



G L A T F E L T E R
Beyond Paper

2017 ANNUAL REPORT



Glatfelter is a global supplier of specialty papers and engineered materials, offering innovation, world-class service and over a century and a half of technical expertise. Headquartered in York, PA, the company employs approximately 4,200 people and serves customers in over 100 countries. U.S. operations include facilities in Arkansas, Pennsylvania and Ohio. International operations include facilities in Canada, Germany, France, the United Kingdom and the Philippines, and sales and distribution offices in China and Russia. Glatfelter's sales approximate \$1.6 billion annually and its common stock is traded on the New York Stock Exchange under the ticker symbol GLT. Additional information 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 15 of the accompanying 2017 Annual Report on Form 10-K included herein and in other filings with the SEC.

Dear Shareholders,

Glatfelter's 2017 performance is best characterized by the sharply diverging trajectories of our Engineered Materials and Specialty Papers businesses. While Composite Fibers and Advanced Airlaid Materials turned in strong results, Specialty Papers experienced exceptionally challenging market conditions that reduced its operating profit by approximately \$26 million versus 2016.

Our strategy has focused on driving growth in our Engineered Materials businesses through innovation and by making investments to expand capacity and capabilities to maximize shareholder return. As Glatfelter entered 2017, we anticipated the leading customer positions, innovative new products and healthy market fundamentals of these businesses would lead to strong growth. These business units fulfilled our expectations and drove strong earnings growth and margins to record levels. While our Engineered Materials businesses represented 50% of Glatfelter's revenues in 2017, they generated three-quarters of our adjusted EBITDA.

- Composite Fibers' 2017 operating profit of \$62.3 million rose 15% versus the prior year. Solid growth across all product lines delivered a 9% increase in shipping volume. EBITDA margins climbed to record levels due to lean manufacturing execution and continuous improvement initiatives. The business unit also successfully executed a cost optimization program that generated \$10 million in savings, positioning the business for improved margins.
- Advanced Airlaid Materials achieved record operating profit of \$30 million, up 14% over 2016. EBITDA margins also reached record levels. The business unit experienced strong demand for its feminine hygiene products, while shipments of wipes and adult incontinence products were each up 14% over the previous year. The new Fort Smith, Arkansas, facility was substantially completed and we began shipping commercial goods during the first quarter of 2018. We also installed a new modern business system at the Gatineau and Fort Smith facilities, and Falkenhagen will be online by the end of 2018. We expect this new global platform to transform the way we operate and lead to profitable growth.



Dante C. Parrini, Chairman and Chief Executive Officer

While continuing to produce high-quality, technically sophisticated products, Glatfelter PEOPLE across our company showed resilience, commitment, and passion for operational excellence by reducing costs, embracing continuous improvement, and completing a multi-year capital improvement program tied to the company's growth and sustainability efforts. However, the solid progress we made could not overshadow the stark contrast that emerged between our business units' results.

We expected that Specialty Papers would face a difficult year. But the uncoated free-sheet market deteriorated even more than envisioned as prices plunged to an 11-year low. The business unit's operating profit declined to \$15.4 million, 63% lower than the previous year. Despite aggressive cost reduction and a paper machine closure, Specialty Papers could not overcome the very difficult competitive environment.

Our safety improvement journey continued with most of Glatfelter's facilities meeting or exceeding their annual goals. Several mills reported outstanding performance and set new records as we strove to ensure that all Glatfelter PEOPLE work injury-free, every day.

The strong performances of the Engineered Materials businesses, plus the considerable progress we made in cost reduction, operating excellence and new product innovation, were not enough to overcome the competitive intensity in Specialty Papers' markets. As a result, our 2017 net sales declined 1% and adjusted earnings per share declined 16% to \$1.16.

We increased the dividend by 4% over 2016 to \$0.52 annually – the fifth year in a row it has been raised. We also maintained the strength of our balance sheet – retaining the financial flexibility to invest in our people, processes and technology while pursuing strategic growth opportunities.

