



G L A T F E L T E R

2018 ANNUAL REPORT



Glatfelter is a leading global supplier of engineered materials. The Company's high-quality, innovative and customizable solutions are found in tea and single-serve coffee filtration, personal hygiene and packaging products as well as home improvement and industrial applications. Headquartered in York, PA, the Company's annualized net sales approximate \$950 million with customers in over 100 countries and approximately 2,600 employees worldwide. Operations include eleven manufacturing facilities located in the United States, Canada, Germany, France, the United Kingdom and the Philippines. Additional information about Glatfelter may be found at www.glatfelter.com.

FORWARD-LOOKING STATEMENTS

Certain statements made in this annual report which pertain to future financial performance or business conditions and other financial and business matters are "forward-looking statements" within the meaning of the safe harbor provisions of the United States Private Securities Litigation Reform Act of 1995. These statements are based on management's current expectations and are subject to numerous risks, uncertainties and other unpredictable or uncontrollable factors which may cause actual results or performance to differ materially from management's expectations. Some of the risks, uncertainties and other factors that could cause actual results to differ materially from those expressed in the forward-looking statements are detailed on page 13 of the accompanying 2018 Annual Report on Form 10-K included herein and in other filings with the SEC.

DEAR SHAREHOLDERS,

As we reflect on 2018, it clearly was a pivotal year in our journey to transform Glatfelter into a leading global supplier of engineered materials. Through the diligence and dedication of Glatfelter PEOPLE, we successfully executed four strategic actions that reposition our portfolio and open the door to more stable growth, stronger cash flows and meaningful improvements in profitability.

- 1. Expanded airlaid capacity** – Early in 2018, we shipped the first commercial products from our new state-of-the-art facility in Fort Smith, Arkansas. This milestone concluded a multi-year greenfield project to boost our airlaid materials production capacity by 20,000 metric tons. This expanded capacity better positions us to capitalize more fully on the market growth in North America for airlaid products, including wipes and tabletop products.
- 2. Acquired additional airlaid assets** – As we entered the fourth quarter, we further strengthened our airlaid platform by acquiring Georgia-Pacific's European nonwovens business in Steinfurt, Germany. Steinfurt's people, products and technology are highly complementary to our existing airlaid business. Along with providing profitable growth opportunities, this acquisition will deliver attractive synergies and allow us to create centers of excellence focused on enhancing customer service, expanding innovation, and improving efficiencies.
- 3. Divested specialty paper business** – On October 31, 2018, we exited the uncoated freesheet paper business by completing the sale of the Specialty Papers business to Lindsay Goldberg for \$360 million. This historic transaction was a key catalyst in our transformation as it allows us to devote our investments and resources to accelerating the growth potential of our Composite Fibers and Advanced Airlaid Materials businesses.
- 4. Resolved environmental matter** – After more than 10 years of litigation, we entered into an agreement with the U.S. government and State of Wisconsin to resolve the company's liability related to the Fox River environmental matter. This settlement, which was announced on January 3, 2019, is covered by our existing reserves.



Dante C. Parrini, Chairman and Chief Executive Officer

2018 FINANCIAL AND OPERATING PERFORMANCE >

While we made significant progress on our key strategic initiatives to transform the business, we faced challenges that impacted the financial performance of our two business segments. Net sales from continuing operations of \$866.3 million were up 8% over the previous year. However, adjusted earnings from continuing operations were \$0.21 per share compared with \$0.59 per share in 2017.

Advanced Airlaid Materials achieved organic volume growth of 6% in 2018, despite being confronted by short-term delays in product and customer qualifications for the new capacity in North America. These issues were resolved by the fourth quarter, in which the legacy airlaid business achieved 10% organic growth and 11% higher EBITDA compared with the fourth quarter of 2017. In addition, the recent Steinfurt acquisition had a strong start under Glatfelter ownership, contributing \$2.4 million to operating profit in the fourth quarter.

Composite Fibers experienced a rapid escalation in input costs, particularly for fiber and energy. Due to highly competitive market conditions, we were unable to fully recover these costs through higher selling prices. While these difficult market dynamics significantly impacted profitability, this business continued to drive efficiency and internal cost improvements to help partially offset the impact of the higher input costs.

While cash flow was lower than in 2017, our balance sheet remained solid and continued to provide us with the flexibility to invest in both organic and acquisitive growth, and to maintain our annual dividend of \$0.52 per share in 2018.

As usual, Glatfelter PEOPLE remained focused on their responsibilities, which resulted in record safety performance in 2018. Our continuing businesses operated in the industry's top quartile for safety, and most facilities exceeded their annual safety goals. While we will not be satisfied until the entire company operates injury-free, every day, it is evident our employees are embracing safety as a way of life.

LOOKING AHEAD TO 2019 AND BEYOND >

The significant strategic steps taken in 2018 have helped us become a more focused engineered materials company. We are well positioned to accelerate growth and expand our leadership positions in markets where our products are recognized for the unique value they provide. We have opportunities in both Advanced Airlaid Materials and Composite Fibers to further grow these businesses and improve profitability in 2019 and beyond.

Our Advanced Airlaid Materials business will focus on driving growth in 2019. The combination of the new Fort Smith facility and the Steinfurt acquisition increased our airlaid production capacity by 50% in 2018 and further strengthened our position as the industry leader. Advanced Airlaid Materials' strong fourth-quarter performance gives us confidence we can continue the momentum and deliver 8% to 10% organic volume growth and generate greater EBITDA in 2019. We will continue to drive operational excellence and productivity improvement across the business unit.

Composite Fibers expects volume growth of approximately 3%, in line with the market, driven by demand for single-serve coffee, tea, wipes and electrical products. At the same time, the business will continue to manage the risk associated with the wallcover segment and higher input costs. To improve profitability, the business will also rigorously pursue pricing initiatives, continuous improvement and cost reduction, including reducing staffing levels by approximately 50 people in the first half of 2019.

In 2019, we expect earnings to improve compared with 2018 due to a reduction in corporate expenses to align with the current scale of our business. We expect these reductions will generate \$14 million to \$16 million in annual savings, with approximately half recognized

in 2019, and the full benefit expected by 2020. In 2019, we also expect a \$6 million reduction in interest expense as a result of the debt refinancing that was completed in February 2019. We will continue to take a disciplined approach to capital allocation as we evaluate strategic opportunities going forward.

We will also continue to invest in product development as we recently reinvigorated our innovation team with new talent and skill sets as well as a renewed focus. Our teams are initially targeting health and hygiene products, including the trend for plastic-free substrates, and a variety of industrial products. I am excited about the prospects for these new products as we bring them to market over the next 24 months.

CLOSING THOUGHTS ON OUR PROGRESS AND FUTURE >

We are building a new company to produce greater rewards for our shareholders, customers and employees. Early in 2019, we announced that Glatfelter will move from a business unit structure to a functional operating model. As a leaner, more agile enterprise, Glatfelter will drive ongoing cost efficiencies, strive to be more innovative, and push for greater operational excellence, while building upon our strong customer relationships to grow market share. The result will be a higher-performing company with excellent customer service, rewarding careers and more predictable financial performance.

Our ability to reshape Glatfelter into a higher-value, more profitable growth business is due to the resolve, commitment and drive of Glatfelter PEOPLE. With a renewed sense of optimism and confidence, we are excited about our strategic direction, the actions we are taking and the progress we will make in 2019 and beyond.

It's a new day at Glatfelter!

Sincerely,



Dante C. Parrini

Chairman and Chief Executive Officer

March 15, 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



G L A T F E L T E R

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

1-03560

Exact name of registrant as
specified in its charter

P. H. Glatfelter Company

IRS Employer
Identification No.

23-0628360

State or other jurisdiction of
incorporation or organization

Pennsylvania

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

Title of Each Class
Common Stock, par value \$.01 per share

Name of Each Exchange on which
registered
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:

<i>Dollars in thousands</i>	2018	2017	2016
Net sales	\$ 866,286	\$ 800,362	\$ 761,216
<i>Business unit contribution</i>			
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:

<i>Metric tons</i>	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:

<i>In thousands</i>	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:

<i>In thousands</i>	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, Ascutech
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, Souzhou, 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.

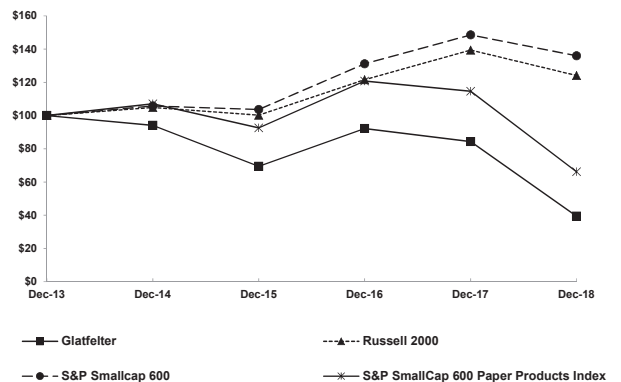
As of February 20, 2019, we had 951 shareholders of record.

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.

COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN*



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 ongoing 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:

<i>In thousands, except per share</i>	Year ended December 31	
	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 :

<i>In thousands, except per share</i>	Year ended December 31			
	2018		2017	
	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 <i>Dollars in millions</i>	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
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

<i>In thousands</i>	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:

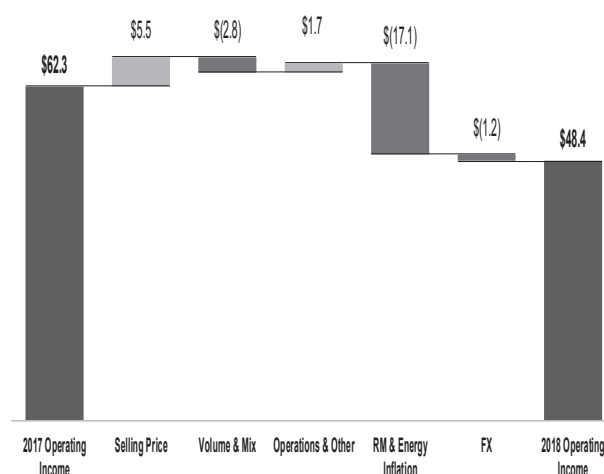
<i>Percent of Total</i>	Year ended December 31	
	2018	2017
Business Unit		
Composite Fibers	64.1%	68.0%
Advanced Airlaid Material	35.9	32.0
Total	100.0%	100.0%

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%.

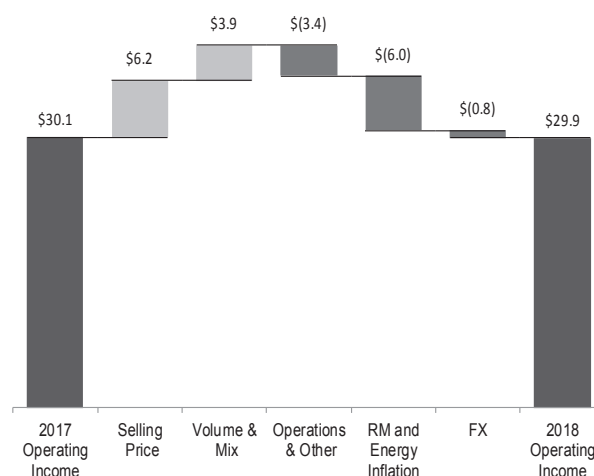
Composite Fibers’ operating income for the year ended December 31, 2018 decreased \$13.9 million to \$48.4 million compared to a year ago primarily due to significantly higher raw material and energy prices particularly wood pulp, which outpaced higher selling

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:

<i>Dollars in thousands</i>	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.

<i>In thousands</i>	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:

<i>In thousands, except per share</i>	Year ended December 31	
	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.

<i>In thousands, except per share</i>	Year ended December 31			
	2017		2016	
	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 (<i>pre-tax</i>)				
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

<i>Dollars in millions</i>	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 (<i>thousands</i>)	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

<i>In thousands</i>	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%	

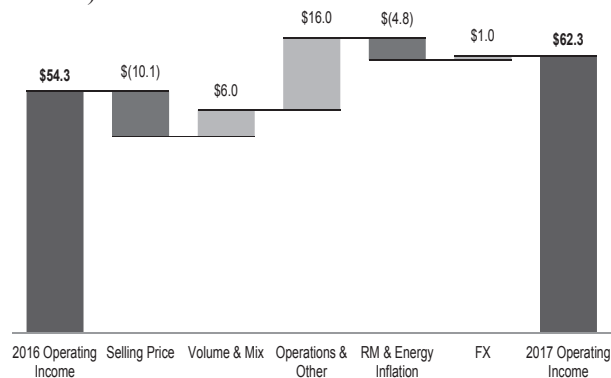
The following table sets forth the contribution to consolidated net sales by each business unit:

<i>Percent of Total</i>	Year ended December 31	
	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%.

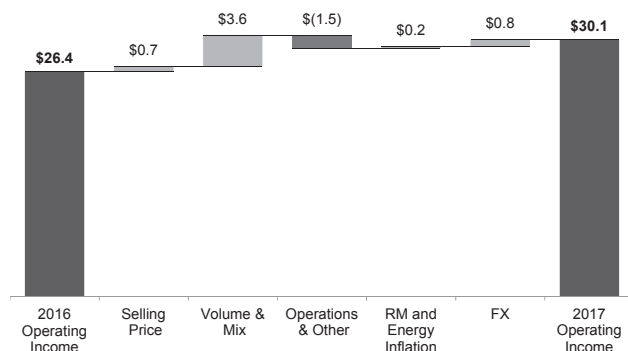
Composite Fibers' net sales increased \$27.3 million, or 5.3%, and totaled \$544.3 million in 2017. Shipping volumes in this business unit increased 9.2% and currency translation was favorable by \$2.0 million; however, selling prices unfavorably impacted the comparison by \$10.1 million.

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:

<i>In thousands</i>	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:

<i>In thousands</i>	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:

<i>In thousands</i>	December 31	
	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.

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

<i>In millions</i>	Total	Payments due during the year ending December 31,			
		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 increase	3.00%	3.00%	3.50%
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

<i>Dollars in thousands</i>	Year Ended December 31					December 31, 2018	
	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
						<u>\$ 413,023</u>	<u>\$ 412,481</u>
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

<i>In thousands, except per share</i>	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)

<i>In thousands</i>	Year ended December 31		
	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)	25,533	63,931	(14,120)
Comprehensive income (loss)	<u>\$ (152,071)</u>	<u>\$ 71,845</u>	<u>\$ 7,434</u>

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

P. H. GLATFELTER COMPANY AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS

December 31

<i>In thousands</i>	2018	2017
Assets		
Cash and cash equivalents	\$ 142,685	\$ 116,219
Accounts receivable (less allowance for doubtful accounts: 2018 - \$1,661; 2017 - \$1,761)	119,772	110,586
Inventories	173,411	136,201
Prepaid expenses and other current assets	33,418	32,013
Current assets held for sale	—	189,952
Total current assets	469,286	584,971
Plant, equipment and timberlands, net	556,044	515,183
Goodwill	153,463	82,744
Intangible assets, net	93,614	58,859
Other assets	67,347	81,127
Noncurrent assets held for sale	—	407,911
Total assets	\$ 1,339,754	\$ 1,730,795
Liabilities and Shareholders' Equity		
Current portion of long-term debt	\$ 10,785	\$ 11,298
Accounts payable	120,701	113,212
Dividends payable	5,719	5,678
Environmental liabilities	23,000	28,500
Other current liabilities	72,597	75,668
Current liabilities held for sale	—	112,820
Total current liabilities	232,802	347,176
Long-term debt	400,962	470,098
Deferred income taxes	78,651	83,571
Other long-term liabilities	88,441	79,649
Long-term liabilities held for sale	—	41,373
Total liabilities	800,856	1,021,867
Commitments and contingencies	—	—
Shareholders' equity		
Common stock, \$0.01 par value; authorized - 120,000,000; issued - 54,361,980 (including treasury shares: 2018 - 10,403,296; 2017 - 10,748,127)	544	544
Capital in excess of par value	62,239	62,594
Retained earnings	770,305	948,411
Accumulated other comprehensive loss	(137,440)	(140,675)
	695,648	870,874
Less cost of common stock in treasury	(156,750)	(161,946)
Total shareholders' equity	538,898	708,928
Total liabilities and shareholders' equity	\$ 1,339,754	\$ 1,730,795

