)	(13.8)	(21.1)
Income (loss) before income taxes	$ 62.3	$ 54.3	$ 30.1	$ 26.4	$ (72.9)	$ (123.3)	$ 19.5	$ (42.6)
Supplementary Data								
Net tons sold (thousands)	150.4	137.7	92.6	89.8	—	—	243.0	227.5
Depreciation, depletion and amortization	$ 28.3	$ 27.8	$ 9.6	$ 9.0	$ 4.2	$ 2.5	$ 42.1	$ 39.3
Capital expenditures	15.9	18.8	50.6	36.8	14.3	5.6	80.8	61.2

The sum of individual amounts set forth above may not agree to the consolidated financial statements included herein due to rounding.

Sales and Costs of Products Sold

In thousands	Year ended December 31 2017	2016	Change
Net sales	$ 800,362	$ 761,216	$ 39,146
Costs of products sold	656,773	629,467	27,306
Gross profit	$ 143,589	$ 131,749	$ 11,840
Gross profit as a percent of Net sales	17.9 %	17.3 %	

The following table sets forth the contribution to consolidated net sales by each business unit:

	Year ended December 31	
Percent of Total	2017	2016
Business Unit		
Composite Fibers	68.0 %	67.9 %
Advanced Airlaid Material	32.0	32.1
Total	100.0%	100.0%

Net sales on a consolidated basis for 2017 were $800.4 million compared with $761.2 million for 2016. On a constant currency basis, net sales increased $34.3 million, or 4.5%. Shipping volumes increased 6.8%.

Composite Fibers' net sales increased $27.3 million, or 5.3%, and totaled $544.3 million in 2017. Shipping volumes in this business unit increased 9.2% and currency translation was favorable by $2.0 million; however, selling prices unfavorably impacted the comparison by $10.1 million.

Composite Fibers' operating income for the year ended December 31, 2017 increased $8.0 million to $62.3 million compared to a year ago primarily due to higher shipping volumes, improved machine utilization rates and reduced downtime, and the impact of our cost optimization program initiated in late 2016. The primary drivers are summarized in the following chart (in millions):

Advanced Airlaid Materials' net sales totaled $256.1 million in 2017. Net sales increased $11.8 million in the year-over-year comparison primarily due to higher shipping volumes which increased 3.1%.

Advanced Airlaid Materials' operating income totaled $30.1 million, an increase of $3.7 million, or 14.0% compared to a year ago driven by strong demand. The primary drivers are summarized in the following chart (in millions):

Other and Unallocated   The amount of net operating expenses not allocated to a business unit and reported as "Other and Unallocated" in our table of Business Unit Performance, totaled $59.1 million in 2017 compared with $102.2 million in 2016. The amounts include charges of $40.0 million recorded in 2016 to increase our reserve for costs related to the Fox River environmental matter. These charges are not allocated to a business unit and are recorded in the accompanying consolidated statements of income (loss) under the caption "Selling, general and administrative expenses." This matter is more fully discussed in Item 8, Financial Statements and Supplementary Data, Note 21.

Income taxes For the year ended December 31, 2017, we recorded a $25.1 million provision for income taxes on pretax income of $19.5 million. The comparable amounts in 2016 were a benefit of $28.4 million and pretax loss of $42.6 million. As more fully discussed in Item 8 - Financial Statements and Supplementary Data, Note 9, the TCJA was passed into law on December 22, 2017. In connection with the TCJA, we recorded a charge of $20.9 million during the fourth quarter of 2017.

Tax expense in 2016 includes a benefit of $14.9 million on the increase in our reserve for the Fox River matter and benefits of $4.1 million primarily due to investment tax credits, release of reserves related to the completion of tax audits and statute closures and due to changes in statutory tax rates.

Foreign Currency   We own and operate facilities in Canada, Germany, France, the United Kingdom and the Philippines. The functional currency of our Canadian operations is the U.S. dollar. However, in Germany and France it is the Euro, in the UK, it is the British Pound Sterling, and in the Philippines the functional currency is the Peso. During 2017, our euro denominated revenue exceeds euro expenses by an estimated €130 million. For 2017 compared to 2016 the average currency exchange rate of the euro strengthened by approximately 2% relative to the U.S. dollar in the year over year comparison, and the British pound sterling to the dollar declined approximately 5%. With respect to the British pound sterling, Canadian dollar, and Philippine peso, we have differing amounts of inflows and outflows of these currencies, although to a lesser degree than the euro. As a result, we are exposed to changes in currency exchange rates and such changes could be significant. The translation of the results from international operations into U.S. dollars is subject to changes in foreign currency exchange rates.