LOOKING AHEAD >

With Glatfelter's Engineered Materials businesses now contributing the vast majority of our EBITDA, Specialty Papers has become less core to the success of the company. After careful study and analysis, we have concluded that Glatfelter should focus its investments and resources solely on accelerating the growth of the Composite Fibers and Advanced Airlaid Materials businesses.

On February 6, 2018, we announced that the company would undertake a review of strategic alternatives for Specialty Papers, including the potential sale of the business unit. Specialty Papers' hard work, exceptional customer service and commitment to continuous improvement have distinguished it among industry peers. We believe the business unit will benefit from stewardship whose singular goal is investing in its many strengths and attributes.

Short term, we will continue to focus Specialty Papers on delivering superior customer service, product innovation and cost optimization to enhance profitability and cash flows. The outlook for the business unit's markets should improve in 2018 as the industry shutters 10% of its capacity and pricing begins to rebound.

The outlook for 2018 and beyond is bright for our Engineered Materials businesses as their markets are expected to continue to grow with long-term growth

rates of 2% to 8%. The new Fort Smith facility adds 20% to the capacity of Advanced Airlaid Materials, and shipping volumes are expected to increase 10% to 15% in 2018 as the facility ramps up production. And demand for Composite Fibers' products is expected to remain robust.

With a period of heavy capital investment behind us, we expect improved cash flows and liquidity in 2018. With a solid balance sheet and improving cash flows, we are well positioned to continue to pursue opportunities to enhance our organic growth with acquisitions that improve our market position and drive competitive advantage.

CLOSING THOUGHTS >

Glatfelter's 2017 performance continued to demonstrate that our global Engineered Materials businesses have become the company's engines of growth. The strategy of targeting resources solely to accelerate their expansion and considering strategic alternatives for Specialty Papers will be critical to our future success. These actions are designed to make Glatfelter a more focused company, where we invest capital and resources in growth opportunities that leverage our innovative products and hard-fought positions of market leadership. Glatfelter's board and management team firmly believe this is the best path to build a more profitable and competitive company that drives future shareholder value creation.

I want to thank all shareholders for their allegiance and support as we chart the best course for our company. We are excited about the opportunities that lie ahead as we evolve our business to become a leading global engineered materials company.

Sincerely,



Dante C. Parrini

Chairman and Chief Executive Officer

March 15, 2018

UNITED STATES SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 10-K

- Annual report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934**
For the fiscal year ended December 31, 2017
or
 Transition Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934
For the transition period from _____ to _____



G L A T F E L T E R
Beyond Paper

96 South George Street, Suite 520
York, Pennsylvania 17401
(Address of principal executive offices)

(717) 225-4711
(Registrant's telephone number, including area code)

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

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

<u>Title of Each Class</u> Common Stock, par value \$.01 per share	<u>Name of Each Exchange on which registered</u> New York Stock Exchange
--	--

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No .

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes No .

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports) and (2) has been subject to such filing requirements for the past 90 days. Yes No .

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No .

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K 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, 2017, the aggregate market value of the Common Stock of the Registrant held by non-affiliates was \$833.7 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, 2018 totaled 43,688,575 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 30, 2018 are incorporated by reference to Part III.