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

P. H. GLATFELTER COMPANY AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS

Year ended December 31

<i>In thousands</i>	2018	2017	2016
Operating activities			
Net income (loss)	\$ (177,604)	\$ 7,914	\$ 21,554
(Income) loss from discontinued operations, net of tax benefits	177,156	(13,526)	(35,731)
Adjustments to reconcile to net cash provided by operations:			
Depreciation, depletion and amortization	47,525	42,078	39,287
Amortization of debt issue costs and original issue discount	1,159	1,157	1,153
Deferred income tax benefit (provision)	(7,704)	12,003	(38,160)
(Gains) losses on dispositions of plant, equipment and timberlands, net	(3,256)	(197)	116
Share-based compensation	6,288	5,494	5,482
Change in operating assets and liabilities			
Accounts receivable	(621)	(4,148)	(2,155)
Inventories	(32,138)	1,522	(4,992)
Prepaid and other current assets	(3,372)	(910)	(1,272)
Accounts payable	13,774	20,361	(544)
Accruals and other current liabilities	(23,984)	(16,690)	40,245
Other	(3,175)	(1,824)	6,095
Net cash (used) provided by operating activities	(5,952)	53,234	31,078
Investing activities			
Expenditures for purchases of plant, equipment and timberlands	(42,129)	(80,783)	(61,162)
Proceeds from disposals of plant, equipment and timberlands, net	3,462	218	29
Acquisition, net of cash acquired	(178,905)	—	—
Other investing	(68)	(243)	(800)
Net cash used by investing activities	(217,640)	(80,808)	(61,933)
Financing activities			
Net borrowings (repayments) under revolving credit facility	(55,446)	109,436	2,891
Payments of borrowing costs	—	—	(136)
Proceeds from term loans	—	—	19,428
Repayment of term loans	(11,069)	(9,771)	(8,205)
Payments of dividends	(22,760)	(22,480)	(21,589)
Proceeds from government grants	—	—	2,000
Payments related to share-based compensation awards and other	(2,151)	(472)	(990)
Net cash provided (used) by financing activities	(91,426)	76,713	(6,601)
Effect of exchange rate changes on cash	(5,564)	7,244	(2,063)
Net increase (decrease) in cash and cash equivalents	(320,582)	56,383	(39,519)
Change in cash and cash equivalents from discontinued operations	347,048	4,392	(10,341)
Cash and cash equivalents at the beginning of period	116,219	55,444	105,304
Cash and cash equivalents at the end of period	\$ 142,685	\$ 116,219	\$ 55,444
Supplemental cash flow information			
Cash paid for:			
Interest, net of amounts capitalized	\$ 15,760	\$ 13,934	\$ 13,235
Income taxes, net	15,171	9,336	14,020

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

P. H. GLATFELTER COMPANY AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY

For the years ended December 31, 2018, 2017 and 2016

<i>In thousands</i>	Common Stock	Capital in Excess of Par Value	Retained Earnings	Accumulated Other Comprehensive Loss	Treasury Stock	Total Shareholders' Equity
Balance at January 1, 2016	\$ 544	\$ 54,912	\$ 963,143	\$ (190,486)	\$ (164,866)	\$ 663,247
Net income			21,554			21,554
Other comprehensive loss				(14,120)		(14,120)
Comprehensive income						7,434
Tax effect on exercise of stock awards		58				58
Cash dividends declared (\$0.50 per share)			(21,813)			(21,813)
Share-based compensation expense		5,889				5,889
Delivery of treasury shares						
RSUs and PSAs		(2,375)			1,624	(751)
Employee stock options exercised — net		(567)			329	(238)
Balance at December 31, 2016	544	57,917	962,884	(204,606)	(162,913)	653,826
Previously unrecognized excess tax benefit on exercise of stock awards			317			317
Net income			7,914			7,914
Other comprehensive income				63,931		63,931
Comprehensive income						71,845
Cash dividends declared (\$0.52 per share)			(22,704)			(22,704)
Share-based compensation expense		6,214				6,214
Delivery of treasury shares						
RSUs and PSAs		(535)			421	(114)
Employee stock options exercised — net		(1,002)			546	(456)
Balance at December 31, 2017	544	62,594	948,411	(140,675)	(161,946)	708,928
Reclassification pursuant to ASU No. 2018-02			22,298	(22,298)		—
Net loss			(177,604)			(177,604)
Other comprehensive income				25,533		25,533
Comprehensive loss						(152,071)
Tax effect on exercise of stock awards		(7)				(7)
Cash dividends declared (\$0.52 per share)			(22,800)			(22,800)
Share-based compensation expense		7,000				7,000
Delivery of treasury shares						
RSUs and PSAs		(6,201)			4,575	(1,626)
Employee stock options exercised — net		(1,147)			621	(526)
Balance at December 31, 2018	<u>\$ 544</u>	<u>\$ 62,239</u>	<u>\$ 770,305</u>	<u>\$ (137,440)</u>	<u>\$ (156,750)</u>	<u>\$ 538,898</u>

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

P. H. GLATFELTER COMPANY

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. ORGANIZATION

P. H. Glatfelter Company and subsidiaries (“Glatfelter”) is a leading global supplier of engineered materials. Its high-quality, innovative and customizable solutions are found in tea and single-serve coffee filtration, personal hygiene and packaging products as well as home improvement and industrial applications. We are headquartered in York, PA, and operate facilities in the United States, Canada, Germany, France, the United Kingdom and the Philippines. We have sales and distribution offices in the U.S., Europe, Russia and China and our products are marketed worldwide, either directly to customers or through brokers and agents. The terms “we,” “us,” “our,” “the Company,” or “Glatfelter,” refer to P. H. Glatfelter Company and subsidiaries unless the context indicates otherwise.

2. ACCOUNTING POLICIES

Principles of Consolidation The consolidated financial statements include the accounts of Glatfelter and its wholly owned subsidiaries. All intercompany balances and transactions have been eliminated.

Accounting Estimates The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingencies as of the balance sheet date and the reported amounts of revenues and expenses during the reporting period. Management believes the estimates and assumptions used in the preparation of these consolidated financial statements are reasonable, based upon currently available facts and known circumstances, but recognizes that actual results may differ from those estimates and assumptions.

Discontinued Operations The results of operations for the Specialty Papers Business Unit have been classified as discontinued operations for all periods presented in the consolidated statements of income (loss). In addition, the related assets and liabilities of this business unit have been classified as held for sale in the consolidated balance sheets for December 31, 2017.

Cash and Cash Equivalents We classify all highly liquid instruments with an original maturity of three months or less at the time of purchase as cash equivalents.

Inventories Inventories are stated at the lower of cost or market. Raw materials, in-process and finished goods inventories are valued principally using the average-cost method.

Plant, Equipment and Timberlands For financial reporting purposes, depreciation is computed using the straight-line method over the estimated useful lives of the respective assets.

The range of estimated service lives used to calculate financial reporting depreciation for principal items of plant and equipment are as follows:

Buildings	15 – 45 Years
Machinery and equipment	5 – 40 Years
Other	3 – 25 Years

Maintenance and Repairs Maintenance and repairs costs are charged to income and major renewals and betterments are capitalized. At the time property is retired or sold, the net carrying value is eliminated and any resultant gain or loss is included in income.

Valuation of Long-lived Assets, Intangible Assets and Goodwill We evaluate long-lived assets for impairment when a specific event indicates that the carrying value of an asset may not be recoverable. Recoverability is assessed based on estimates of future cash flows expected to result from the use and eventual disposition of the asset. If the sum of expected undiscounted cash flows is less than the carrying value of the asset, the asset’s fair value is estimated and an impairment loss is recognized for the amount by which the carrying value exceeds the estimated fair value.

Goodwill and non-amortizing tradename intangible assets are reviewed for impairment during the third quarter of each year or more frequently if impairment indicators are present. 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. For Goodwill, impairment losses, if any, are recognized for the amount by which the carrying value of the reporting unit exceeds its fair value. The carrying value of a reporting unit is defined using an enterprise premise which is generally determined by the difference between the unit’s assets and operating liabilities. With respect to non-amortizing tradenames, impairment losses, if any, are recognized for the amount by which the carrying value of the tradename exceeds its fair value.

Income Taxes Income taxes are determined using the asset and liability method of accounting for income taxes in accordance with FASB ASC 740 *Income Taxes* (“ASC 740”). Under ASC 740, tax expense includes U.S. and international income taxes plus the provision for U.S. taxes on undistributed earnings of international subsidiaries not deemed to be permanently invested. Tax credits and other incentives reduce tax expense in the year the credits are claimed. Certain items of income and

expense are not reported in tax returns and financial statements in the same year. The tax effect of such temporary differences is reported in deferred income taxes. Deferred tax assets are recognized if it is more likely than not that the assets will be realized in future years. We establish a valuation allowance for deferred tax assets for which realization is not more likely than not.

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 record any necessary adjustments in the period in which the facts that give rise to a revision become known.

Investment tax credits are accounted for by the flow-through method, which results in recognition of the benefit in the year in which the credit become available.

Treasury Stock Common stock purchased for treasury is recorded at cost. At the date of subsequent reissue, the treasury stock account is reduced by the cost of such stock on the weighted-average cost basis.

Foreign Currency Translation Foreign currency translation gains and losses and the effect of exchange rate changes on transactions designated as hedges of net foreign investments are included as a component of other comprehensive income (loss). Transaction gains and losses are included in income in the period in which they occur.

Revenue Recognition We adopted ASU No. 2014-09, *Revenue from Contracts with Customers* in the first quarter of 2018. This ASU clarifies the principles for recognizing revenue and establishes expanded disclosure requirements; however, the adoption of ASU No. 2014-09 had no impact on the timing or amount of revenue recognized for any period presented. Refer to Note 6 for additional information about the disaggregation of our net sales.

Our revenue is earned primarily from the manufacture and sale of engineered materials (“product sales”). Revenue is earned pursuant to contracts, supply agreements and other arrangements with a wide variety of customers. Our performance obligation is to produce a specified product according to technical specifications and, in substantially all instances, to deliver the product. Revenue from product sales is earned at a point in time. We recognize revenue on product sales when we have satisfied our performance obligation and control of the product has passed to the customer thereby entitling us to

payment. With respect to substantially all arrangements for product sales, this is deemed to occur when title transfers in accordance with specified shipping terms.

The prices are fixed at the time the sales arrangement is entered into and payment terms are customary for similar arrangements in our industry. Many of our agreements include customary provisions for volume rebates, discounts and similar incentives. In addition, we are obligated for products that fail to meet agreed upon specification. Provisions for such items are estimated and recorded as sales deductions in the period in which the related revenue is recognized.

Environmental Liabilities Accruals for losses associated with environmental obligations are recorded 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 undiscounted 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.

Earnings Per Share Basic earnings (loss) per share is computed by dividing net income (loss) by the weighted-average common shares outstanding during the respective periods. Diluted earnings per share is computed by dividing net income by the weighted-average common shares and common share equivalents outstanding during the period. In periods in which there is a net loss, diluted loss per share is equal to basic loss per share. The dilutive effect of common share equivalents is considered in the diluted earnings per share computation using the treasury stock method.

Financial Derivatives and Hedging Activities We use financial derivatives to manage exposure to changes in foreign currencies. In accordance with FASB ASC 815 *Derivatives and Hedging* (“ASC 815”), we record all derivatives on the balance sheet at fair value. The accounting for changes in the fair value of derivatives depends on the intended use of the derivative, whether we have elected to designate a derivative in a hedging relationship and apply hedge accounting, and whether the hedging relationship has satisfied the criteria necessary to apply hedge accounting.

The effective portion of the gain or loss on those derivative instruments designated and qualifying as a hedge of the exposure to variability in expected future cash flows related to forecasted transactions is deferred and reported as a component of accumulated other

comprehensive income (loss). Deferred gains or losses are reclassified to our results of operations at the time the hedged forecasted transaction is recorded in our results of operations. The effectiveness of cash flow hedges is assessed at inception and quarterly thereafter. If the instrument becomes ineffective or it becomes probable that the originally forecasted transaction will not occur, the related change in fair value of the derivative instrument is also reclassified from accumulated other comprehensive income (loss) and recognized in earnings.

Fair Value of Financial Instruments Under the accounting for fair value measurements and disclosures, a fair value hierarchy was established that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements). A financial instrument's level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. The three levels of the fair value hierarchy are described below:

Level 1 - Unadjusted quoted prices in active markets that are accessible at the measurement date for identical, unrestricted assets or liabilities.

Level 2 - Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly, including quoted prices for similar assets or liabilities in active markets; quoted prices for identical or similar assets or liabilities in markets that are not active; inputs other than quoted prices that are observable for the asset or liability (e.g., interest rates); and inputs that are derived principally from or corroborated by observable market data by correlation or other means.

Level 3 - Inputs that are both significant to the fair value measurement and unobservable.

Recently Issued Accounting Pronouncements In February 2018, the FASB issued ASU No. 2018-02, *“Reclassification of Certain Tax Effects From Accumulated Other Comprehensive Income.”* (“ASU No. 2018-02”). In December 2017, Tax Cuts and Jobs Act (“TCJA”) was passed into law and, among other provisions, reduced the statutory federal tax rate from 35% to 21%. The change in the tax rate impacted the carrying value of deferred tax assets and liabilities. ASU No. 2018-02 allows a reclassification from accumulated other comprehensive income (“AOCI”) to retained earnings for stranded tax effects resulting from the TCJA. We elected to adopt ASU No. 2018-02 in the first quarter of 2018, and we reclassified \$22.3 million of net deferred tax benefits from AOCI to Retained earnings.

In March 2017, the FASB issued ASU No. 2017-07, *Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost* (“ASU 2017-07”). The update requires entities to present the service cost component of the net periodic benefit cost in the same income statement line item as other employee compensation costs arising from services rendered during the period. All other components are to be presented below the determination of operating income. Entities are required to disclose the line(s) used to present the other components of net periodic benefit cost, if the components are not presented separately in the income statement. We adopted this standard in 2018 and all previously presented consolidated statements of income (loss) were reclassified to reflect the new presentation requirements.

In February 2016, the FASB issued ASU No. 2016-02, *Leases (Topic 842)* (“ASU 842”). This ASU will require organizations to recognize on the balance sheet the assets and liabilities for the rights and obligations created by those leases. The new guidance is effective for annual periods beginning after December 15, 2018, and interim periods therein. We have elected to follow a modified retrospective method provided for under ASU 842 which permits us to adopt the standard effective January 1, 2019, without restating previous periods. We are substantially complete with our review of contracts and quantifying the net present value of the obligation as of the adoption date. We do not expect to record a material right-of-use asset and a corresponding lease obligation.

In August 2017, the FASB issued ASU 2017-12, *“Derivatives and Hedging (Topic 815), Targeted Improvements to Accounting for Hedging Activities”* (“ASU 2017-12”), which simplifies the application of hedge accounting and more closely aligns hedge accounting with an entity’s risk management strategies. ASU 2017-12 also amends the manner in which hedge effectiveness may be performed and changes the presentation of hedge ineffectiveness in the financial statements. ASU 2017-12 is effective for us beginning January 1, 2019, with early adoption permitted. ASU 2017-12 requires a cumulative-effect adjustment for certain items upon adoption. The adoption of ASU 2017-12 is not expected to have a material impact on our consolidated financial statements.

In June 2016, the FASB issued ASU No. 2016-13 *Financial Instruments—Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments* that changes the impairment model for most financial instruments, including trade receivables from an incurred loss method to a new forward-looking approach, based on expected losses. Under the new guidance, an allowance is recognized based on an estimate of expected credit losses. This standard is effective for us in the first quarter of 2020 and must be adopted using a modified retrospective transition approach. We are currently assessing the impact this standard may have on our results of operations and financial position.

3. ACQUISITION

On October 1, 2018, we completed the acquisition of Georgia-Pacific’s European nonwovens business based in Steinfurt, Germany (“Steinfurt”) for \$186 million including a working capital adjustment and subject to customary post-closing purchase price adjustments.

The acquisition consisted of Georgia-Pacific’s operations located in Steinfurt along with sales offices located in France and Italy. 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 facility is a state-of-the-art, 32,000-metric-ton-capacity manufacturing facility that employs approximately 220 people. Steinfurt’s results are reported prospectively from the acquisition date as part of our Advanced Airlaid Materials business unit.

We financed the transaction through a combination of cash on hand and borrowings under our revolving credit facility.

The preliminary purchase price allocation set forth in the following table is based on all information available to us at the present time and is subject to change. In the event new information, primarily related to the finalization of working capital adjustments, becomes available, the measurement of the amounts of goodwill reflected may be affected.

The preliminary allocation of the purchase price to assets acquired and liabilities assumed is as follows:

<i>In thousands</i>	Preliminary Allocation
Assets	
Cash and cash equivalents	\$ 7,540
Accounts receivable	13,277
Inventory	11,133
Prepaid and other current assets	290
Plant, equipment and timberlands	66,167
Intangible assets	43,573
Goodwill	75,317
Total assets	217,297
Liabilities	
Accounts payable	8,577
Deferred tax liabilities	19,119
Other long term liabilities	1,162
Total liabilities	28,858
Total	188,439
less cash acquired	(7,540)
Total purchase price	\$ 180,899

For purposes of allocating the total purchase price, assets acquired and liabilities assumed are recorded at their estimated fair market value. The allocation set forth above is based on management’s estimate of the fair value using valuation techniques such as discounted cash flow models, appraisals and similar methodologies. The amount allocated to intangible assets represents the estimated value of customer relationships, technological know-how and trade name.

In connection with the Steinfurt acquisition we recorded \$75.3 million of goodwill and \$43.6 million of intangible assets. The goodwill arising from the acquisition largely relates to strategic benefits, product and market diversification, assembled workforce, and similar factors. For tax purposes, none of the goodwill is deductible. Intangible assets consist of technology, customer relationships and tradename.

Acquired property, plant and equipment are being depreciated on a straight-line basis with estimated remaining lives ranging from 5 years to 25 years. Intangible assets are being amortized on a straight-line basis over an average estimated remaining life of 13 years reflecting the expected future value.