The table below summarizes the translation impact on reported results that changes in currency exchange rates had on our non-U.S. based operations from the conversion of these operation's results for the year indicated:

In thousands	Year ended December 31, 2017 Favorable

	(unfavorable)
Net sales	$ 4,818
Costs of products sold	(2,782)
SG&A expenses	(300)
Income taxes and other	1,122
Net income	$ 2,858

The above table only presents the financial reporting impact of foreign currency translations assuming currency exchange rates in 2017 were the same as 2016. It does not include the impact of certain competitive advantages or disadvantages of operating or competing in multi-currency markets.

LIQUIDITY AND CAPITAL RESOURCES

Our business requires expenditures for new or enhanced equipment, research and development efforts, and to support our business strategy. In addition, we have mandatory debt service requirements of both principal and interest. The following table summarizes cash flow information for each of the periods presented:

In thousands	Year ended December 31 2018	2017
Cash and cash equivalents at beginning of period	$116,219	$55,444
Cash provided (used) by		
Operating activities	(5,952)	53,234
Investing activities	(217,640)	(80,808)
Financing activities	(91,426)	76,713
Effect of exchange rate changes on cash	(5,564)	7,244
Change in cash and cash equivalents from discontinued operations	347,048	4,392
Net cash provided	26,466	60,775
Cash and cash equivalents at end of period	$142,685	$116,219

At December 31, 2018, we had $142.7 million in cash and cash equivalents (“cash”), of which approximately 50% was held by foreign subsidiaries. Cash held by our foreign subsidiaries can be repatriated without incurring a significant amount of additional taxes. In addition to cash, as of December 31, 2018, $153 million was available under our then existing revolving credit agreement.

Cash used by operating activities totaled $6.0 million in 2018 compared with $53.2 million of cash provided by operations a year ago. The decrease in cash from operations primarily reflects higher use of cash for strategic initiatives, working capital, predominantly inventory, as well as higher payments for interest and taxes.

Net cash used by investing activities increased by $136.8 million in the year-over-year comparison primarily due to the acquisition of Steinfurt for $178.9 million, net of cash acquired and before a post-closing adjustment. Capital expenditures totaled $42.1 million in 2018 compared with $80.8 million in 2017 reflecting lower spending due to the completion of Advanced Airlaid Materials’ capacity expansion project in early 2018. Capital expenditures are expected to total between $23 million and $28 million in 2019.

Net cash used by financing activities totaled $91.4 million in 2018 compared with $76.7 million provided by financing activities in 2017. The change in the year-to-year comparison primarily reflects repayments of debt in 2018 versus a net use of the revolving credit facility in 2017.

The following table sets forth our outstanding long-term indebtedness:

	December 31	
In thousands	2018	2017
Revolving credit facility, due Mar. 2020	$114,495	$171,200
5.375% Notes, due Oct. 2020	250,000	250,000
2.40% Term Loan, due Jun. 2022	5,725	7,710
2.05% Term Loan, due Mar. 2023	25,972	33,607
1.30% Term Loan, due Jun. 2023	7,361	9,423
1.55% Term Loan, due Sep. 2025	9,470	11,390
Total long-term debt	413,023	483,330
Less current portion	(10,785)	(11,298)
Unamortized deferred issuance costs	(1,276)	(1,934)
Long-term debt, net of current portion	$400,962	$470,098

Our revolving credit facility due in March 2020, contained a number of customary compliance covenants, the most restrictive of which was a maximum leverage ratio of 4.5x reducing to 4.0x at the end of 2019. As of December 31, 2018, the leverage ratio, as calculated in accordance with the definition in our amended credit agreement, was 2.9x, within the limits set forth in our credit agreement.

The table above sets forth our outstanding debt as of December 31, 2018. The significant terms of the debt instruments are more fully discussed in Item 8 - Financial Statements and Supplementary Data – Note 17.

In early 2019, we significantly changed our debt capital structure. On January 25, 2019, we issued a notice to redeem, at par, all outstanding 5.375% Notes. We expect the redemption will be completed on February 28, 2019. In addition, on February 8, 2019, we entered into a new credit facility with a consortium of financial institutions. The new five-year facility (the “2019 Facility”) replaces our existing Revolving credit facility and consists of a $400 million variable rate revolver and a €220 million term loan. The other terms of the 2019 Facility are substantially similar to our existing Revolving credit facility.