P. H. GLATFELTER COMPANY
ANNUAL REPORT ON FORM 10-K
For the Year Ended

DECEMBER 31, 2017

Table of Contents

	<u>Page</u>		<u>Page</u>
PART I			
Item 1 Business	1	9. Stock-Based Compensation	44
Item 1A Risk Factors	6	10. Retirement Plans and Other Post-Retirement Benefits	45
Item 1B Unresolved Staff Comments	12	11. Inventories	49
Item 2 Properties	12	12. Plant, Equipment and Timberlands	49
Item 3 Legal Proceedings	12	13. Goodwill and Intangible Assets	49
Executive Officers	12	14. Other Long-Term Assets	49
Item 4 Mine Safety Disclosures	13	15. Other Current Liabilities	50
PART II		16. Long-Term Debt	50
Item 5 Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities	13	17. Fair Value of Financial Instruments	51
Common Stock Prices and Dividends Declared Information	13	18. Financial Derivatives and Hedging Activities	51
Stock Performance Graph	14	19. Shareholders' Equity	53
Item 6 Selected Financial Data	14	20. Commitments, Contingencies and Legal Proceedings	53
Item 7 Management's Discussion and Analysis of Financial Condition and Results of Operations	15	21. Segment and Geographic Information	57
Results of Operations	16	22. Condensed Consolidating Financial Statements	59
Liquidity and Capital Resources	24	23. Quarterly Results (Unaudited)	63
Critical Accounting Policies and Estimates	26	Item 9 Changes in and Disagreements With Accountants on Accounting and Financial Disclosures	64
Item 7A Quantitative and Qualitative Disclosures about Market Risk	27	Item 9A Controls and Procedures	64
Item 8 Financial Statements and Supplementary Data	28	Item 9B Other Information	64
Report of Independent Registered Public Accountants	29	PART III	
Statements of Income	31	Item 10 Directors, Executive Officers and Corporate Governance	64
Statements of Comprehensive Income	32	Item 11 Executive Compensation	64
Balance Sheets	33	Item 12 Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	64
Statements of Cash Flows	34	Item 13 Certain Relationships and Related Transactions, and Director Independence	64
Statements of Shareholders' Equity	35	Item 14 Principal Accountant Fees and Services	64
Notes to Consolidated Financial Statements		PART IV	
1. Organization	36	Item 15 Exhibits, Financial Statement Schedules	65
2. Accounting Policies	36	Signatures	
3. Energy and Related Sales, Net	39		
4. Gain on Dispositions of Plant, Equipment and Timberlands	39	Schedule II	
5. Asset Impairment Charges	39		
6. Earnings Per Share	40		
7. Accumulated Other Comprehensive Income	40		
8. Income Taxes	41		

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,” “us,” “our,” “the Company,” or “Glatfelter” refer to P. H. Glatfelter Company and subsidiaries.

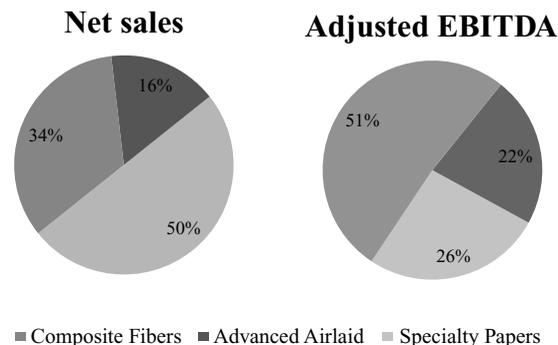
ITEM 1 BUSINESS

Overview Glatfelter began operations in 1864, and we believe we are one of the world’s leading manufacturers of specialty papers and engineered materials. We are headquartered in York, Pennsylvania, and we own and operate manufacturing facilities in Arkansas, Pennsylvania, Ohio, Canada, Germany, the United Kingdom, France, and the Philippines. In addition to many of our manufacturing locations, we have sales and distribution offices in the U.S., Russia and China. Our 13 manufacturing facilities have a combined production capacity of approximately 1.0 million tons of engineered materials and specialty papers products used in a wide array of applications. We manage our company as three separate business units: Composite Fibers; Advanced Airlaid Materials; and Specialty Papers.

Strategy Our strategy is focused on



The following charts depict Net sales and Adjusted EBITDA (earnings before interest, taxes, depreciation and amortization) by business unit for the year ended December 31, 2017.



Over the past few years, we have shifted more of our focus to developing our engineered materials businesses (Composite Fibers and Advanced Airlaid Materials). We have expanded our position in growing global markets with approximately half of our net sales and three-quarters of Adjusted EBITDA coming from these two businesses. This expansion counterbalances the decline of demand in certain markets served by Specialty Papers.

In our growth businesses, 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. For example, we invested approximately \$85 million to build a new advanced airlaid facility in Arkansas to service the North America market. The new facility will provide approximately 22,000 short tons of capacity with commercial shipments anticipated to begin in the first quarter of 2018. The investment increases our total global airlaid materials capacity to approximately 129,000 short tons.