Revenue and operating income of Steinfurt included in our consolidated results of operations for 2018 totaled \$23.1 million and \$2.4 million, respectively. The following table summarizes unaudited pro forma financial information as if the acquisition occurred as of January 1, 2017:

<i>In thousands, except per share</i>	Year ended	
	December 31 (Unaudited)	2017
	2018	
Pro forma		
Net sales	\$ 937,043	\$ 904,430
Income from continuing operations	1,585	1,396
Income per share from continuing operations	0.04	0.03

During 2018, we incurred legal, professional and advisory costs directly related to the Steinfurt acquisition totaling \$5.1 million. For purposes of presenting the

4. DISCONTINUED OPERATIONS

On October 31, 2018, we completed the sale of the Specialty Papers Business Unit on a cash free and debt free basis to Pixelle Specialty Solutions LLC, an affiliate of Lindsay Goldberg (the “Purchaser”) for \$360 million. The sale of the business unit was in connection with the strategic focus on our more growth oriented Composite Fibers and Advanced Airlaid Materials. Cash proceeds from the sale were approximately \$323 million reflecting estimated purchase price adjustments as of the closing date and the assumption by the Purchaser of approximately \$38 million in retiree healthcare liabilities. In addition, the Purchaser assumed approximately \$210 million of pension liabilities relating to Specialty Papers’ employees and will receive approximately \$280 million of related assets from the Company’s existing pension plan. We recognized a \$144.1 million pre-tax loss, presented below as an “Impairment charge” for the amount by which Specialty Papers’ carrying value exceeded net proceeds from the sale.

In connection with the sale of Specialty Papers, we entered into a Transition Services Agreement with Purchaser pursuant to which we agreed to provide various back-office and information technology support until the business is fully separated from us. The following table sets forth a summary of discontinued operations included in the condensed consolidated statements of income (loss):

<i>In thousands</i>	Year ended		
	December 31	2017	2016
	2018		
Net sales	\$ 661,186	\$ 790,935	\$ 843,582
Energy and related sales, net	3,388	5,126	6,141
Total revenues	664,574	796,061	849,723
Costs of products sold	637,472	751,135	767,320
Gross profit	27,102	44,926	82,403
Selling, general and administrative expenses	32,465	22,538	29,701
(Gains) losses on dispositions of plant, equipment and timberlands, net	(423)	219	101
Operating income (loss)	(4,940)	22,169	52,601
Non-operating income (expense)			
Interest expense	(6,942)	(4,455)	(1,972)
Other, net	(51,236)	2,154	2,759
Impairment charge	(144,124)	—	—
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

The amounts presented above are derived from the segment reporting for Specialty Papers adjusted to include certain retirement benefit costs and to exclude corporate shared services costs which are required to remain in continuing operations. Interest expense was allocated to discontinued operations based on borrowings under the revolving credit facility required to be repaid with proceeds from the sale of Specialty Papers. The amounts set forth above in 2018 under the caption “Other, net” include the recognition of a \$54.0 million, pre-tax, curtailment and settlement charge for pension and other post-employment benefits related to the transfer and discontinuance of future service of Specialty Papers’ employees.

above pro forma financial information, such costs have been eliminated. All such costs are presented under the caption “Selling, general and administrative expenses” in the accompanying consolidated statements of income (loss).

This unaudited pro forma financial information presented in this section is not necessarily indicative of what the operating results would have been had the acquisition been completed at the beginning of the respective period nor is it indicative of future results.

The following table sets forth the carrying amounts of Specialty Papers' major asset and liabilities, which were classified as held for sale in the consolidated balance sheet as of the end of 2017:

<i>In thousands</i>	December 31 2017
Assets	
Accounts receivable, net	\$ 63,567
Inventories	115,858
Prepaid expenses and other current assets	10,527
Current assets held for sale	<u>\$ 189,952</u>
Plant, equipment and timberlands, net	350,560
Other assets	57,351
Noncurrent assets held for sale	<u>\$ 407,911</u>
Liabilities	
Accounts payable	\$ 77,266
Other current liabilities	35,554
Current liabilities held for sales	<u>\$ 112,820</u>
Long-term liabilities held for sale	<u>\$ 41,373</u>

The following table sets forth a summary of cash flows from discontinued operations which is included in the consolidated statements of cash flows:

<i>In thousands</i>	2018	Year ended December 31 2017	2016
Net cash provided by operating activities	\$ 38,803	\$ 51,028	\$ 85,032
Net cash provided by (used in) investing activities	308,120	(51,511)	(98,955)
Net cash provided by financing activities	125	4,875	3,582
Change in cash and cash equivalents from discontinued operations	<u>\$ 347,048</u>	<u>\$ 4,392</u>	<u>\$ (10,341)</u>

5. GAIN ON DISPOSITIONS OF PLANT, EQUIPMENT AND TIMBERLANDS

During 2018, 2017 and 2016, we completed the following sales of assets:

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

6. REVENUE

The following tables set forth disaggregated information pertaining to our net sales:

<i>In thousands</i>	Year ended December 31		
	2018	2017	2016
Composite Fibers			
Food & beverage	\$ 279,515	\$ 268,474	\$ 258,463
Wallcovering	103,686	103,011	90,767
Technical specialties and other	81,281	76,991	71,558
Metallized	52,174	57,088	61,059
Composite laminates	38,213	38,696	35,107
	<u>554,869</u>	<u>544,260</u>	<u>516,954</u>
Advanced Airlaid Materials			
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
	<u>311,417</u>	<u>256,102</u>	<u>244,262</u>
Total	<u>\$ 866,286</u>	<u>\$ 800,362</u>	<u>\$ 761,216</u>

<i>In thousands</i>	Year ended December 31		
	2018	2017	2016
Composite Fibers			
Europe, Middle East and Africa	\$ 354,978	\$ 349,336	\$ 341,334
Americas	113,546	107,064	97,441
Asia Pacific	86,345	87,860	78,179
	<u>554,869</u>	<u>544,260</u>	<u>516,954</u>
Advanced Airlaid Materials			
Europe, Middle East and Africa	163,157	132,480	125,818
Americas	144,913	122,379	116,895
Asia Pacific	3,347	1,243	1,549
	<u>311,417</u>	<u>256,102</u>	<u>244,262</u>
Total	<u>\$ 866,286</u>	<u>\$ 800,362</u>	<u>\$ 761,216</u>

7. EARNINGS PER SHARE

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

<i>In thousands, except per share</i>	Year ended December 31		
	2018	2017	2016
Net income (loss)	\$ (177,604)	\$ 7,914	\$ 21,554
Weighted average common shares outstanding used in basic EPS	43,768	43,609	43,558
Common shares issuable upon exercise of dilutive stock options and PSAs / RSUs	—	830	571
Weighted average common shares outstanding and common share equivalents used in diluted EPS	43,768	44,439	44,129
Income (loss) per share			
Continuing operations	\$ (0.01)	\$ (0.13)	\$ (0.32)
Discontinued operations	(4.05)	0.30	0.81

The following table sets forth the potential common shares outstanding for stock options that were not included in the computation of diluted EPS for the period indicated, because their effect would be anti-dilutive:

<i>In thousands</i>	Year ended December 31		
	2018	2017	2016
Potential common shares	1,379	610	596

8. ACCUMULATED OTHER COMPREHENSIVE INCOME

The following table sets forth details of the changes in accumulated other comprehensive income (losses) for the three years ended December 31, 2018, 2017 and 2016.

<i>In thousands</i>	Currency translation adjustments	Unrealized gain (loss) on cash flow hedges	Change in pensions	Change in other postretirement defined benefit plans	Total
Balance at January 1, 2018	\$ (41,839)	\$ (4,092)	\$ (98,295)	\$ 3,551	\$ (140,675)
Amount reclassified for Adoption of ASU No. 2018-02			(23,297)	999	(22,298)
Balance as adjusted at January 1, 2018	(41,839)	(4,092)	(121,592)	4,550	(162,973)
Other comprehensive income (loss) before reclassifications (net of tax)	(27,783)	2,641	(9,267)	2,979	(31,430)
Amounts reclassified from accumulated other comprehensive income (net of tax)	—	3,650	59,428	(6,115)	56,963
Net current period other comprehensive income (loss)	(27,783)	6,291	50,161	(3,136)	25,533
Balance at December 31, 2018	<u>\$ (69,622)</u>	<u>\$ 2,199</u>	<u>\$ (71,431)</u>	<u>\$ 1,414</u>	<u>\$ (137,440)</u>
Balance at January 1, 2017	\$ (100,448)	\$ 1,500	\$ (110,656)	\$ 4,998	\$ (204,606)
Other comprehensive income (loss) before reclassifications (net of tax)	58,609	(5,182)	2,981	(1,099)	55,309
Amounts reclassified from accumulated other comprehensive income (net of tax)	—	(410)	9,380	(348)	8,622
Net current period other comprehensive income (loss)	58,609	(5,592)	12,361	(1,447)	63,931
Balance at December 31, 2017	<u>\$ (41,839)</u>	<u>\$ (4,092)</u>	<u>\$ (98,295)</u>	<u>\$ 3,551</u>	<u>\$ (140,675)</u>
Balance at January 1, 2016	\$ (73,041)	\$ (225)	\$ (120,714)	\$ 3,494	\$ (190,486)
Other comprehensive income (loss) before reclassifications (net of tax)	(27,407)	1,247	(4,334)	2,086	(28,408)
Amounts reclassified from accumulated other comprehensive income (net of tax)	—	478	14,392	(582)	14,288
Net current period other comprehensive income (loss)	(27,407)	1,725	10,058	1,504	(14,120)
Balance at December 31, 2016	<u>\$ (100,448)</u>	<u>\$ 1,500</u>	<u>\$ (110,656)</u>	<u>\$ 4,998</u>	<u>\$ (204,606)</u>

The following table sets forth the amounts reclassified from accumulated other comprehensive income (losses) for the years indicated.

<i>In thousands</i>	Year ended December 31			Line Item in Statements of Income
	2018	2017	2016	
Description				
Cash flow hedges (Note 19)				
(Gains) losses on cash flow hedges	\$ 5,020	\$ (532)	\$ 551	Costs of products sold
Tax expense (benefit)	(1,370)	122	(73)	Income tax provision (benefit)
Net of tax	3,650	(410)	478	
Retirement plan obligations (Note 11)				
Amortization of defined benefit pension plan items				
Prior service costs	39	21	21	Other, net
Actuarial losses	7,050	7,109	7,582	Other, net
Discontinued operations amortization of defined benefit pension plans	6,990	7,975	8,266	Discontinued operations
Pension curtailment and settlement	61,917	—	—	Discontinued operations
Pension settlement	—	—	7,306	Selling, general and administrative
	75,996	15,105	23,175	
Tax benefit	(16,568)	(5,725)	(8,783)	Income tax provision (benefit)
Net of tax	59,428	9,380	14,392	
Amortization of defined benefit other plan items				
Actuarial losses	(261)	(13)	(58)	Other, net
Discontinued operations amortization of defined benefit other plans	(575)	(547)	(879)	Discontinued operations
Other benefit plan settlement	(7,949)	—	—	Discontinued operations
	(8,785)	(560)	(937)	
Tax expense	2,670	212	355	Income tax provision (benefit)
Net of tax	(6,115)	(348)	(582)	
Total reclassifications, net of tax	\$ 56,963	\$ 8,622	\$ 14,288	

9. INCOME TAXES

On December 22, 2017, the TCJA was signed into U.S. law. Among other things, the TCJA reduced the U.S. federal corporate tax rate from 35% to 21% beginning in 2018 and required companies to pay a one-time transition tax on previously unremitted earnings of non-U.S. subsidiaries that were previously tax deferred. ASC Topic 740, *Accounting for Income Taxes*, required companies to recognize the effect of tax law changes in the period of enactment, or 2017, even though the effective date for most provisions was for tax years beginning after December 31, 2017. Accordingly, in 2017 we recorded an income tax benefit of \$18.1 million to remeasure the net deferred tax liabilities due to the reduction in the U.S. corporate income tax rate to 21%.

The TCJA included a one-time mandatory repatriation transition tax on the net accumulated earnings and profits of a U.S. taxpayer's foreign subsidiaries. Given the significance of the legislation, the U.S. Securities and Exchange Commission staff issued Staff Accounting Bulletin No. 118, which allowed registrants to record provisional amounts during a one year "measurement period" similar to that used when accounting for business combinations. We performed an earnings and profits analysis which resulted in us recording in 2017 a provisional U.S. federal income tax expense of \$41.8 million associated with the repatriation transition tax, and \$3.8 million of non-US taxes and \$0.3 million of state

taxes associated with the repatriation of such earnings and profits.

Our accounting for all provisions of the TCJA was completed as of December 31, 2018. We filed our 2017 U.S. federal income tax return during the third quarter of 2018 and reported the mandatory repatriation transition tax on the net earnings and profits of our foreign subsidiaries. As a result, we recorded a net benefit of \$0.5 million to adjust the provisional amounts previously recorded in 2017 in connection with the repatriation provision.

While the TCJA provided for a territorial tax system, beginning in 2018, it includes the global intangible low-taxed income ("GILTI") provision. We elected to account for GILTI tax in the period in which it is incurred. The GILTI provisions require entities to include in its U.S. income tax return foreign subsidiary earnings in excess of an allowable return on the foreign subsidiaries' tangible assets.

For the year ended December 31, 2018, our income tax expense increased by approximately \$2.5 million as a result of the GILTI provisions which, due to our utilization of U.S. federal tax loss carryforward, restricts our ability to recognize the associated foreign tax credits and a deduction of up to 50% of the GILTI income. Since we are using U.S. federal tax loss carryforwards, there is no impact to cash taxes related to the GILTI provisions.

Income taxes are recognized for the amount of taxes payable or refundable for the current year and deferred tax liabilities and assets for the future tax consequences of events that have been recognized in our consolidated financial statements or tax returns. The effects of income taxes are measured based on enacted tax laws and rates.

The provision for (benefit from) income taxes from continuing operations consisted of the following:

<i>In thousands</i>	Year ended December 31		
	2018	2017	2016
Current taxes			
Federal	\$	\$ (1,323)	\$ (763)
State	442	107	315
Foreign	14,985	14,292	10,203
	15,427	13,076	9,755
Deferred taxes and other			
Federal	(9,242)	5,375	(38,811)
State	251	2,652	(3,428)
Foreign	1,287	3,976	4,079
	(7,704)	12,003	(38,160)
Income tax provision (benefit)	\$ 7,723	\$ 25,079	\$ (28,405)

The following are the domestic and foreign components of pretax income (loss) from continuing operations:

<i>In thousands</i>	Year ended December 31		
	2018	2017	2016
United States	\$ (59,264)	\$ (60,788)	\$ (116,703)
Foreign	66,539	80,255	74,121
Total pretax income (loss)	\$ 7,275	\$ 19,467	\$ (42,582)

The following table sets forth a reconciliation of the statutory federal income tax rate to our actual effective tax rate for continuing operations.

	Year ended December 31		
	2018	2017	2016
Federal income tax provision at statutory rate	21.0%	35.0%	35.0%
State income taxes, net of federal income tax benefit	(15.9)	(1.8)	7.0
Foreign income tax rate differential	(18.9)	(58.0)	24.4
Tax effect of tax credits	1.3	(20.1)	—
Provision for (resolution of) tax matters	46.5	27.8	0.4
Rate changes due to enacted legislation	7.2	(1.3)	1.9
State benefit due to enacted legislation	—	(8.2)	—
Effect of U.S. tax law change ⁽¹⁾	(7.5)	107.5	—
Global Intangible Low-taxed Income	33.8	—	—
Stock-based compensation	10.0	(0.2)	0.2
Nondeductible officer's compensation	5.2	—	—
Valuation allowance	15.7	47.0	(1.8)
Other	7.8	1.1	(0.4)
Actual tax rate	106.2%	128.8%	66.7%

- (1) Due to the TCJA which was enacted in December 2017, provisional mandatory transition tax on accumulated foreign earnings was accrued as of December 31, 2017. Our U.S. deferred tax assets and liabilities as of December 31, 2017 were re-measured from 35% to 21%.

The provisional effects of the TCJA for the year ended December 31, 2017, are \$39.0 million of deferred income tax expense, including a \$6.8 million reversal of a valuation allowance, and \$18.1 million of deferred income tax benefit.

The sources of deferred income taxes were as follows at December 31:

<i>In thousands</i>	2018	2017
Reserves	\$ 3,720	\$ 3,145
Environmental	10,795	11,189
Compensation	3,957	6,782
Post-retirement benefits	2,133	12,570
Research & development expenses	—	6,787
Inventories	(35)	1,891
Tax carryforwards	21,843	21,988
Other	3,506	2,106
Deferred tax assets	45,919	66,458
Valuation allowance	(30,029)	(7,405)
Net deferred tax assets	15,890	59,053
Property	(66,426)	(98,809)
Intangible assets	(22,231)	(17,647)
Pension	(3,890)	(21,941)
Other	(1,935)	(4,110)
Deferred tax liabilities	(94,482)	(142,507)
Net deferred tax liabilities	\$ (78,592)	\$ (83,454)

Non-current deferred tax assets and liabilities are included in the following balance sheet captions:

<i>In thousands</i>	December 31	
	2018	2017
Other assets	\$ 59	\$ 117
Deferred income taxes	78,651	83,571

At December 31, 2018 we had federal, state and foreign tax net operating loss (“NOL”) carryforwards of \$37.6 million, \$201.7 million and \$2.7 million, respectively. These NOL carryforwards are available to offset future taxable income, if any. All federal NOL carryforwards expire in 2037. The state NOL carryforwards expire at various times and in various amounts beginning in 2019 and through 2038. Certain foreign NOL carryforwards begin to expire after 2023.

The federal, state and foreign NOL carryforwards on the income tax returns filed included unrecognized tax benefits taken in prior years. The NOLs for which a deferred tax asset is recognized for financial statement purposes in accordance with ASC 740 are presented net of these unrecognized tax benefits.

In addition, we had various federal tax credit carryforwards totaling \$11.2 million which begin to expire after 2036, state tax credit carryforwards totaling \$0.2 million, which begin to expire in 2019, and foreign investment tax credits of \$2.4 million which begin to expire after 2027.