Financing activities includes cash used for common stock dividends. In 2018, we used $22.8 million of cash for dividends on our common stock compared with $22.5 million in 2017. Our Board of Directors determines what, if any, dividends will be paid to our shareholders. Dividend payment decisions are based upon then-existing factors and conditions and, therefore, historical trends of dividend payments are not necessarily indicative of future payments.

During 2018, we sold Specialty Papers for net proceeds of $323 million. This receipt and the net activities of the business unit are reflected in the summary table of cash flows under the caption “Change in cash and cash equivalents from discontinued operations.”

We are subject to various federal, state and local laws and regulations intended to protect the environment as well as human health and safety. At various times, we have incurred costs to comply with these regulations and we could incur additional costs as new regulations are developed or regulatory priorities change.

As more fully discussed in Item 8 - Financial Statements and Supplementary Data – Note 21 – Commitments, Contingencies and Legal Proceedings (“Note 21”), we are involved in the Lower Fox River in Wisconsin (the “Fox River”), an EPA Superfund site for which we remain potentially liable for certain government oversight and long-term monitoring and maintenance costs. Pursuant to a consent decree with certain government agencies entered into in January 2019, we paid $20.5 million for past government oversight costs. Although there

remains some uncertainty as to the amount we may ultimately be required to spend, the consent decree specifies the nature of our future obligations.

We expect to meet all our near and long-term cash needs from a combination of operating cash flow, cash and cash equivalents, our existing credit facility and other long-term debt.

Off-Balance-Sheet Arrangements As of December 31, 2018 and 2017, we had not entered into any off-balance-sheet arrangements. Financial derivative instruments, to which we are a party, and guarantees of indebtedness, which solely consist of obligations of subsidiaries and a partnership, are reflected in the consolidated balance sheets included herein in Item 8 – Financial Statements and Supplementary Data.

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Contractual Obligations The following table sets forth contractual obligations as of December 31, 2018:

		Payments due during the year ending December 31,			
In millions	Total	2019	2020 to 2021	2022 to 2023	2024 and beyond
Long-term debt (1)	$441	$31	$288	$ 6	$ 116
Operating leases (2)	13	5	6	2	—
Purchase obligations (3)	109	84	25	—	—
Other long term obligations (4), (5)	29	4	7	5	13
Total	$592	$124	$326	$ 13	$ 129

(1) Represents contractual principal and interest payments due on long-term debt, the significant terms of which are discussed in Item 8 – Financial Statements and Supplementary Data, Note 17, “Long-term Debt.” The amounts include

expected interest payments of $30 million over the term of the underlying debt instruments based contractual or current market rates in the case of variable rate instruments. The amounts do not reflect the effects of the debt refinancing initiated in February 2019. See Item 8 – Financial Statements, Note 17, “Long-Term Debt”.

(2) Represents agreements for the lease of production equipment, warehouse space, facilities, automobiles, and office space.

(3) Represents open purchase orders and other obligations, primarily for raw material and energy supply contracts. In certain situations, prices are subject to variations based on market prices. In such situations, the information above is based on prices in effect at December 31, 2018.

(4) Primarily represents benefits estimated to be paid pursuant to retirement medical plans and nonqualified pension plans.

(5) Since we are unable to reasonably estimate the timing of ultimate payment, the amounts set forth above do not include any payments that may be made related to uncertain tax positions, including potential interest, accounted for in accordance with ASC 740-10-20. As discussed in more detail in Item 8 – Financial Statements and Supplementary Data, Note 9, “Income Taxes,” such amounts totaled $30 million at December 31, 2018.

Critical Accounting Policies and Estimates The preceding discussion and analysis of our consolidated financial position and results of operations is based upon our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States of America. The preparation of these consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosures of contingent assets and liabilities. On an on-going basis, we evaluate our estimates, including those related to inventories, long-lived assets, pension and post-employment obligations, environmental liabilities and income taxes. We base our estimates on historical experience and on various other assumptions that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates.

We believe the following represent the most significant and subjective estimates used in the preparation of our consolidated financial statements.