As of December 31, 2018 and 2017, we had a valuation allowance of \$30.0 million and \$7.4 million, respectively, against net deferred tax assets, primarily due to uncertainty regarding the ability to utilize federal, state and foreign tax NOL carryforwards and certain state tax credits. In assessing the need for a valuation allowance, management considers all available positive and negative evidence in its analysis. Based on this analysis, we recorded a valuation allowance for the portion of deferred tax assets where the weight of available evidence indicated it is more likely than not that the deferred tax assets will not be realized.

Tax credits and other incentives reduce tax expense in the year the credits are claimed. We recorded tax credits of \$(0.1) million, \$3.9 million and \$0.0 million in 2018, 2017 and 2016, respectively, related to research and development credits.

At December 31, 2018 and 2017, unremitted earnings of subsidiaries outside the United States deemed to be indefinitely reinvested totaled \$29.0 million and \$0.0 million, respectively. Because the unremitted earnings of subsidiaries are deemed to be indefinitely reinvested as of December 31, 2018 and because we have no need for or plans to repatriate such earnings, no

deferred tax liability has been recognized in our consolidated financial statements.

As of December 31, 2018, 2017 and 2016, we had \$29.6 million, \$26.9 million and \$14.2 million of gross unrecognized tax benefits, respectively. As of December 31, 2018, if such benefits were to be recognized, approximately \$19.8 million would be recorded as a component of income tax expense, thereby affecting our effective tax rate.

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

<i>In millions</i>	2018	2017	2016
Balance at January 1	\$ 26.9	\$ 14.2	\$ 12.2
Increases in tax positions for prior years	0.3	1.7	2.0
Decreases in tax positions for prior years	(1.0)	—	(1.4)
Acquisition related:			
Purchase Accounting	0.3	—	—
Increases in tax positions for current year	4.0	11.9	1.9
Settlements	(0.2)	—	(0.2)
Lapse in statutes of limitation	(0.7)	(0.9)	(0.3)
Balance at December 31	\$ 29.6	\$ 26.9	\$ 14.2

We, or one of our subsidiaries, file income tax returns with the United States Internal Revenue Service, as well as various state and foreign authorities. The following table summarizes tax years that remain subject to examination by major jurisdiction:

Jurisdiction	Open Tax Years	
	Examinations not yet initiated	Examination in progress
United States		
Federal	2015 - 2018	N/A
State	2014 - 2018	N/A
Canada ⁽¹⁾	2011-2013; 2018	2014 - 2017
Germany ⁽¹⁾	2016 - 2018	2011 - 2015
France	2018	2015-2017
United Kingdom	2017 - 2018	N/A
Philippines	2015, 2018	2016, 2017

(1) Includes provincial or similar local jurisdictions, as applicable.

The amount of income taxes we pay is subject to ongoing audits by federal, state and foreign tax authorities, which often result in proposed assessments. Management performs a comprehensive review of its global tax positions on a quarterly basis and accrues amounts for uncertain tax positions. Based on these reviews and the result of discussions and resolutions of matters with certain tax authorities and the closure of tax years subject to tax audit, reserves are adjusted as necessary. However, future results may include favorable or unfavorable adjustments to our estimated tax liabilities

in the period the assessments are determined or resolved or as such statutes are closed. Due to potential for resolution of federal, state and foreign examinations, and the expiration of various statutes of limitation, it is reasonably possible our gross unrecognized tax benefits balance may decrease within the next twelve months by a range of zero to \$6.5 million. The majority of this range relates to tax positions taken in Germany and the U.S.

We recognize interest and penalties related to uncertain tax positions as income tax expense. The following table summarizes information related to interest and penalties on uncertain tax positions:

<i>In millions</i>	As of or for the year ended December 31,		
	2018	2017	2016
Accrued interest payable	\$ 1.1	\$ 0.8	\$ 0.5
Interest expense (income)	0.3	0.3	(0.1)
Penalties	–	–	–

10. STOCK-BASED COMPENSATION

The P. H. Glatfelter Amended and Restated Long Term Incentive Plan (the “LTIP”) provides for the issuance of Glatfelter common stock to eligible participants in the form of restricted stock units, restricted stock awards, non-qualified stock options, performance shares, incentive stock options and performance units. As of December 31, 2018, there were 1,990,742 shares of common stock available for future issuance under the LTIP.

Pursuant to the terms of the LTIP, we have issued to eligible participants restricted stock units, performance share awards and stock only stock appreciation rights (“SOSARs”).

Restricted Stock Units (“RSUs”) and Performance Share Awards (“PSAs”) Awards of RSUs and PSAs are made under our LTIP. The vesting of RSUs is generally based on the passage of time, generally over a three-year period or in certain instances the RSUs were issued with five year cliff vesting. PSAs are issued to members of management and vesting is based on achievement of cumulative financial performance targets covering a two year period followed by an additional one-year service period. The performance measures include a minimum, target and maximum performance level

providing the grantees an opportunity to receive more or less shares than targeted depending on actual financial performance. In addition, beginning in 2018, PSA awards include a modifier based on the three-year total shareholder return relative to a broad market index. For RSUs the grant date fair value of the awards, or the closing price per common share on the date of the award, is used to determine the amount of expense to be recognized over the applicable service period. For PSAs, the grant date fair value is estimated using a lattice model. The significant inputs include the stock price, volatility, dividend yield, and risk-free rate of return. Settlement of RSUs and PSAs will be made in shares of our common stock currently held in treasury.

The following table summarizes RSU and PSA activity during the past three years:

<i>Units</i>	2018	2017	2016
Balance at January 1,	929,386	679,038	674,523
Granted	435,542	375,435	302,722
Forfeited	(112,501)	(96,306)	(148,232)
Shares delivered	(495,641)	(28,781)	(149,975)
Balance at December 31,	756,786	929,386	679,038
	2018	2017	2016
Compensation expense	\$ 5,971	\$ 4,228	\$ 2,875

The amount granted in 2018, 2017 and 2016 includes 184,834, 163,274 and 199,693 PSAs, respectively, exclusive of reinvested dividends. The weighted average grant date fair value per unit for awards in 2018, 2017 and 2016 was \$20.20, \$22.32 and \$18.08, respectively. As of December 31, 2018, unrecognized compensation expense for outstanding RSUs and PSAs totaled \$5.2 million. The weighted average remaining period over which the expense will be recognized is 1.3 years.

Stock Only Stock Appreciation Rights The following table sets forth information related to outstanding SOSARS:

SOSARS	2018		2017		2016	
	Shares	Wtd Avg Exercise Price	Shares	Wtd Avg Exercise Price	Shares	Wtd Avg Exercise Price
Outstanding at January 1,	2,561,846	\$ 17.87	2,736,616	\$ 17.64	2,199,742	\$ 17.82
Granted	—	—	—	—	743,925	17.54
Exercised	(158,545)	13.31	(157,140)	13.76	(61,190)	10.70
Canceled / forfeited	(68,559)	21.09	(17,630)	18.46	(145,861)	22.80
Outstanding at December 31,	2,334,742	\$ 18.08	2,561,846	\$ 17.87	2,736,616	\$ 17.64
Exercisable at December 31,	2,134,297	18.13	2,011,075	17.56	1,740,591	16.19
Vested and expected to vest	2,334,742		2,561,846		2,725,611	
SOSAR Grants						
Weighted average grant date fair value per share	—		—		\$ 4.07	
Aggregate grant date fair value (in thousands)	—		—		\$ 3,013	
Black-Scholes assumptions						
Dividend yield	—		—		2.85%	
Risk free rate of return	—		—		1.34%	
Volatility	—		—		31.97%	
Expected life	—		—		6	
Compensation expense (in thousands)	\$ 317		\$ 1,266		\$ 2,607	

Under terms of the SOSAR, the recipients receive the right to receive a payment in the form of shares of common stock equal to the difference, if any, in the fair market value of one share of common stock at the time of exercising the SOSAR and the exercise price. The SOSARS vest ratably over a three year period. No SOSARS were issued during 2018 or 2017. As of December 31, 2018, the intrinsic value of SOSARS vested and expected to vest totaled \$0 million and the remaining weighted average contractual life of outstanding SOSARS was 4.7 years.

use a December 31-measurement date for all of our defined benefit plans.

We also provide certain health care benefits to eligible U.S.-based retired employees. Participation in the plan is closed to any salaried employees hired after December 31, 2006. These benefits include a comprehensive medical plan for retirees prior to age 65 and a fixed payment to certain retirees over age 65 to help defray the costs of Medicare. Claims are paid as reported.

11. RETIREMENT PLANS AND OTHER POST-RETIREMENT BENEFITS

We provide non-contributory retirement benefits under both funded and unfunded plans to all U.S. employees and to certain non-U.S. employees in Germany. Participation and benefits under the plans are based upon the employees' date of hire and the covered group in which that employee falls. U.S. benefits are based on either a unit-benefit formula for bargained hourly employees, or a final average pay formula or cash balance formula for salaried employees. Non-U.S. benefits are based, in the case of certain plans, on average salary and years of service and, in the case of other plans, on a fixed amount for each year of service. U.S. plan provisions and funding meet the requirements of the Employee Retirement Income Security Act of 1974. We

In connection with the sale of the Specialty Papers business unit, the buyer assumed \$210 million of pension liabilities for all employees active as of October 31, 2018, and we agreed to transfer pension assets of approximately \$280 million, subject to final actuarial determination. In addition, the buyers assumed \$38 million of retiree healthcare liabilities related to employees active as of the October 31, 2018. We retained the pension retiree healthcare liabilities for all retired and deferred vested Specialty Paper employees.

All information presented in the following tables represents amounts attributable to continuing operations and all prior year data has been restated.

<i>In millions</i>	Pension Benefits		Other Benefits	
	2018	2017	2018	2017
Change in Benefit Obligation				
Balance at beginning of year	\$ 347.0	\$ 311.5	\$ 9.7	\$ 9.2
Service cost	2.3	2.0	0.1	0.1
Interest cost	13.3	13.7	0.5	0.4
Plan amendments	0.1	4.1	—	—
Participant contributions	—	—	1.2	1.1
Transfers from Discontinued Operations	25.7	27.9	4.3	2.5
Actuarial (gain)/loss	(10.6)	23.1	(3.1)	(0.6)
Benefits paid	(45.1)	(36.5)	(3.5)	(3.0)
Effect of currency rate changes	(0.5)	1.2	—	—
Balance at end of year	\$ 332.2	\$ 347.0	\$ 9.2	\$ 9.7

Change in Plan Assets				
Fair value of plan assets at beginning of year	\$ 372.8	\$ 327.4	\$ —	\$ —
Actual return on plan assets	(22.4)	51.9	—	—
Total contributions	2.2	2.1	3.5	3.0
Transfers from Discontinued Operations	25.7	27.9	—	—
Benefits paid	(45.1)	(36.5)	(3.5)	(3.0)
Fair value of plan assets at end of year	333.2	372.8	—	—
Funded status at end of year	\$ 1.0	\$ 25.8	\$ (9.2)	\$ (9.7)

Amounts presented under the caption “transfers from discontinued operations” represent the impact of employees changing their status from what was originally assumed for purposes of accounting for discontinued operations to the final determination at the time the sale was completed.

Amounts recognized in the consolidated balance sheets consist of the following as of December 31:

<i>In millions</i>	Pension Benefits		Other Benefits	
	2018	2017	2018	2017
Other assets	\$ 43.3	\$ 66.4	\$ —	\$ —
Current liabilities	(2.1)	(2.2)	(2.4)	(3.5)
Other long-term liabilities	(40.2)	(38.4)	(6.8)	(6.2)
Net amount recognized	\$ 1.0	\$ 25.8	\$ (9.2)	\$ (9.7)

The components of amounts recognized as “Accumulated other comprehensive income” consist of the following on a pre-tax basis:

<i>In millions</i>	Pension Benefits		Other Benefits	
	2018	2017	2018	2017
Prior service cost/(credit)	\$ 0.5	\$ 16.1	\$ —	\$ (0.5)
Net actuarial loss	90.9	145.6	1.9	(5.6)

The accumulated benefit obligation for all defined benefit pension plans was \$324.0 million and \$320.7 million at December 31, 2018 and 2017, respectively.

The weighted-average assumptions used in computing the benefit obligations above were as follows:

	Pension Benefits		Other Benefits	
	2018	2017	2018	2017
Discount rate – benefit obligation	4.34%	3.85%	4.19%	3.68%
Future compensation growth rate	2.50	3.00	—	—

The discount rates set forth above were estimated based on the modeling of expected cash flows for each of our benefit plans and selecting a portfolio of high-quality debt instruments with maturities matching the respective cash flows of each plan. The resulting discount rates as of December 31, 2018 ranged from 2.05% to 4.54% for pension plans and from 4.11% to 4.22% for other benefit plans.

Information for pension plans with an accumulated benefit obligation in excess of plan assets was as follows:

<i>In millions</i>	2018	2017
Projected benefit obligation	\$ 42.2	\$ 40.9
Accumulated benefit obligation	36.6	36.7
Fair value of plan assets	—	—

Net periodic benefit cost includes the following components:

<i>In millions</i>	Year Ended December 31		
	2018	2017	2016
Pension Benefits			
Service cost	\$ 2.3	\$ 2.0	\$ 1.8
Interest cost	13.3	13.7	14.0
Expected return on plan assets	(21.1)	(22.2)	(23.3)
Amortization of actuarial loss	7.1	7.1	7.6
One-time settlement charge	—	—	7.3
Total net periodic benefit cost	\$ 1.6	\$ 0.6	\$ 7.4
Other Benefits			
Service cost	\$ 0.1	\$ 0.1	\$ 0.1
Interest cost	0.5	0.4	0.4
Amortization of actuarial loss	(0.3)	—	(0.1)
Total net periodic benefit cost	\$ 0.3	\$ 0.5	\$ 0.4

In 2016, we recorded a pension settlement charge of \$7.3 million and settled \$24.2 million of benefits in connection with a voluntary program offered to deferred vested terminated participants.

Other changes in plan assets and benefit obligations recognized in other comprehensive income (loss) were as follows:

<i>In millions</i>	Year Ended December 31	
	2018	2017
Pension Benefits		
Actuarial (gain) loss	\$ 32.9	\$ (6.8)
Plan amendments	0.1	4.1
Recognized actuarial losses	(7.1)	(7.1)
Total recognized in other comprehensive loss	25.9	(9.8)
Total recognized in net periodic benefit cost and other comprehensive loss	\$ 27.5	\$ (9.2)
Other Benefits		
Actuarial (gain) loss	\$ (3.1)	\$ (0.6)
Amortization of actuarial losses	0.3	—
Total recognized in other comprehensive (income) loss	(2.8)	(0.6)
Total recognized in net periodic benefit cost and other comprehensive (income) loss	\$ (2.5)	\$ (0.1)

The weighted-average assumptions used in computing the net periodic benefit cost information above were as follows:

	Year Ended December 31		
	2018	2017	2016
Pension Benefits			
Discount rate – benefit expense	3.85%	4.44%	4.65%
Future compensation growth rate	3.00	3.00	3.50
Expected long-term rate of return on plan assets	7.25	7.25	7.75
Other Benefits			
Discount rate – benefit expense	3.68%	4.18%	4.38%

To develop the expected long-term rate of return assumption, we considered the historical returns and the future expected returns for each asset class, as well as the target asset allocation of the pension portfolio.

Assumed health care cost trend rates used to determine benefit obligations at December 31 were as follows:

	2018	2017
Health care cost trend rate assumed for next year	5.90%	6.20%
Rate to which the cost trend rate is assumed to decline (the ultimate trend rate)	4.50	4.50
Year that the rate reaches the ultimate rate	2037	2037

Plan Assets All pension plan assets in the U.S. are invested through a single master trust fund. The strategic asset allocation for this trust fund is selected by management, reflecting the results of comprehensive asset and liability modeling. The general principles guiding U.S. pension asset investment policies are those embodied in the Employee Retirement Income Security Act of 1974 (ERISA). These principles include discharging our investment responsibilities for the exclusive benefit of plan participants and in accordance with the “prudent expert” standard and other ERISA rules and regulations. We establish strategic asset allocation percentage targets and appropriate benchmarks for significant asset classes with the aim of achieving a prudent balance between return and risk.

Investments and decisions will be made solely in the interest of the Plan’s participants and beneficiaries, and for the exclusive purpose of providing benefits accrued thereunder. The primary goal of the Plan is to ensure the solvency of the Plan over time and thereby meet its distribution objectives. All investments in the Plan will be made in accordance with ERISA and other applicable statutes.

Diversification of plan assets is achieved by setting targets for duration of fixed income securities, maintaining a certain level of credit quality, and limiting the amount of investment in a single security and in non-investment grade paper. As of December 31, 2018, the

targeted range of investment allocations of Plan assets is 80% to 100% fixed income and the balance in cash and cash equivalents.

A formal asset allocation review is done periodically to ensure that the Plan has an appropriate asset allocation based on the Plan's projected benefit obligations. It is expected that asset class performance will meet or exceed that of the assigned indices and be at least at the median relative to other professionally managed accounts in its peer group. The target return for cash and cash equivalents is a return that at least equals that of the 90-day T-bills.

The Investment Policy statement lists specific categories of securities or activities that are prohibited including options, futures, commodities, hedge funds, limited partnerships, and our stock.