Long- and indefinite-lived Assets We evaluate the recoverability of our long- and indefinite-lived assets, including plant, equipment, timberlands, goodwill and other intangible assets periodically or whenever events or changes in circumstances indicate that the carrying amounts may not be recoverable. Goodwill and non-amortizing tradename intangible assets are reviewed for impairment during the third quarter of each year. The fair value of Goodwill is determined using market approach and a discounted cash flow model. The fair value of non-amortizing tradename intangible assets is determined using a discounted cash flow model. Our evaluations include considerations of a variety of qualitative factors and analyses based on the cash flows generated by the underlying assets, profitability information, including estimated future operating results, trends or other determinants of fair value. If the value of an asset determined by these evaluations is less than its carrying amount, a loss is recognized for the difference between the fair value and the carrying value of the asset. Future adverse changes in market conditions or poor operating results of the related business may indicate an inability to recover the carrying value of the assets, thereby possibly requiring an impairment charge in the future.

Pension and Other Post-Employment Obligations Accounting for defined-benefit pension plans, and any curtailments or settlements thereof, requires various assumptions, including, but not limited to discount rates, expected long-term rates of return on plan assets, future compensation growth rates and mortality rates. Accounting for our retiree medical plans, and any curtailments or settlements thereof, also requires various assumptions, which include, but are not limited to, discount

rates and annual rates of increase in the per capita costs of health care benefits.

The following chart summarizes the more significant assumption used in the actuarial valuation of our defined-benefit plans for each of the past three years:

	2018	2017	2016
Pension plans			
Weighted average discount rate for benefit expense	3.85%	4.44%	4.65%
for benefit obligation	4.34%	3.85%	4.44%
Expected long-term rate of return on plan assets(1)	7.25%	7.25%	7.75%
Rate of compensation	3.00%	3.00%	3.50%

increase			
Other benefit plans			
Weighted average discount rate for benefit expense	3.68%	4.18%	4.38%
for benefit obligation	4.19%	3.68%	4.18%
Health care cost trend rate assumed for next year	5.90%	6.20%	6.50%
Ultimate cost trend rate	4.50%	4.50%	4.50%
Year that the ultimate cost trend rate is reached	2037	2037	2037

(1) For 2019, the expected long-term rate of return on plan assets was reduced to 4.50% due, in part, to a change in the investment allocation of plan assets.

We evaluate these assumptions at least once each year or as facts and circumstances dictate and we make changes as conditions warrant. Changes to these assumptions will increase or decrease our reported net periodic benefit expense, which will result in changes to the recorded benefit plan assets and liabilities.

Environmental Liabilities We maintain accruals for losses associated with environmental obligations when it is probable that a liability has been incurred and the amount of the liability can be reasonably estimated based on existing legislation and remediation technologies. These accruals are adjusted periodically as assessment and remediation actions continue and/or further legal or technical information develops. Such liabilities are exclusive of any insurance or other claims against third parties. Environmental costs are capitalized if the costs extend the life of the asset, increase its capacity and/or mitigate or prevent contamination from future operations. Recoveries of environmental remediation costs from other parties, including insurance carriers, are recorded as assets when their receipt is assured beyond a reasonable doubt.

Income Taxes We record the estimated future tax effects of temporary differences between the tax bases of assets and liabilities and amounts reported in our consolidated balance sheets, as well as operating loss and tax credit carry forwards. These deferred tax assets and liabilities are measured using enacted tax rates and laws that will be in effect when such amounts are expected to reverse or be utilized. We regularly review our deferred tax assets for recoverability based on historical taxable income, projected future taxable income, the expected timing of the reversals of existing temporary differences and tax planning strategies. If we are unable to generate sufficient future taxable income, or if there is a material change in the actual effective tax rates or time period within which the underlying temporary differences become taxable or deductible, we could be required to increase the valuation allowance against our deferred tax assets, which may result in a substantial increase in our effective tax rate and a material adverse impact on our reported results.

Significant judgment is required in determining our worldwide provision for income taxes and recording the related assets and liabilities. In the ordinary course of our business, there are many transactions and calculations where the ultimate tax determination is less than certain.

We and our subsidiaries are examined by various Federal, State and foreign tax authorities. We regularly assess the potential outcomes of these examinations and any future examinations for the current or prior years in determining the adequacy of our provision for income taxes. We continually assess the likelihood and amount of potential adjustments and adjust the income tax provision, the current liability and deferred taxes in the period in which the facts that give rise to a revision become known.

Other significant accounting policies, not involving the same level of uncertainties as those discussed above, are nevertheless important to an understanding of the Consolidated Financial Statements. Refer to Item 8 – Financial Statements and Supplementary Data – Notes to Consolidated Financial Statements for additional accounting policies.