The table below presents the fair values of our benefit plan assets by level within the fair value hierarchy, as described in Note 2:

<i>In millions</i>	December 31, 2018			
	Total	Level 1	Level 2	Level 3
Fixed income	\$ 330.9	\$ 41.8	\$ 289.1	\$ —
Cash and equivalents	2.3	—	2.3	—
Total	\$ 333.2	\$ 41.8	\$ 291.4	\$ —

<i>In millions</i>	December 31, 2017			
	Total	Level 1	Level 2	Level 3
Domestic Equity				
Large cap	\$ 119.0	\$ 6.9	\$ 112.1	\$ —
Small and mid cap	25.6	25.6	—	—
International equity	45.1	4.0	41.1	—
REIT	15.3	15.3	—	—
Fixed income	161.1	13.3	147.8	—
Cash and equivalents	6.7	0.1	6.6	—
Total	\$ 372.8	\$ 65.2	\$ 307.6	\$ —

Cash Flow We were not required to make contributions to our qualified pension plan in 2018 nor do we expect to make any to this plan in 2019. Benefit payments expected to be made in 2019 under our non-qualified pension plans and other benefit plans are summarized below:

<i>In thousands</i>	
Nonqualified pension plans	\$ 2,126
Other benefit plans	2,364

The following benefit payments under all pension and other benefit plans, and giving effect to expected future service, as appropriate, are expected to be paid:

<i>In thousands</i>	Pension Benefits	Other Benefits
2019	\$ 26,252	\$ 2,364
2020	22,358	1,732
2021	22,009	1,264
2022	22,005	885
2023	21,344	665
2024 through 2028	101,499	1,992

Defined Contribution Plans We maintain 401(k) plans for certain hourly and salaried employees. Employees may contribute up to 50% of their earnings, subject to certain restrictions. Company matches are made in cash. The expense associated with our 401(k) match was \$0.4 million, \$0.3 million and \$0.2 million in 2018, 2017 and 2016, respectively.

12. INVENTORIES

Inventories, net of reserves were as follows:

<i>In thousands</i>	December 31	
	2018	2017
Raw materials	\$ 50,205	\$ 39,797
In-process and finished	84,894	65,277
Supplies	38,312	31,127
Total	\$ 173,411	\$ 136,201

13. PLANT, EQUIPMENT AND TIMBERLANDS

Plant, equipment and timberlands at December 31 were as follows:

<i>In thousands</i>	2018	2017
Land and buildings	\$ 164,002	\$ 126,980
Machinery and equipment	676,501	591,220
Furniture, fixtures, and other	152,121	137,870
Accumulated depreciation	(458,567)	(435,231)
	534,057	420,839
Construction in progress	21,946	94,149
Timberlands, less depletion	41	195
Total	\$ 556,044	\$ 515,183

As of December 31, 2018 and 2017, we had \$4.8 million and \$13.7 million, respectively, of accrued capital expenditures.

The following table sets forth amounts of interest expense capitalized in connection with major capital projects:

	Year Ended December 31		
	2018	2017	2016
Interest cost incurred	\$ 16,005	\$ 15,066	\$ 14,169
Interest capitalized	396	1,749	319
Interest expense	\$ 15,609	\$ 13,317	\$ 13,850

14. GOODWILL AND INTANGIBLE ASSETS

The following table sets forth information with respect to goodwill and other intangible assets:

<i>In thousands</i>	December 31	
	2018	2017
Goodwill		
Composite Fibers	\$ 79,024	\$ 82,744
Advanced Airlaid Materials	74,439	—
Total Goodwill	<u>153,463</u>	<u>82,744</u>
Other Intangible Assets		
Composite Fibers		
Tradename - nonamortizing	4,556	4,773
Technology and related	38,813	40,686
Customer relationships and related	35,029	36,705
Advanced Airlaid Materials		
Tradename	4,534	—
Technology and related	18,014	1,488
Customer relationships and related	24,853	3,001
Total intangibles	125,799	86,653
Accumulated amortization	(32,185)	(27,794)
Net intangibles	\$ 93,614	\$ 58,859

The change in the gross value of goodwill and intangible assets was primarily due to additional amounts recorded in connection with the Steinfurt acquisition and due to currency translation adjustments. Other than goodwill and an indefinite-lived tradename, intangible assets are amortized on a straight-line basis. Customer relationships are amortized over periods ranging from 10 years to 14 years and technology and related intangible assets are amortized over periods ranging from 14 years to 20 years. The following table sets forth information pertaining to amortization of intangible assets:

<i>In thousands</i>	2018	2017	2016
Aggregate amortization expense:	\$ 5,860	\$ 4,773	\$ 4,852
Estimated amortization expense:			
2019	8,416		
2020	8,289		
2021	7,887		
2022	7,767		
2023	7,767		

The remaining weighted average useful life of intangible assets was 11.4 years at December 31, 2018.

15. OTHER LONG-TERM ASSETS

Other long-term assets consist of the following:

<i>In thousands</i>	December 31	
	2018	2017
Pension	\$ 43,341	\$ 66,382
Other	24,006	14,745
Total	\$ 67,347	\$ 81,127

16. OTHER CURRENT LIABILITIES

Other current liabilities consist of the following:

<i>In thousands</i>	December 31	
	2018	2017
Accrued payroll and benefits	\$ 15,898	\$ 29,255
Other accrued compensation and retirement benefits	6,064	7,864
Income taxes payable	2,147	1,927
Accrued rebates	2,889	3,261
Other accrued expenses	45,599	33,361
Total	\$ 72,597	\$ 75,668

17. LONG-TERM DEBT

Long-term debt is summarized as follows:

<i>In thousands</i>	December 31	
	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 agreement with a consortium of banks (the “Revolving Credit Facility”) provides for borrowing up to \$400 million, and matures March 12, 2020. On February 1, 2017, and September 7, 2018, the Revolving Credit Facility was further amended to, among other, (a) increase the maximum leverage ratio financial covenant to 4.0x and (b) change the definition of earnings before interest, taxes, depreciation and amortization (“EBITDA”) for purposes of calculating covenant compliance.

For all US dollar denominated borrowings under the Revolving Credit Facility, the borrowing rate is, at our option, either, (a) the bank’s base rate which is equal to the greater of i) the prime rate; ii) the federal funds rate plus 50 basis points; or iii) the daily Euro-rate plus 100 basis points plus an applicable spread over either i), ii) or iii) ranging from 12.5 basis points to 100 basis points based on the Company’s leverage ratio and its corporate credit ratings determined by Standard & Poor’s Rating Services and Moody’s Investor Service, Inc. (the “Corporate Credit Rating”); or (b) the daily Euro-rate plus an applicable margin ranging from 112.5 basis points to 200 basis points based on the Company’s leverage ratio and the Corporate Credit Rating. For non-US dollar denominated borrowings, interest is based on (b) above.

The Revolving Credit Facility contains a number of customary covenants for financings of this type that, among other things, restrict our ability to dispose of or create liens on assets, incur additional indebtedness, repay other indebtedness, limits certain intercompany financing arrangements, make acquisitions and engage in mergers

or consolidations. We are also required to comply with specified financial tests and ratios including: i) maximum net debt to EBITDA ratio (the “leverage ratio”); and ii) a consolidated EBITDA to interest expense ratio. The most restrictive of our covenants is a maximum leverage ratio of 4.5x reducing 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. A breach of these requirements would give rise to certain remedies under the Revolving Credit Facility, among which are the termination of the agreement and accelerated repayment of the outstanding borrowings plus accrued and unpaid interest under the credit facility.

On October 3, 2012, we completed a private placement offering of \$250.0 million aggregate principal amount of 5.375% Senior Notes due 2020 (the “5.375% Notes”). The 5.375% Notes, which are now publicly registered, are fully and unconditionally guaranteed, jointly and severally, by PHG Tea Leaves, Inc., Mollanvick, Inc., Glatfelter Composite Fibers N. A., Inc., Glatfelter Advanced Materials N.A., Inc., and Glatfelter Holdings, LLC (the “Guarantors”). Interest on the 5.375% Notes is payable semiannually in arrears on April 15 and October 15.

The 5.375% Notes are redeemable, in whole or in part, at any time on or after October 15, 2016 at the redemption prices specified in the applicable Indenture. These Notes and the guarantees of the notes are senior obligations of the Company and the Guarantors, respectively, rank equally in right of payment with future senior indebtedness of the Company and the Guarantors and will mature on October 15, 2020.

The 5.375% Notes contain various covenants customary to indebtedness of this nature including limitations on i) the amount of indebtedness that may be incurred; ii) certain restricted payments including common stock dividends; iii) distributions from certain subsidiaries; iv) sales of assets; v) transactions amongst subsidiaries; and vi) incurrence of liens on assets. In addition, the 5.375% Notes contain cross default provisions that could result in all such notes becoming due and payable in the event of a failure to repay debt outstanding under the Revolving Credit Agreement at maturity or a default under the Revolving Credit Agreement that accelerates the debt outstanding thereunder. As of December 31, 2018, we met all of the requirements of our debt covenants.

On February 8, 2019, we refinanced the Revolving Credit Facility with a new credit facility consisting of a five-year €220 million term loan and a \$400 million revolving credit facility (the “2019 Credit Facility”). The 2019 Credit Facility contains pricing, covenants and terms and conditions substantially identical to the Revolving Credit Facility which it refinanced. In addition, in January 2019 we issued a redemption notice for all outstanding

5.375% Notes. The redemption of these Notes, at par, will be completed using proceeds under the term loan and is expected to be completed on February 28, 2019.

Glatfelter Gernsbach GmbH & Co. KG (“Gernsbach”), a wholly-owned subsidiary of ours, entered into a series of borrowing agreements with IKB Deutsche Industriebank AG, Düsseldorf (“IKB”) as summarized below:

<i>Amounts in thousands</i>	Original Principal	Interest Rate	Maturity
Borrowing date			
Apr. 11, 2013	€ 42,700	2.05%	Mar. 2023
Sep. 4, 2014	10,000	2.40%	Jun. 2022
Oct. 10, 2015	2,608	1.55%	Sep. 2025
Apr. 26, 2016	10,000	1.30%	Jun. 2023
May 4, 2016	7,195	1.55%	Sep. 2025

Each of the borrowings require quarterly repayments of principal and interest and provide for representations, warranties and covenants customary for financings of these types. The financial covenants contained in each of the IKB loans, which relate to the minimum ratio of consolidated EBITDA to consolidated interest expense and the maximum ratio of consolidated total net debt to consolidated adjusted EBITDA, will be calculated by reference to our Revolving Credit Agreement.

Aggregated unamortized deferred debt issuance costs incurred in connection with all of our outstanding debt totaled \$1.9 million at December 31, 2018. The deferred costs are being amortized on a straight-line basis over the life of the underlying instruments. Amortization expense related to deferred debt issuance costs totaled \$1.1 million in 2018.

The following schedule sets forth the amortization of our term loan agreements together with the maturity of our other long-term debt during the indicated year.

<i>In thousands</i>	
2019	\$ 10,785
2020	375,281
2021	10,786
2022	9,968
2023	3,749
Thereafter	2,454

P. H. Glatfelter Company guarantees all debt obligations of its subsidiaries. All such obligations are recorded in these consolidated financial statements.

As of December 31, 2018 and 2017, we had \$5.2 million and \$5.2 million, respectively, of letters of credit issued to us by certain financial institutions. The letters of credit, which reduce amounts available under our revolving credit facility, primarily provide financial assurances for the benefit of certain state workers compensation insurance agencies in conjunction with our self-insurance program. We bear the credit risk on this amount to the extent that we do not comply with the

provisions of certain agreements. No amounts are outstanding under the letters of credit.

18. FAIR VALUE OF FINANCIAL INSTRUMENTS

The amounts reported on the consolidated balance sheets for cash and cash equivalents, accounts receivable and short-term debt approximate fair value. The following table sets forth the carrying value and fair value of long-term debt as of December 31:

<i>In thousands</i>	2018		2017	
	Carrying Value	Fair Value	Carrying Value	Fair Value
Variable rate debt	\$ 114,495	\$114,495	\$ 171,200	\$171,200
Fixed-rate bonds	250,000	249,010	250,000	253,823
2.40% Term loan	5,725	5,836	7,710	7,889
2.05% Term loan	25,972	26,346	33,607	34,122
1.30% Term Loan	7,361	7,341	9,423	9,370
1.55% Term loan	9,470	9,453	11,390	11,320
Total	\$ 413,023	\$412,481	\$ 483,330	\$487,724

As of December 31, 2018 and 2017, we had \$250.0 million of 5.375% fixed rate bonds. These bonds are publicly registered, but thinly traded. Accordingly, the values set forth above for the bonds, as well as our other debt instruments, are based on observable inputs and other relevant market data (Level 2). The fair value of financial derivatives is set forth below in Note 19.

19. FINANCIAL DERIVATIVES AND HEDGING ACTIVITIES

As part of our overall risk management practices, we enter into financial derivatives primarily designed to either i) hedge foreign 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.”

Derivatives Designated as Hedging Instruments - Cash Flow Hedges We use currency forward contracts as cash flow hedges to manage our exposure to fluctuations in the currency exchange rates on certain forecasted production costs or capital expenditures expected to be incurred over a maximum of eighteen months. Currency forward contracts involve fixing the EUR-USD exchange rate or USD-CAD for delivery of a specified amount of foreign currency on a specified date.

We designate certain currency forward contracts as cash flow hedges of forecasted raw material purchases, certain production costs or capital expenditures with exposure to changes in foreign currency exchange rates. The effective portion of changes in the fair value of derivatives designated and that qualify as cash flow hedges of foreign exchange risk is deferred as a component of accumulated other comprehensive income in the accompanying consolidated balance sheets. With respect to hedges of forecasted raw material purchases or production costs, the amount deferred is subsequently

reclassified into costs of products sold in the period that inventory produced using the hedged transaction affects earnings. For hedged capital expenditures, deferred gains or losses are reclassified and included in the historical cost of the capital asset and subsequently affect earnings as depreciation is recognized. The ineffective portion of the change in fair value of the derivative is recognized directly to earnings and reflected in the accompanying consolidated statements of income (loss) as non-operating income (expense) under the caption “Other-net.”

We had the following outstanding derivatives that were used to hedge foreign exchange risks associated with forecasted transactions and designated as hedging instruments:

<i>In thousands</i>	December 31	
	2018	2017
Derivative		
<i>Sell/Buy - sell notional</i>		
Philippine Peso / British Pound	13,140	19,047
Euro / British Pound	15,250	13,586
Philippine Peso / Euro	16,446	—
Euro / U.S. Dollar	—	1,048
U.S. Dollar / Euro	88	946
<i>Sell/Buy - buy notional</i>		
Euro / Philippine Peso	1,069,006	890,096
British Pound / Philippine Peso	980,137	797,496
Euro / U.S. Dollar	76,417	60,519
U.S. Dollar / Canadian Dollar	35,154	32,265
British Pound / Euro	216	335
U.S. Dollar / Euro	—	4,253

These contracts have maturities of eighteen months or less.

Derivatives Not Designated as Hedging Instruments - Foreign Currency Hedges We also enter into forward foreign exchange contracts to mitigate the impact changes in currency exchange rates have on balance sheet monetary assets and liabilities. None of these contracts are designated as hedges for financial accounting purposes and, accordingly, changes in value of the foreign exchange forward contracts and in the offsetting underlying on-balance-sheet transactions are reflected in the accompanying consolidated statements of income (loss) under the caption “Other, net.”

<i>In thousands</i>	December 31	
	2018	2017
Derivative		
<i>Sell/Buy - sell notional</i>		
U.S. Dollar / British Pound	25,500	17,500
British Pound / Euro	2,000	1,000
<i>Sell/Buy - buy notional</i>		
Euro / U.S. Dollar	11,000	4,500
British Pound / Euro	8,000	13,000

These contracts have maturities of one month from the date originally entered into.

Fair Value Measurements

The following table summarizes the fair values of derivative instruments as of December 31 for the year indicated and the line items in the accompanying consolidated balance sheets where the instruments are recorded:

<i>In thousands</i>	December 31		December 31	
	2018	2017	2018	2017
Balance sheet caption	Prepaid Expenses and Other Current Assets		Other Current Liabilities	
Designated as hedging:				
Forward foreign currency exchange contracts	\$ 4,381	\$ 1,066	\$ 1,548	\$ 4,787
Not designated as hedging:				
Forward foreign currency exchange contracts	\$ 103	\$ 151	\$ 122	\$ 43

The amounts set forth in the table above represent the net asset or liability giving effect to rights of offset with each counterparty.

The following table summarizes the amount of income or loss from derivative instruments recognized in our results of operations for the periods indicated and the line items in the accompanying consolidated statements of income (loss) where the results are recorded:

<i>In thousands</i>	Year ended December 31		
	2018	2017	2016
Designated as hedging:			
Forward foreign currency exchange contracts:			
Effective portion – cost of products sold	\$ (5,020)	\$ 532	\$ (551)
Ineffective portion – other – net	138	182	(166)
Not designated as hedging:			
Forward foreign currency exchange contracts:			
Other – net	\$ (1,419)	\$ 882	\$ 806

The impact of activity not designated as hedging was substantially all offset by the remeasurement of the underlying on-balance sheet item.

The fair value hierarchy consists of three broad levels, which gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3). The three levels of the fair value hierarchy are described in Note 2.

The fair values of the foreign exchange forward contracts are considered to be Level 2. Foreign currency

forward contracts are valued using foreign currency forward and interest rate curves. The fair value of each contract is determined by comparing the contract rate to the forward rate and discounting to present value. Contracts in a gain position are recorded in the accompanying consolidated balance sheets under the caption “Prepaid expenses and other current assets” and the value of contracts in a loss position is recorded under the caption “Other current liabilities.”