ITEM 7A QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

	Year Ended December 31					December 31, 2018	
Dollars in thousands	2019	2020	2021	2022	2023	Carrying Value	Fair Value
Long-term debt							
Average principal outstanding							
At fixed interest rates – Bond	$250,000	$197,917	$—	$—	$—	$250,000	$249,010
At fixed interest rates – Term Loans	43,136	32,350	21,564	11,392	3,566	48,528	48,976
At variable interest rates	114,495	23,853	—	—	—	114,495	114,495
						$413,023	$412,481
Weighted-average interest rate							
On fixed rate debt – Bond	5.375 %	5.375 %	—	—	—		
On fixed rate debt – Term Loans	1.87 %	1.85 %	1.82 %	1.77 %	1.53 %		
On variable rate debt	1.50 %	1.50 %	—	—	—		

The table above presents the average principal outstanding and related interest rates for the next five years for debt outstanding as of December 31, 2018. The amounts presented do not give effect to the February 2019 redemption of the $250 million, fixed rate bonds and any additional borrowings under the variable rate credit facility to fund such redemption. Fair values included herein have been determined based upon rates currently available to us for debt with similar terms and remaining maturities.

Our market risk exposure primarily results from changes in interest rates and currency exchange rates. At December 31, 2018, we had $411.7 million of long-term debt, net of deferred debt issuance costs. Approximately 27.8% of our debt was at variable interest rates. The fixed rate Term Loans and the variable rate debt are all euro-based borrowings and thus the value of which is also subject to currency risk. Variable-rate debt outstanding represents borrowings under our revolving credit agreement that accrues interest based on one-month LIBOR plus a margin. At December 31, 2018, the interest rate paid was 1.50%. A hypothetical 100 basis point increase or decrease in the interest rate on variable rate debt would increase or decrease annual interest expense by $1.1 million.

As part of our overall risk management practices, we enter into financial derivatives primarily designed to either i) hedge currency risks associated with forecasted transactions – “cash flow hedges”; or ii) mitigate the impact that changes in currency exchange rates have on intercompany financing transactions and foreign currency denominated receivables and payables – “foreign currency hedges.” For a more complete discussion of this activity, refer to Item 8 – Financial Statements and Supplementary Data – Note 19.

We are subject to certain risks associated with changes in foreign currency exchange rates to the extent our operations are conducted in currencies other than the U.S. Dollar. On an annual basis, our euro denominated revenue is estimated to exceed euro expenses by approximately €160 million. With respect to the British Pound Sterling, Canadian dollar, and Philippine Peso, we have greater outflows than inflows of these currencies, although to a lesser degree. As a result, particularly with respect to the euro, we are exposed to changes in currency exchange rates and such changes could be significant.

ITEM 8 FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA
MANAGEMENT'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

Management of P. H. Glatfelter Company (the "Company") is responsible for establishing and maintaining adequate internal control over financial reporting. The Company's internal control over financial reporting is a process designed under the supervision of the chief executive and chief financial officer to provide reasonable assurance regarding the reliability of financial reporting and the preparation of the Company's financial statements for external reporting purposes in accordance with accounting principles generally accepted in the United States.

As of December 31, 2018, management conducted an assessment of the effectiveness of the Company's internal control over financial reporting based on the framework established in Internal Control — Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). We excluded from our assessment the internal control over financial reporting at Glatfelter Steinfurt GmbH ("Steinfurt"), which was acquired on October 1, 2018 and whose financial statements constitute 16.2% of total assets, and 2.7% of total net sales of the Company's consolidated financial statement amounts as of and for the year ended December 31, 2018.

Management has determined that the Company's internal control over financial reporting as of December 31, 2018, is effective to provide reasonable assurance regarding the reliability of financial reporting and the preparation of the Company's financial statements for external reporting purposes in accordance with accounting principles generally accepted in the United States.

The Company's internal control over financial reporting includes policies and procedures that pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect transactions and dispositions of assets; provide reasonable assurances that transactions are recorded as necessary to permit preparation of financial statements in accordance with accounting principles generally accepted in the United States, and that receipts and expenditures are being made only in accordance with authorizations of management; 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 our financial statements.

The Company's internal control over financial reporting as of December 31, 2018, has been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their report appearing herein, which expresses an unqualified opinion on the effectiveness of the Company's internal control over financial reporting as of December 31, 2018.