A rollforward of fair value amounts recorded as a component of accumulated other comprehensive income is as follows:

<i>In thousands</i>	2018	2017
Balance at January 1,	\$ (5,640)	\$ 1,882
Deferred (losses) gains on cash flow hedges	3,624	(6,990)
Reclassified to earnings	5,020	(532)
Balance at December 31,	\$ 3,004	\$ (5,640)

We expect substantially all of the amounts recorded as a component of accumulated other comprehensive income will be realized in results of operations within the next twelve to eighteen months and the amount ultimately recognized will vary depending on actual market rates.

Credit risk related to derivative activity arises in the event a counterparty fails to meet its obligations to us. This exposure is generally limited to the amounts, if any, by which the counterparty’s obligations exceed our obligation to them. Our policy is to enter into contracts only with financial institutions which meet certain minimum credit ratings.

20. SHAREHOLDERS’ EQUITY

The following table summarizes outstanding shares of common stock:

<i>In thousands</i>	Year ended December 31		
	2018	2017	2016
Shares outstanding at beginning of year	43,614	43,550	43,420
Treasury shares issued for:			
Restricted stock awards	304	28	108
Employee stock options exercised	41	36	22
Shares outstanding at end of year	43,959	43,614	43,550

21. COMMITMENTS, CONTINGENCIES AND LEGAL PROCEEDINGS

Contractual Commitments The following table summarizes the minimum annual payments due on noncancelable operating leases and other similar

contractual obligations having initial or remaining terms in excess of one year:

<i>In thousands</i>	Leases	Other
2019	\$ 5,020	\$ 84,451
2020	3,861	22,249
2021	2,515	2,483
2022	1,426	306
2023	584	49
Thereafter	383	2

Other contractual obligations primarily represent minimum purchase commitments under energy supply contracts and other purchase obligations.

At December 31, 2018, required minimum annual payments due under operating leases and other similar contractual obligations aggregated \$13.8 million and \$109.5 million, respectively.

Fox River - Neenah, Wisconsin

Background. We have previously reported that we face significant uncertainties associated with environmental claims arising out of the presence of polychlorinated biphenyls (“PCBs”) in sediments in the lower Fox River, on which our former Neenah facility was located, and in the Bay of Green Bay Wisconsin (collectively, the “Site”). Subject to certain procedural steps and court approvals, we have resolved many of those uncertainties as described below.

Since the early 1990s, the United States, the State of Wisconsin and two Indian tribes (collectively, the “Governments”) have pursued a cleanup of a 39-mile stretch of river from Little Lake Butte des Morts into Green Bay and natural resource damages (“NRDs”).

The United States originally notified several entities that they were potentially responsible parties (“PRPs”); however, after giving effect to settlements reached with the Governments, the remaining PRPs exposed to continuing obligations to implement the remainder of the cleanup consist of us, Georgia Pacific Consumer Products, L.P. (“Georgia Pacific”) and NCR Corporation (“NCR”).

The United States Environmental Protection Agency (“EPA”) has divided the Site into five “operable units”, including the most upstream portion of the Site on which our facility was located (“OU1”) and four downstream reaches of the river and bay (“OU2-5”).

We, with contributions of certain other PRPs, implemented the remedial action in OU1 under a consent decree with the Governments. That work is complete, other than on-going monitoring and maintenance.

For OU2-5, work has proceeded primarily under a Unilateral Administrative Order (“UAO”) issued in November 2007 by the EPA to us and seven other respondents. The majority of the work in OU 2-5 has been funded or conducted by parties other than us. Prior to the

UAO, we contributed to a project in that area. Since the issuance of the UAO we have conducted about \$13.4 million of cleanup work under the UAO in 2015 and 2016. The cleanup is expected to continue at least through 2019 and decommissioning thereafter.

Litigation and Settlement. In 2008, in an allocation action, NCR and Appvion sued us and many other defendants in an effort to allocate among the liable parties the costs of cleaning up this Site and compensating the Governments for their costs and the natural resource trustees for NRDs. This case has been called the “Whiting litigation.”

In 2010, in an enforcement action, the Governments sued us and other defendants for (a) an injunction to require implementation of the cleanup ordered by the 2007 UAO, (b) recovery of the Governments’ past and future costs of response, (c) recovery of NRDs, and (d) recovery of a declaration of liability for the Site. After appeals, the Governments did not obtain an injunction and they withdrew their claims for NRDs. The Governments obtained a declaration of our liability to comply with the 2007 UAO. The Governments’ cost claims remained pending.

On January 17, 2017, the United States filed a consent decree with the federal district court among the United States, Wisconsin, NCR, and Appvion (the “NCR/Appvion consent decree”) under which NCR would agree to complete the remaining cleanup and both NCR and Appvion would agree not to seek to recover from us or anyone else any amounts they have spent or will spend, and we and others would be barred from seeking claims against NCR or Appvion. The federal district court entered a somewhat revised version of the NCR/Appvion consent decree on August 23, 2017. Under the consent decree, if it were to withstand appeal, we faced exposure to: (i) government past oversight costs, (ii) government future oversight costs, (iii) long term monitoring and maintenance, and (iv) depending on the reason, a further remedy if necessary in the event the currently ordered remedy fails, over 30 or more years, to achieve its objectives. As the result of earlier settlements, Georgia Pacific is only jointly liable with us to the Governments for monitoring and maintenance costs incurred in the most downstream three miles of the river (“OU4b”) and the bay of Green Bay (“OU5”).

We and Georgia Pacific had claims against each other to reallocate the costs that we have each incurred or will incur. We have settled those claims. Under this settlement, Georgia Pacific has agreed to implement the monitoring and maintenance in OU4b and OU5 and we are responsible for monitoring and maintenance of all other upstream Operable Units. We paid Georgia Pacific \$9.5 million in August 2017.

The NCR/Appvion consent decree and our settlement with Georgia Pacific resulted in all claims among the responsible parties being barred, waived, or withdrawn. Accordingly, on October 10, 2017, the federal district court approved a stipulation dismissing all remaining claims in the Whiting litigation. Therefore, unless certain limited circumstances occur permitting reassertion of claims, we are not subject to claims for reallocation of costs or damages incurred by any of the other parties and we cannot seek contribution or reallocation from them.

On October 20, 2017, we appealed the district court's approval of the NCR/Appvion consent decree. We contend that the court did not do what was required to properly conclude that the NCR/Appvion consent decree was substantially fair to us. We contend that the consent decree was unfair to us because the costs we have already incurred and the costs that we would have to incur were the NCR/Appvion consent decree to remain in effect and the governments to recover their full claims would exceed our fair share of costs for this site.

In January 2019, we reached an agreement with the United States, the State of Wisconsin, and Georgia-Pacific to resolve all remaining claims among those parties. A consent decree ("Glatfelter consent decree") documenting that agreement was lodged in the federal district court on January 3, 2019. After an opportunity for public comment, the United States may move for entry of that consent decree. If entered, all litigation, including our appeal from entry of the NCR/Appvion consent decree would be concluded.

Under the Glatfelter consent decree, we have settled the United States' and Wisconsin's claims for response costs paid by them before October 2018 and for NRDs. In addition, we are primarily responsible for long-term monitoring and maintenance in OU2-OU4a and for reimbursement of government oversight costs paid after October 2018. Finally, we remain responsible for our obligation to continue long-term monitoring and maintenance under our OU1 consent decree.

Cost estimates. The Glatfelter consent decree calls for payment of \$20.5 million to the United States in satisfaction of the governments' claims for costs incurred prior to October 2018, and NRDs. In January 2019, we paid that amount into a court registry account, as required under the consent decree, and that amount will be disbursed to various government funds upon request of the United States should the decree be entered.

We remain subject to our remaining obligations under the OU1 consent decree, which now consist of long-term monitoring and maintenance. Furthermore, assuming that the Glatfelter consent decree is entered we are primarily responsible for long term monitoring and maintenance in OU2-OU4a over a period of at least 30 years. The monitoring activities consist of, among others, testing fish tissue, sampling water quality and sediment, and inspections of the engineered caps. In the first quarter of 2018, we entered into a fixed-price, 30-year agreement with a third party for the performance of all of our monitoring and maintenance obligations in OU1 through OU4a with limited exceptions, such as, for extraordinary amounts of cap maintenance or replacement. Our obligation under this agreement is included in our total reserve for the Site. If the Glatfelter consent decree is entered, we will be permitted to pay for this contract using the remaining balance of the escrow account established by us and WTM I Company ("WTM I") another PRP, under the OU1 consent decree during any period that the balance in that account exceeds the amount due under our fixed-price contract. We are obligated to make the regular payments under that fixed-price contract until the remaining amount due is paid down to below the OU1 escrow account balance. The difference at present is approximately \$2 million. We are also required to secure the payment of that difference with a renewal letter of credit or another instrument in the interim.

We and WTM I executed documents for the withdrawal of WTM I from the entity we jointly formed for the performance of the OU1 work and for the release of all claims between us related to the Site. The court overseeing WTM I's bankruptcy approved this action in May 2018. As a result, we assumed WTM I's portion of the OU1 escrow account totaling approximately \$4.7 million, and have recorded a corresponding increase of the same amount to our Fox River reserve for potential liabilities associated with the river that we believe may ultimately be satisfied with funds from the escrow account. At December 31, 2018, the combined account balance totaled \$8.9 million which is included in the consolidated balance sheet under the caption "other assets"

Under the consent decree, we will be responsible for reimbursement of government oversight costs paid from October 2018 and later over approximately the next 30 years. We anticipate that a significant portion of the oversight costs will be incurred in the next few years until such time as remediation is completed. Once completed, costs will be an order of magnitude lower in most years during the period of long-term monitoring and maintenance.

Reserves for the Site. Our reserve for past and future government oversight costs and long-term monitoring and maintenance is set forth below:

<i>In thousands</i>	Year ended December 31	
	2018	2017
Balance at January 1,	\$ 43,144	\$ 52,788
Payments	(3,054)	(9,644)
Assumption of WTM I escrow	4,746	-
Accretion	165	-
Balance at December 31,	\$ 45,001	\$ 43,144

The payments set forth above primarily represent cash paid under the recently-entered long-term monitoring and maintenance agreement. Of our total reserve for the

Fox River, \$23.0 million is recorded in the accompanying December 31, 2018 consolidated balance sheet under the caption "Environmental liabilities" and the remaining \$22.0 million is recorded under the caption "Other long term liabilities."

Range of Reasonably Possible Outcomes. Based on our analysis of all available information, including but not limited to decisions of the courts, official documents such as records of decision, discussions with legal counsel, cost estimates for future monitoring and maintenance and other post-remediation costs to be performed at the Site, we do not believe that our costs associated with the Fox River matter could exceed the aggregate amounts accrued by a material amount.

Summary. Our current assessment is that we expect the Glatfelter consent decree will be entered by the federal district court and therefore, the Fox River matter will not have a material adverse impact on us. However, if the consent decree is not entered by the district court, there can be no assurances our reserves will be adequate to provide for future obligations related to this matter.

22. SEGMENT AND GEOGRAPHIC INFORMATION

The following tables set forth profitability and other information by business unit:

For the year ended December 31, 2018 <i>In millions</i>	Composite Fibers	Advanced Airlaid Materials	Other and Unallocated	Total
Net sales	\$ 554.9	\$ 311.4	\$ —	\$ 866.3
Cost of products sold	462.3	269.3	4.3	735.9
Gross profit (loss)	92.6	42.1	(4.3)	130.4
SG&A	44.2	12.2	55.3	111.7
Gains on dispositions of plant, equipment and timberlands, net	—	—	(3.3)	(3.3)
Total operating income (loss)	48.4	29.9	(56.3)	21.9
Non-operating expense	—	—	(14.7)	(14.7)
Income (loss) before income taxes	\$ 48.4	\$ 29.9	\$ (71.0)	\$ 7.3
Supplementary Data				
Plant, equipment and timberlands, net	\$ 233.2	\$ 298.2	\$ 24.6	\$ 556.0
Depreciation, depletion and amortization	28.3	14.9	4.3	47.5
Capital expenditures	15.7	21.6	4.8	42.1

For the year ended December 31, 2017 <i>In millions</i>	Composite Fibers	Advanced Airlaid Materials	Other and Unallocated	Total
Net sales	\$ 544.3	\$ 256.1	\$ —	\$ 800.4
Cost of products sold	437.6	216.7	2.5	656.8
Gross profit (loss)	106.7	39.4	(2.5)	143.6
SG&A	44.4	9.3	56.8	110.5
Gains on dispositions of plant, equipment and timberlands, net	—	—	(0.2)	(0.2)
Total operating income (loss)	62.3	30.1	(59.1)	33.3
Non-operating expense	—	—	(13.8)	(13.8)
Income (loss) before income taxes	\$ 62.3	\$ 30.1	\$ (72.9)	\$ 19.5
Supplementary Data				
Plant, equipment and timberlands, net	\$ 254.0	\$ 235.6	\$ 25.6	\$ 515.2
Depreciation, depletion and amortization	28.3	9.6	4.2	42.1
Capital expenditures	15.9	50.6	14.3	80.8

For the year ended December 31, 2016 <i>In millions</i>	Composite Fibers	Advanced Airlaid Materials	Other and Unallocated	Total
Net sales	\$ 517.0	\$ 244.3	\$ —	\$ 761.2
Cost of products sold	416.4	209.5	3.6	629.5
Gross profit (loss)	100.6	34.8	(3.6)	131.7
SG&A	46.3	8.4	98.4	153.2
Loss on dispositions of plant, equipment and timberlands, net	—	—	0.1	0.1
Total operating income (loss)	54.3	26.4	(102.1)	(21.5)
Non-operating expense	—	—	(21.1)	(21.1)
Income (loss) before income taxes	\$ 54.3	\$ 26.4	\$ (123.2)	\$ (42.6)
Supplementary Data				
Plant, equipment and timberlands, net	\$ 235.1	\$ 179.3	\$ 14.4	\$ 428.8
Depreciation, depletion and amortization	27.8	9.0	2.5	39.3
Capital expenditures	18.8	36.8	5.6	61.2

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

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.

Management evaluates results of operations of the business units before pension expense, 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.

Our Composite Fibers business unit 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;
- **Wallcovering** 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 Laminate** 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.

The Advanced Airlaid Materials business unit is a leading global supplier of highly absorbent cellulose-based airlaid nonwoven materials used in:

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

Disaggregated revenue by market segment and geographic region for Composite Fibers and Advanced Airlaid Materials is presented in Item 8 Financial Statements and Supplementary Data, Note 6 – Revenue.

Approximately 16% of our consolidated net revenue in 2018, 2017 and 2016, were from sales to Procter & Gamble Company, a customer of the Advanced Airlaid Materials business unit.

Our net sales to external customers and location of net plant, equipment and timberlands are summarized below. Net sales are attributed to countries based upon origin of shipment.

<i>In thousands</i>	2018		2017		2016	
	Net sales	Plant, Equipment and Timberlands – Net	Net sales	Plant, Equipment and Timberlands – Net	Net sales	Plant, Equipment and Timberlands – Net
United States	\$ 124,690	\$ 109,797	\$ 89,773	\$ 105,663	\$ 74,986	\$ 44,851
Germany	483,628	286,839	450,668	240,932	427,520	220,380
United Kingdom	76,053	50,483	76,594	55,494	78,759	51,903
Canada	114,877	74,448	120,433	78,220	115,901	79,727
Other	67,038	34,477	62,894	34,874	64,050	31,911
Total	\$ 866,286	\$ 556,044	\$ 800,362	\$ 515,183	\$ 761,216	\$ 428,772

23. CONDENSED CONSOLIDATING FINANCIAL STATEMENTS

Our 5.375% Notes issued by P. H. Glatfelter Company (the “Parent”) are fully and unconditionally guaranteed, on a joint and several basis, by certain of our 100%-owned domestic subsidiaries, PHG Tea Leaves, Inc., Mollanvick, Inc., Glatfelter Composite Fibers N. A., Inc., Glatfelter Advance Materials N.A., Inc., and Glatfelter Holdings, LLC. The guarantees are subject to certain customary release provisions including i) the designation of such subsidiary as an unrestricted or excluded subsidiary; (ii) in connection with any sale or disposition of the capital stock of the subsidiary guarantor; and (iii) upon our exercise of our legal defeasance option or our covenant defeasance option, all of which are more fully described in the Indenture dated as of October 3, 2012 and the First Supplemental Indenture dated as of October 27, 2015, among us, the Guarantors and US Bank National Association, as Trustee, relating to the 5.375% Notes.

The following presents our condensed consolidating statements of income (loss), including comprehensive income (loss), and cash flows for the years ended December 31, 2018, 2017 and 2016 and our condensed consolidating balance sheets as of December 31, 2018 and 2017.

Condensed Consolidating Statement of Income (Loss) for the year ended December 31, 2018

<i>In thousands</i>	Parent Company	Guarantors	Non Guarantors	Adjustments/ Eliminations	Consolidated
Net sales	\$ -	\$ 124,716	\$ 844,005	\$ (102,435)	\$ 866,286
Costs of products sold	3,746	117,867	716,701	(102,435)	735,879
Gross profit (loss)	(3,746)	6,849	127,304	—	130,407
Selling, general and administrative expenses	45,491	1,856	64,374	—	111,721
Gain on dispositions of plant equipment and timberlands, net	(16)	(3,225)	(15)	—	(3,256)
Operating income (loss)	(49,221)	8,218	62,945	—	21,942
Other non-operating income (expense)					
Interest expense	(23,527)	(2,784)	(2,664)	13,366	(15,609)
Interest income	7,070	6,238	617	(13,366)	559
Equity in earnings of subsidiaries	53,684	51,721	—	(105,405)	—
Other, net	(714)	(6,862)	7,959	—	383
Total other non-operating income (expense)	36,513	48,313	5,912	(105,405)	(14,667)
Income (loss) before income taxes	(12,708)	56,531	68,857	(105,405)	7,275
Income tax provision (benefit)	(12,260)	3,079	16,904	—	7,723
Income (loss) from continuing operations	(448)	53,452	51,953	(105,405)	(448)
Discontinued operations:					
Income (loss) from discontinued operations before income taxes	(207,242)	—	—	—	(207,242)
Income tax provision (benefit)	(30,086)	—	—	—	(30,086)
Income (loss) from discontinued operations	(177,156)	—	—	—	(177,156)
Net income (loss)	(177,604)	53,452	51,953	(105,405)	(177,604)
Other comprehensive income (loss)	25,533	(22,411)	(23,214)	45,625	25,533
Comprehensive income (loss)	\$ (152,071)	\$ 31,041	\$ 28,739	\$ (59,780)	\$ (152,071)

Condensed Consolidating Statement of Income for the
year ended December 31, 2017

<i>In thousands</i>	Parent Company	Guarantors	Non Guarantors	Adjustments/ Eliminations	Consolidated
Net sales	\$ -	\$ 89,787	\$ 798,603	\$ (88,028)	\$ 800,362
Costs of products sold	598	85,196	659,007	(88,028)	656,773
Gross profit	(598)	4,591	139,596	—	143,589
Selling, general and administrative expenses	45,623	2,598	62,313	—	110,534
Gain on dispositions of plant equipment and timberlands, net	—	(188)	(9)	—	(197)
Operating income (loss)	(46,221)	2,181	77,292	—	33,252
Other non-operating income (expense)					
Interest expense	(15,939)	(971)	(1,801)	5,394	(13,317)
Interest income	599	4,947	85	(5,394)	237
Equity in earnings of subsidiaries	18,864	60,871	—	(79,735)	—
Other, net	2,756	(6,776)	3,315	—	(705)
Total other non-operating income (expense)	6,280	58,071	1,599	(79,735)	(13,785)
Income (loss) before income taxes	(39,941)	60,252	78,891	(79,735)	19,467
Income tax provision (benefit)	(34,329)	41,388	18,020	—	25,079
Income (loss) from continuing operations	(5,612)	18,864	60,871	(79,735)	(5,612)
Discontinued operations:					
Income from discontinued operations before income taxes	19,868	—	—	—	19,868
Income tax provision	6,342	—	—	—	6,342
Income from discontinued operations	13,526	—	—	—	13,526
Net income	7,914	18,864	60,871	(79,735)	7,914
Other comprehensive income	63,931	52,290	51,828	(104,118)	63,931
Comprehensive income	\$ 71,845	\$ 71,154	\$ 112,699	\$ (183,853)	\$ 71,845

Condensed Consolidating Statement of Income for the
year ended December 31, 2016

<i>In thousands</i>	Parent Company	Guarantors	Non Guarantors	Adjustments/ Eliminations	Consolidated
Net sales	\$ -	\$ 75,000	\$ 755,860	\$ (69,644)	\$ 761,216
Costs of products sold	240	70,991	627,880	(69,644)	629,467
Gross profit (loss)	(240)	4,009	127,980	—	131,749
Selling, general and administrative Expenses	95,846	(156)	57,463	—	153,153
Loss on dispositions of plant equipment and timberlands, net	77	—	39	—	116
Operating income (loss)	(96,163)	4,165	70,478	—	(21,520)
Other non-operating income (expense)					
Interest expense	(15,464)	(41)	(3,060)	4,715	(13,850)
Interest income	687	4,177	57	(4,715)	206
Equity in earnings of subsidiaries	61,007	58,347	—	(119,354)	—
Other, net	(8,459)	(3,966)	5,007	—	(7,418)
Total other non-operating income (expense)	37,771	58,517	2,004	(119,354)	(21,062)
Income (loss) before income taxes	(58,392)	62,682	72,482	(119,354)	(42,582)
Income tax provision (benefit)	(44,215)	1,675	14,135	—	(28,405)
Income (loss) from continuing operations	(14,177)	61,007	58,347	—	(14,177)
Discontinued operations:					
Income from discontinued operations before income taxes	53,388	—	—	—	53,388
Income tax provision	17,657	—	—	—	17,657
Income from discontinued operations	35,731	—	—	—	35,731
Net income	21,554	61,007	58,347	—	21,554
Other comprehensive income (loss)	(14,120)	(25,916)	(25,176)	51,092	(14,120)
Comprehensive income	\$ 7,434	\$ 35,091	\$ 33,171	\$ 51,092	\$ 7,434

Condensed Consolidating Balance Sheet as of December 31, 2018

<i>In thousands</i>	Parent Company	Guarantors	Non Guarantors	Adjustments/ Eliminations	Consolidated
Assets					
Cash and cash equivalents	\$ 69,574	\$ 2,924	\$ 70,187	\$ —	\$ 142,685
Other current assets	113,809	162,065	306,575	(255,848)	326,601
Current assets held for sale	—	—	—	—	—
Plant, equipment and timberlands, net	23,943	85,854	446,247	—	556,044
Investments in subsidiaries	789,958	651,873	—	(1,441,831)	—
Other assets	59,252	—	255,172	—	314,424
Noncurrent assets held for sale	—	—	—	—	—
Total assets	\$ 1,056,536	\$ 902,716	\$ 1,078,181	\$ (1,697,679)	\$ 1,339,754
Liabilities and Shareholders' Equity					
Current liabilities	\$ 212,625	\$ 105,603	\$ 170,422	\$ (255,848)	\$ 232,802
Current liabilities held for sale	—	—	—	—	—
Long-term debt	248,906	—	152,056	—	400,962
Deferred income taxes	(11,024)	15,891	73,784	—	78,651
Other long-term liabilities	67,131	107	21,203	—	88,441
Long-term liabilities held for sale	—	—	—	—	—
Total liabilities	517,638	121,601	417,465	(255,848)	800,856
Shareholders' equity	538,898	781,115	660,716	(1,441,831)	538,898
Total liabilities and shareholders' equity	\$ 1,056,536	\$ 902,716	\$ 1,078,181	\$ (1,697,679)	\$ 1,339,754

Condensed Consolidating Balance Sheet as of December 31, 2017

<i>In thousands</i>	Parent Company	Guarantors	Non Guarantors	Adjustments/ Eliminations	Consolidated
Assets					
Cash and cash equivalents	\$ 1,292	\$ 720	\$ 114,207	\$ -	\$ 116,219
Other current assets	59,341	217,822	279,626	(277,989)	278,800
Current assets held for sale	189,952	—	—	—	\$ 189,952
Plant, equipment and timberlands, net	24,671	80,992	409,520	—	515,183
Investments in subsidiaries	829,895	653,128	—	(1,483,023)	—
Other assets	82,201	—	140,529	—	222,730
Noncurrent assets held for sale	407,911	—	—	—	407,911
Total assets	<u>\$ 1,595,263</u>	<u>\$ 952,662</u>	<u>\$ 943,882</u>	<u>\$ (1,761,012)</u>	<u>\$ 1,730,795</u>
Liabilities and Shareholders' Equity					
Current liabilities	\$ 289,967	\$ 54,640	\$ 167,738	\$ (277,989)	\$ 234,356
Current liabilities held for sale	112,820	—	—	—	112,820
Long-term debt	368,496	51,000	50,602	—	470,098
Deferred income taxes	14,081	16,814	52,676	—	83,571
Other long-term liabilities	59,598	313	19,738	—	79,649
Long-term liabilities held for sale	41,373	—	—	—	41,373
Total liabilities	886,335	122,767	290,754	(277,989)	1,021,867
Shareholders' equity	708,928	829,895	653,128	(1,483,023)	708,928
Total liabilities and shareholders' equity	<u>\$ 1,595,263</u>	<u>\$ 952,662</u>	<u>\$ 943,882</u>	<u>\$ (1,761,012)</u>	<u>\$ 1,730,795</u>

Condensed Consolidating Statement of Cash Flows for the year
ended December 31, 2018

<i>In thousands</i>	Parent Company	Guarantors	Non Guarantors	Adjustments/ Eliminations	Consolidated
Net cash provided (used) by					
Operating activities	\$ (61,355)	\$ 14,707	\$ 81,131	\$ (40,435)	\$ (5,952)
Investing activities					
Expenditures for purchases of plant, equipment and timberlands	(4,799)	(14,929)	(22,401)	—	(42,129)
Proceeds from disposals of plant, equipment and timberlands, net	17	3,416	29	—	3,462
Advances of intercompany loans	(75,500)	(8,050)	—	83,550	—
Intercompany capital contributed	—	(315)	—	315	—
Intercompany capital returned	—	20,000	—	(20,000)	—
Acquisitions, net of cash acquired	—	—	(178,905)	—	(178,905)
Other	(68)	—	—	—	(68)
Total investing activities	(80,350)	122	(201,277)	63,865	(217,640)
Financing activities					
Net borrowings (repayments) of long-term debt	(120,200)	(51,000)	104,685	—	(66,515)
Payment of dividends to shareholders	(22,760)	—	—	—	(22,760)
Borrowings of intercompany loans	8,050	68,500	7,000	(83,550)	—
Intercompany capital received	—	—	315	(315)	—
Intercompany capital returned	—	—	(20,000)	20,000	—
Payment of intercompany dividend	—	(30,125)	(10,310)	40,435	—
Payments related to share-based compensation awards and other	(2,151)	—	—	—	(2,151)
Total financing activities	(137,061)	(12,625)	81,690	(23,430)	(91,426)
Effect of exchange rate on cash	—	—	(5,564)	—	(5,564)
Net increase (decrease) in cash	(278,766)	2,204	(44,020)	—	(320,582)
Change in cash from discontinued operations	347,048	—	—	—	347,048
Cash at the beginning of period	1,292	720	114,207	—	116,219
Cash at the end of period	<u>\$ 69,574</u>	<u>\$ 2,924</u>	<u>\$ 70,187</u>	<u>\$ —</u>	<u>\$ 142,685</u>

Condensed Consolidating Statement of Cash Flows for the
ended December 31, 2017

<i>In thousands</i>	Parent Company	Guarantors	Non Guarantors	Adjustments/ Eliminations	Consolidated
Net cash provided (used) by					
Operating activities	\$ (55,287)	\$ (3,506)	\$ 112,027	\$ —	\$ 53,234
Investing activities					
Expenditures for purchases of plant, equipment and timberlands	(14,301)	(45,644)	(20,838)	—	(80,783)
Proceeds from disposals of plant, equipment and timberlands, net	1	209	8	—	218
Repayments from intercompany loans	—	12,000	—	(12,000)	—
Advances of intercompany loans	—	(14,400)	—	14,400	—
Intercompany capital contributed	(14,000)	(400)	—	14,400	—
Intercompany capital returned	—	—	—	—	—
Other	(243)	—	—	—	(243)
Total investing activities	(28,543)	(48,235)	(20,830)	16,800	(80,808)
Financing activities					
Net borrowings (repayments) of long-term debt	84,200	37,000	(21,535)	—	99,665
Payment of dividends to shareholders	(22,480)	—	—	—	(22,480)
Repayments of intercompany loans	—	—	(12,000)	12,000	—
Borrowings of intercompany loans	14,400	—	—	(14,400)	—
Intercompany capital received	—	14,000	400	(14,400)	—
Payments related to share-based compensation awards and other	(472)	—	—	—	(472)
Total financing activities	75,648	51,000	(33,135)	(16,800)	76,713
Effect of exchange rate on cash	—	—	7,244	—	7,244
Net increase (decrease) in cash	(8,182)	(741)	65,306	—	56,383
Change in cash from discontinued operations	4,392	—	—	—	4,392
Cash at the beginning of period	5,082	1,461	48,901	—	55,444
Cash at the end of period	<u>\$ 1,292</u>	<u>\$ 720</u>	<u>\$ 114,207</u>	<u>\$ —</u>	<u>\$ 116,219</u>

**Condensed Consolidating Statement of Cash Flows for the year
ended December 31, 2016**

<i>In thousands</i>	Parent Company	Guarantors	Non Guarantors	Adjustments/ Eliminations	Consolidated
Net cash provided (used) by					
Operating activities	\$ (51,923)	\$ 1,275	\$ 81,726	\$ —	\$ 31,078
Investing activities					
Expenditures for purchases of plant, equipment and timberlands	(5,599)	(30,682)	(24,881)	—	(61,162)
Proceeds from disposals of plant, equipment and timberlands, net	—	—	29	—	29
Repayments from intercompany loans	—	15,601	—	(15,601)	—
Advances of intercompany loans	—	(18,330)	—	18,330	—
Intercompany capital contributed	(17,000)	(500)	—	17,500	—
Acquisitions, net of cash acquired	—	—	—	—	—
Other	(800)	—	—	—	(800)
Total investing activities	(23,399)	(33,911)	(24,852)	20,229	(61,933)
Financing activities					
Net borrowings (repayments) of long-term debt	36,000	14,000	(35,886)	—	14,114
Payments of borrowing costs	(136)	—	—	—	(136)
Payment of dividends to shareholders	(21,589)	—	—	—	(21,589)
Repayments of intercompany loans	—	—	(15,601)	15,601	—
Borrowings of intercompany loans	18,330	—	—	(18,330)	—
Intercompany capital received	—	17,000	500	(17,500)	—
Payment of intercompany dividend	—	632	(632)	—	—
Proceeds from government grants	—	2,000	—	—	2,000
Payments related to share-based compensation awards and other	(990)	—	—	—	(990)
Total financing activities	31,615	33,632	(51,619)	(20,229)	(6,601)
Effect of exchange rate on cash	—	—	(2,063)	—	(2,063)
Net increase (decrease) in cash	(43,707)	996	3,192	—	(39,519)
Change in cash from discontinued operations	(10,341)	—	—	—	(10,341)
Cash at the beginning of period	59,130	465	45,709	—	105,304
Cash at the end of period	\$ 5,082	\$ 1,461	\$ 48,901	\$ —	\$ 55,444

24. QUARTERLY RESULTS (UNAUDITED)

<i>In thousands, except per share</i>	Net sales		Gross Profit		Income (loss) from continuing operations		Earnings (loss) per share	
	2018	2017	2018	2017	2018	2017	2018	2017
First	\$ 211,209	\$ 184,941	\$ 36,561	\$ 32,781	\$ 2,268	\$ 1,701	\$ 0.05	\$ 0.04
Second	215,742	195,974	33,300	35,096	1,278	2,341	0.03	0.05
Third	209,855	210,120	29,872	37,375	(705)	5,045	(0.02)	0.11
Fourth	229,480	209,327	30,674	38,337	(3,289)	(14,699)	(0.08)	(0.34)

ITEM 9 CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURES

None.

ITEM 9A CONTROLS AND PROCEDURES

Disclosure Controls and Procedures

Our chief executive officer and our chief financial officer have, after evaluating the effectiveness of our disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)), as of December 31, 2018, concluded that, as of the evaluation date, our disclosure controls and procedures were effective.

Internal Control Over Financial Reporting

Management's report on the Company's internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) and the related report of our independent registered public accounting firm are included in Item 8 – Financial Statements and Supplementary Data.

Changes in Internal Control over Financial Reporting

On October 1, 2018, we completed the acquisition of Steinfurt. We are in the process of incorporating Steinfurt's internal controls into our control structure. We consider the ongoing integration of Steinfurt a material change in our internal control over financial reporting. There were no other changes in our internal control over financial reporting during the three months ended December 31, 2018, that have materially affected or are reasonably likely to materially affect our internal control over financial reporting.

ITEM 9B OTHER INFORMATION

None.

PART III

ITEM 10 DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Directors The information with respect to directors required under this Item is incorporated herein by reference to our Proxy Statement, to be dated on or about March 29, 2019. Our board of directors has determined that, based on the relevant experience of the members of

the Audit Committee, two of the four members are *audit committee financial experts* as this term is set forth in the applicable regulations of the SEC.

Executive Officers of the Registrant The information with respect to the executive officers required under this Item is incorporated herein by reference to "Executive Officers" as set forth in Part I, page 11 of this report.

We have adopted a Code of Business Ethics for the CEO and Senior Financial Officers (the "Code of Business Ethics") in compliance with applicable rules of the Securities and Exchange Commission that applies to our chief executive officer, chief financial officer and our principal accounting officer or controller, or persons performing similar functions. A copy of the Code of Business Ethics is filed as an exhibit to this Annual Report on Form 10-K and is available on our website, free of charge, at www.glatfelter.com.

ITEM 11 EXECUTIVE COMPENSATION

The information required under this Item is incorporated herein by reference to our Proxy Statement, to be dated on or about March 29, 2019.

ITEM 12 SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The information required under this Item is incorporated herein by reference to our Proxy Statement, to be dated on or about March 29, 2019.

ITEM 13 CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information required under this Item is incorporated herein by reference to our Proxy Statement, to be dated on or about March 29, 2019.

ITEM 14 PRINCIPAL ACCOUNTANT FEES AND SERVICES

The information required under this Item is incorporated herein by reference to our Proxy Statement, to be dated on or about March 29, 2019.

Our Chief Executive Officer has certified to the New York Stock Exchange that he is not aware of any violations by the Company of the NYSE corporate governance listing standards.