The Company's management, including the chief executive officer and chief financial officer, does not expect that our internal control over financial reporting will prevent or detect all errors and all frauds. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system's objectives will be met. The design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Further, because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud, if any, within the Company have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty and that breakdowns can occur because of simple error or mistake. Controls can also be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the controls. The design of any system of controls is based, in part, on certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Projections of any evaluation of controls effectiveness to future periods are subject to risks. Over time, controls may become inadequate because of changes in conditions or deterioration in the degree of compliance with policies or procedures.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the shareholders and Board of Directors of P. H. Glatfelter Company

Opinion on Internal Control over Financial Reporting

We have audited the internal control over financial reporting of P. H. Glatfelter Company and subsidiaries (the "Company") as of December 31, 2018, based on criteria established in Internal Control — Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2018, based on criteria established in Internal Control – Integrated Framework (2013) issued by COSO.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated financial statements as of and for the year ended December 31, 2018, of the Company and our report dated February 25, 2019, expressed an unqualified opinion on those financial statements.

As described in Management's Report on Internal Control over Financial Reporting, management excluded from its assessment the internal control over financial reporting at Glatfelter Steinfurt GmbH ("Steinfurt"), which was acquired on October 1, 2018 and whose financial statements constitute 16.2% of total assets, and 2.7% of total net sales of the Company's consolidated financial statement amounts as of and for the year ended December 31, 2018. Accordingly, our audit did not include the internal control over financial reporting at Steinfurt.

Basis for Opinion

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 are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. 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.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (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 its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ DELOITTE & TOUCHE LLP

Philadelphia, Pennsylvania

February 25, 2019

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the shareholders and Board of Directors of P. H. Glatfelter Company

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of P. H. Glatfelter Company and subsidiaries (the "Company") as of December 31, 2018 and 2017, the related consolidated statements of income (loss), comprehensive income (loss), shareholders' equity, and cash flows for each of the three years in the period ended December 31, 2018, and the related notes and the schedule listed in the Index at Item 15 (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2018 and 2017, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2018, in conformity with accounting principles generally accepted in the United States of America.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2018, based on criteria established in Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated February 25, 2019, expressed an unqualified opinion on the Company's internal control over financial reporting.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ DELOITTE & TOUCHE LLP

Philadelphia, Pennsylvania

February 25, 2019

We have served as the Company's auditor since at least 1940, however the specific year has not been determined.

P. H. GLATFELTER COMPANY AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF INCOME (LOSS)

	Year ended December 31		
In thousands, except per share	2018	2017	2016
Net sales	$866,286	$800,362	$761,216
Costs of products sold	735,879	656,773	629,467
Gross profit	130,407	143,589	131,749
Selling, general and administrative expenses	111,721	110,534	153,153
Losses (gains) on dispositions of plant, equipment and timberlands, net	(3,256)	(197)	116
Operating income (loss)	21,942	33,252	(21,520)
Non-operating income (expense)			
Interest expense	(15,609)	(13,317)	(13,850)
Interest income	559	237	206
Other, net	383	(705)	(7,418)
Total non-operating expense	(14,667)	(13,785)	(21,062)
Income (loss) before income taxes	7,275	19,467	(42,582)
Income tax provision (benefit)	7,723	25,079	(28,405)
Loss from continuing operations	(448)	(5,612)	(14,177)
Discontinued operations:			
Income (loss) before income taxes	(207,242)	19,868	53,388
Income tax provision (benefit)	(30,086)	6,342	17,657
Income (loss) from discontinued operations	(177,156)	13,526	35,731
Net income (loss)	$(177,604)	$7,914	$21,554
Basic earnings (loss) per share			
Income (loss) from continuing operations	$(0.01)	$(0.13)	$(0.33)
Income (loss) from discontinued operations	(4.05)	0.31	0.82
Basic earnings (loss) per share	$(4.06)	$0.18	$0.49
Diluted earnings (loss) per share			
Income (loss) from continuing operations	$(0.01)	$(0.13)	$(0.32)
Income (loss) from discontinued operations	(4.05)	0.30	0.81
Diluted earnings (loss) per share	$(4.06)	$0.18	$0.49
Weighted average shares outstanding			
Basic	43,768	43,609	43,558
Diluted	43,768	44,439	44,129

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

P. H. GLATFELTER COMPANY AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)

	Year ended December 31		
In thousands	2018	2017	2016
Net income (loss)	$(177,604)	$7,914	$21,554
Foreign currency translation adjustments	(27,783)	58,609	(27,407)
Net change in:			
Deferred gains (losses) on cash flow hedges, net of taxes of $(2,353), $1,930 and $(335), respectively	6,291	(5,592)	1,725
Unrecognized retirement obligations, net of taxes of $(13,898), $(6,293) and $(7,247), respectively	47,025	10,914	11,562
Other comprehensive income (loss)			