PART IV

ITEM 15 EXHIBITS, FINANCIAL STATEMENT SCHEDULES

- (a)
1. Our Consolidated Financial Statements as follows are included in Part II, Item 8:
 - i. Consolidated Statements of Income (Loss) for the years ended December 31, 2018, 2017 and 2016
 - ii. Consolidated Statements of Comprehensive Income (Loss) for the years ended December 31, 2018, 2017 and 2016
 - iii. Consolidated Balance Sheets as of December 31, 2018 and 2017
 - iv. Consolidated Statements of Cash Flows for the years ended December 31, 2018, 2017 and 2016
 - v. Consolidated Statements of Shareholders' Equity for the years ended December 31, 2018, 2017 and 2016
 - vi. Notes to Consolidated Financial Statements
 2. Financial Statement Schedules (Consolidated) included in Part IV:
 - i. Schedule II -Valuation and Qualifying Accounts - For each of the three years ended December 31, 2018

(b) Exhibit Index

Exhibit Number	Description of Documents	Incorporated by Reference to	
		Exhibit	Filing
2.1	Share Purchase Agreement, dated March 13, 2013, by and among Glatfelter Gernsbach GmbH & Co. KG. (as purchaser), P H. Glatfelter Company (as purchaser guarantor), Fortress Security Papers AG (as vendor) and Fortress Paper Ltd. (as vendor guarantor). ***	2.1	Form 10-Q filed May 9, 2013
2.2	Share Purchase Agreement, dated June 19, 2018, by and among Buckeye Holdings GmbH, Georgia-Pacific Nonwovens LLC and Glatfelter Gernsbach GmbH & Co. KG. ***	2.1	Form 8-K filed June 19, 2018
2.3	Asset Purchase Agreement, dated August 21, 2018, by and between P. H. Glatfelter Company and Spartan Paper LLC. ***	2.1	Form 8-K filed August 22, 2018
3.1	Articles of Incorporation, as amended through December 20, 2007 (restated for the purpose of filing on EDGAR).	3(b)	Form 10-K filed March 13, 2008
3.2	Amended and Restated By-Laws of P. H. Glatfelter Company, as amended, dated December 15, 2016	3.2	Form 10-K filed Feb. 24, 2017
4.1	Indenture, dated as of October 3, 2012, by and among P. H. Glatfelter Company, the Subsidiary Guarantors named therein and U.S. Bank National Association, as Trustee, relating to 5.375% Senior Notes due 2020.	4.1	Form 8-K filed Oct. 3, 2012
4.2	First Supplemental Indenture dated as of October 27, 2015 by and among P. H. Glatfelter Company, the Subsidiary Guarantors named therein and US Bank National Association, as Trustee.	4.2	Form 10-K filed Feb. 26, 2016
10.1	Third Amended and Restated Credit Agreement, dated as of February 8, 2019, by and among the Company, certain of its subsidiaries as borrowers and certain of its subsidiaries as guarantors and PNC Bank, National Association, as administrative agent, PNC Capital Markets LLC, JPMorgan Chase Bank, N.A., and HSBC Bank USA, N.A., as joint lead arrangers and joint bookrunners, and JPMorgan Chase Bank, N.A. and HSBC Bank USA, N.A., as co-syndication agents, and Cobank, ACB, Bank of America, N.A. and Manufacturers and Traders Trust Company, as co-documentation agents.	10.1	Form 8-K filed Feb. 11, 2019
10.2	First Amendment to Second Amended and Restated Credit Agreement, dated as of February 1, 2017, by and among P. H. Glatfelter Company, the Lenders party thereto, and PNC Bank, National Association, in its capacity as administrative agent for the Lenders.	10.1	Form 8-K filed Feb. 6, 2017
10.3	Loan Agreement, dated April 11, 2013, by and among Glatfelter Gernsbach GmbH & Co. KG. and IKB Deutsche Industriebank AG, Düsseldorf	10.1	Form 10-Q filed May 9, 2013
10.4	Guaranty, dated April 17, 2013, executed by P. H. Glatfelter Company (as Guarantor) in favor of IKB Deutsche Industriebank AG.	10.2	Form 10-Q filed May 9, 2013
10.5	P. H. Glatfelter Company Amended and Restated Long-Term Incentive Plan, as amended and restated effective February 23, 2017 **	10.1	Form 8-K filed May 4, 2017
10.6	P. H. Glatfelter Company Amended and Restated 2005 Management Incentive Plan, effective January 1, 2015 **	10.1	Form 8-K filed May 8, 2015
10.7	P. H. Glatfelter Company Supplemental Long Term Disability Plan, dated February 25, 2014, between the registrant and certain employees **	10.1	Form 10-Q filed May 2, 2014
10.8	P. H. Glatfelter Company Supplemental Executive Retirement Plan (amended and restated effective January 1, 2010) **	10(c)	Form 10-K filed March 8, 2013
10.9	P. H. Glatfelter Company Supplemental Management Pension Plan (amended and restated effective January 1, 2008) **	10(d)	Form 10-K filed March 8, 2013
10.10	Form of Non-Employee Director Restricted Stock Unit Award Certificate (form effective May 4, 2017) **	10.4	Form 8-K filed May 4, 2017
10.11	Form of Stock-Only Stock Appreciation Right Award Certificate (form effective February 26, 2014) **	10.3	Form 10-Q filed May 2, 2014
10.12	Form of Performance Share Award Certificate (form effective February 23, 2017) **	10.2	Form 8-K filed May 4, 2017
10.13	Form of Performance Share Award Certificate (form effective February 26, 2014) **	10.2	Form 10-Q filed May 2, 2014

Exhibit Number	Description of Documents	Incorporated by Reference to	
		Exhibit	Filing
10.14	Form of Restricted Stock Unit Award Certificate (form effective as of February 23, 2017) **	10.3	Form 8-K filed May 4, 2017
10.15	Form of Restricted Stock Unit Award Certificate (form effective as of December 13, 2013) **	10(l)	Form 10-K filed March 3, 2014
10.16	Non-Competition and Non-Solicitation Agreement by and between P. H. Glatfelter Company and Dante C. Parrini, dated July 2, 2010. **	10.1	Form 8-K filed July 6, 2010
10.17	Retention agreement between P. H. Glatfelter Company and Timothy R. Hess, dated January 7, 2017 **	10.17	Form 10-K filed Feb. 24, 2017
10.18	Restricted Stock Unit Award Certificate for Timothy R. Hess, dated as of January 6, 2017 **	10.18	Form 10-K filed Feb. 24, 2017
10.19	Form of Change in Control Employment Agreement by and between P. H. Glatfelter Company and certain employees (form effective as of March 7, 2008) **	10(j)	Form 10-K filed March 13, 2009
10.20	Form of Change in Control Employment Agreement by and between P. H. Glatfelter Company and certain employees (form effective as of August 5, 2013) **	10(q)	Form 10-K filed March 3, 2014
10.20	(A) Schedule of Change in Control Employment Agreements, filed herewith **		
10.21	Summary of Non-Employee Director Compensation, effective January 1, 2005 **	10.1	Form 8-K filed Dec. 20, 2004
10.22	P. H. Glatfelter Company Deferred Compensation Plan for Directors, effective as of January 1, 2007 **	10(k)	Form 10-K filed March 8, 2013
10.23	Service Agreement, commencing on August 1, 2006, between the Registrant (through a wholly owned subsidiary) and Martin Rapp **	10(r)	Form 10-K filed March 16, 2007
10.24	Retirement Pension Contract, dated October 31, 2007, between Registrant (through a wholly owned subsidiary) and Martin Rapp **	10(t)	Form 10-K filed March 13, 2008
10.25	Form of Director's and Officer's Indemnification Agreement **	10.1	Form 8-K filed Dec. 19, 2017
10.26	Guidelines for Executive Severance **	10.2	Form 8-K filed July 6, 2010
10.27	Consent Decree for Remedial Design and Remedial Action at Operable Unit 1 of the Lower Fox River and Green Bay Site between the United States of America and the State of Wisconsin v. P. H. Glatfelter Company and WTM I Company (f/k/a Wisconsin Tissue Mills Inc.)	10.3(a)	Form 10-Q filed August 6, 2010
10.27	(A) Agreed Supplement to Consent Decree between United States of America and the State of Wisconsin vs. P. H. Glatfelter Company and WTM I Company (f/k/a Wisconsin Tissue Mills Inc.)	10.3(b)	Form 10-Q filed August 6, 2010
10.27	(B) Second Agreed Supplement to Consent Decree between United States of America and the State of Wisconsin vs. P. H. Glatfelter Company and WTM I Company (f/k/a Wisconsin Tissue Mills Inc.)	10.3(c)	Form 10-Q filed August 6, 2010
10.27	(C) Amended Consent Decree for Remedial Design and Remedial Action at Operable Unit 1 of the Lower Fox River and Green Bay Site by and among the United States of America and the State of Wisconsin v. P. H. Glatfelter and WTM I Company (f/k/a Wisconsin Tissue Mills Inc.) (certain Appendices have been intentionally omitted, copies of which can be obtained free of charge from the Registrant)	10.3(d)	Form 10-Q filed August 6, 2010
10.28	Administrative Order for Remedial Action dated November 13, 2007, issued by the United States Environmental Protection Agency	10.2	Form 8-K filed Nov. 19, 2007
14	Code of Business Ethics for the CEO and Senior Financial Officers of Glatfelter	14	Form 10-K filed March 15, 2004
21	Subsidiaries of the Registrant, filed herewith		
23	Consent of Independent Registered Public Accounting Firm, filed herewith		
31.1	Certification of Dante C. Parrini, Chairman and Chief Executive Officer of Glatfelter, pursuant to Section 302(a) of the Sarbanes-Oxley Act Of 2002, filed herewith		
31.2	Certification of John P. Jacunski, Executive Vice President and Chief Financial Officer of Glatfelter, pursuant to Section 302(a) of the Sarbanes-Oxley Act Of 2002, filed herewith		
32.1	Certification of Dante C. Parrini, Chairman and Chief Executive Officer of Glatfelter, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, 18 U.S.C. Section 1350, furnished herewith		
32.2	Certification of John P. Jacunski, Executive Vice President and Chief Financial Officer of Glatfelter, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, 18 U.S.C. Section 1350, furnished herewith		
101.INS	XBRL Instance Document, filed herewith		
101.SCH	XBRL Taxonomy Extension Schema, filed herewith		
101.CAL	XBRL Extension Calculation Linkbase, filed herewith		
101.DEF	XBRL Extension Definition Linkbase, filed herewith		
101.LAB	XBRL Extension Label Linkbase, filed herewith		
101.PRE	XBRL Extension Presentation Linkbase, filed herewith		

*** Schedules have been omitted pursuant to Item 601(b)(2) of Regulation S-K and will be provided to the Securities and Exchange Commission upon request.

** Management contract or compensatory plan

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

P. H. GLATFELTER COMPANY
(Registrant)

February 25, 2019

By /s/ Dante C. Parrini
Dante C. Parrini
Chairman and
Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant in the capacities and on the dates indicated:

<u>Date</u>	<u>Signature</u>	<u>Capacity</u>
February 25, 2019	<u>/s/ Dante C. Parrini</u> Dante C. Parrini Chairman and Chief Executive Officer	Principal Executive Officer and Director
February 25, 2019	<u>/s/ John P. Jacunski</u> John P. Jacunski Executive Vice President and Chief Financial Officer	Principal Financial Officer
February 25, 2019	<u>/s/ David C. Elder</u> David C. Elder Vice President, Finance	Chief Accounting Officer
February 25, 2019	<u>/s/ Bruce Brown</u> Bruce Brown	Director
February 25, 2019	<u>/s/ Kathleen A. Dahlberg</u> Kathleen A. Dahlberg	Director
February 25, 2019	<u>/s/ Nicholas DeBenedictis</u> Nicholas DeBenedictis	Director
February 25, 2019	<u>/s/ Kevin M. Fogarty</u> Kevin M. Fogarty	Director
February 25, 2019	<u>/s/ J. Robert Hall</u> J. Robert Hall	Director
February 25, 2019	<u>/s/ Richard C. Ill</u> Richard C. Ill	Director
February 25, 2019	<u>/s/ Ronald J. Naples</u> Ronald J. Naples	Director
February 25, 2019	<u>/s/ Lee C. Stewart</u> Lee C. Stewart	Director

P. H. GLATFELTER COMPANY AND SUBSIDIARIES
SUPPLEMENTAL FINANCIAL STATEMENT SCHEDULE

For each of the three years ended December 31, 2018

Valuation and Qualifying Accounts

<i>In thousands</i>	Allowance for					
	Doubtful Accounts			Sales Discounts and Deductions		
	2018	2017	2016	2018	2017	2016
Balance, beginning of year	\$ 1,761	\$ 1,695	\$ 2,081	\$ 1,029	\$ 925	\$ 1,301
Provision	695	(152)	32	2,075	1,191	690
Write-offs, recoveries and discounts allowed	(688)	—	(363)	(2,294)	(1,159)	(1,054)
Other (a)	(107)	218	(55)	22	72	(12)
Balance, end of year	\$ 1,661	\$ 1,761	\$ 1,695	\$ 832	\$ 1,029	\$ 925

The provision for doubtful accounts is included in selling, general and administrative expense and the provision for sales discounts and deductions is deducted from sales. The related allowances are deducted from accounts receivable.

(a) Relates primarily to changes in currency exchange rates.

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DIRECTORS AND OFFICERS

OFFICERS AND MANAGEMENT

Dante C. Parrini

Chairman and Chief Executive Officer

Christopher W. Astley

Senior Vice President & Business Unit
President, Advanced Airlaid Materials

Samuel L. Hillard

Senior Vice President & Chief Financial Officer

Martin Rapp

Senior Vice President & Business Unit
President, Composite Fibers

Eileen L. Beck

Vice President, Human Resources

David C. Elder

Vice President, Finance

Joseph J. Zakutney

Vice President & Chief Information Officer

Ramesh Shettigar

Vice President & Treasurer

John A. Stachowiak

Vice President, Internal Audit

Jill L. Urey

Chief Legal and Compliance Officer
and Corporate Secretary

Amy R. Wannemacher

Vice President, Tax

DIRECTORS

Dante C. Parrini

Chairman and Chief Executive Officer

Bruce Brown

Retired Chief Technology Officer
Procter & Gamble

Kathleen A. Dahlberg

Chief Executive Officer
G.G.I., Inc.

Nicholas DeBenedictis

Chairman Emeritus
Aqua America, Inc.

Kevin M. Fogarty

President and Chief Executive Officer
Kraton Corporation, Inc.

J. Robert Hall

Chief Executive Officer
Ole Smoky Distillery

Richard C. III

Retired Chairman and Chief Executive Officer
Triumph Group, Inc.

Ronald J. Naples

Chairman Emeritus
Quaker Chemical Corporation

Lee C. Stewart

Private Financial Consultant

CORPORATE INFORMATION

**WORLD HEADQUARTERS
P. H. GLATFELTER COMPANY**

96 South George Street
Suite 520
York, PA 17401
phone: 717-225-2719
fax: 717-846-7208
www.glatfelter.com

**STOCK EXCHANGE
AND SYMBOL**

New York Stock Exchange
GLT

**ANNUAL MEETING
OF SHAREHOLDERS**

May 9, 2019, 9:00 a.m. EST
York County Heritage Trust
Historical Society Museum
250 East Market Street, York, PA

**TRANSFER AGENT,
DIVIDEND DISBURSING
AGENT AND REGISTRAR**

Correspondence should be mailed to:
Computershare
P.O. Box 505000
Louisville, KY 40233

Overnight correspondence should be sent to:
Computershare
462 South 4th Street, Suite 1600
Louisville, KY 40202

Shareholder website

www.computershare.com/investor

Shareholder online inquiries

<https://www-us.computershare.com/investor/Contact>

toll-free: 877-832-7259

international: 201-680-6578

INFORMATION SOURCES

For the latest quarterly business results or other information, visit www.glatfelter.com or contact:

Investor Relations
P. H. Glatfelter Company
96 South George Street
Suite 520
York, PA 17401

phone: 717-225-2719

e-mail: ir@glatfelter.com

LOCATIONS

WORLD HEADQUARTERS

P. H. Glatfelter Company

96 South George Street
Suite 520
York, PA 17401
U.S.A.

U.S. OPERATIONS

Fort Smith Facility

8201 Chad Colley Boulevard
Fort Smith, AR 72916

INTERNATIONAL OPERATIONS

Gernsbach Facility*

Hördener Straße 5
76593 Gernsbach
Germany

Dresden Facility*

Pirnaer Straße 31-33
01809 Heidenau
Germany

Ober-Schmittgen Facility*

Rhönstraße 13
Ober-Schmittgen
63667 Nidda
Germany

Scaër Facility*

BP 2
29390 Scaër
France

Lydney Facility*

Church Road
Lydney, Gloucestershire
GL15 5EJ
United Kingdom

Caerphilly Facility*

Pontygwindy Industrial Estate
Caerphilly, Mid Glamorgan
CF83 3HU
United Kingdom

Newtech Pulp Facility

Bo. Maria Cristina
9217 Balo-I, Lanao del Norte
Philippines

Gatineau Facility*

1680 rue Atmec
Gatineau, QC J8P 7G7
Canada

Falkenhagen Facility*

Gewerbepark Prignitz/Falkenhagen
Rolf-Hövelmann-Straße 10
16928 Pritzwalk
Germany

Steinfurt Facility*

Dieselstraße 16
48565
Steinfurt, Germany

SALES OFFICE-ONLY LOCATIONS

Gainesville, Georgia

351 Jesse Jewell Parkway
Suite 301
Gainesville, GA 30501
U.S.A.

Moscow, Russia

13 2-ya Zvenigorodskaya Street
Building 41 (Floor 9)
Moscow, 123022
Russia

China

Room 501
Building 24 of Times Square
Suzhou Industrial Park
215028 Suzhou
People's Republic of China

* Also a Sales Office



GLATFELTER