New product development and new business development are critical components of our business. During 2017, 2016 and 2015, we invested \$10.3 million, \$10.3 million and \$10.4 million, respectively, in new product development activities.

We are committed to ensuring our cost structure is competitive and to maintaining our leading market positions, expanding product margins and generating strong free cash flows driven by delivering on cost reduction and continuous improvement initiatives. In 2017, we implemented significant cost optimization initiatives in both Composite Fibers and Specialty Papers. Combined, the actions are delivering meaningful results.

Our investment in a global business system transformation will unify our processes and systems to

improve our cost structure, facilitate global growth, empower employees, enable compliance and improve the customer experience. Advanced Airlaid Materials successfully completed implementation of a new manufacturing and business systems in North America during the fourth quarter of 2017 with implementation at our European site to follow in 2018.

Acquisitions Over the past several years, we have completed a number of acquisitions that have diversified our revenue, expanded our geographic footprint and enhanced our asset base. Our acquisition strategy is focused on targeting investments in adjacent or closely related markets and which complement our long-term strategy of driving growth in core markets. Since 2006, we have successfully completed six acquisitions demonstrating our ability to establish leading market positions through the successful acquisition and integration of complementary businesses.

Business Units We manage our company as three separate business units: Composite Fibers; Advanced Airlaid Materials; and Specialty Papers. Consolidated net sales and the relative net sales contribution of each of our business units for the past three years are summarized below:

<i>Dollars in thousands</i>	2017	2016	2015
Net sales	\$1,591,297	\$1,604,797	\$1,661,084
<i>Business unit contribution</i>			
Composite Fibers	34.2%	32.2%	32.6%
Advanced Airlaid Materials	16.1	15.2	14.7
Specialty Papers	49.7	52.6	52.7
Total	100.0%	100.0%	100.0%

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

<i>Short tons</i>	2017	2016	2015
Composite Fibers	165,775	151,766	153,766
Advanced Airlaid Materials	102,110	99,037	95,957
Specialty Papers	764,437	794,318	802,188
Total	1,032,322	1,045,121	1,051,911

Composite Fibers 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 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 markets, wallcover base material and many products it produces. This business unit's revenue composition by market consisted of the following for the years indicated:

<i>In thousands</i>	2017	2016	2015
Food & beverage	\$ 268,474	\$ 258,463	\$ 274,865
Wallcovering	103,011	90,767	91,620
Technical specialties	76,991	71,558	71,689
Composite laminates	38,696	35,107	34,897
Metallized	57,088	61,059	68,397
Total	\$ 544,260	\$ 516,954	\$ 541,468

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 2017 to 2016 by \$2.0 million and unfavorably affected the comparison of 2016 to 2015 by \$11.1 million.

We believe many of the markets served by Composite Fibers present attractive growth opportunities due to evolving consumer preferences, new or emerging geographic markets, and increased market share through superior products and quality. We also believe growth opportunities exist as a result of new product innovations. Many of this business' papers are extremely lightweight, technically sophisticated, require specialized fibers, and require specifically designed papermaking equipment and production processes. Our proven capability to produce these demanding products and our focus on customer relationships positions us well to compete in these global markets.

The 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:

Production Capacity (short tons)	Principal Raw Material ("PRM")	Estimated Annual Quantity of PRM (short tons)
155,500 lightweight and other paper	Abaca pulp	15,300
	Wood pulp	96,300
	Synthetic fiber	24,400
24,000 metallized	Base stock	23,900
18,000 abaca pulp	Abaca fiber	22,700

Composite Fibers' lightweight products are produced using highly specialized inclined wire paper machine technology. We believe we currently maintain approximately 25% of the global inclined wire capacity.

The primary raw materials used in the production of our lightweight papers are abaca pulp, wood pulp and synthetic 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 energy prices, particularly natural gas. The business unit generates all of its steam needed for production by burning natural gas. However, in 2017 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, K�ammerer and Ahlstrom
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:

- capitalizing on growing global markets in food & beverage, wallcover, electrical products 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 to support projected growth.

Advanced Airlaid Materials Our Advanced Airlaid Materials business unit is a leading global supplier of highly absorbent cellulose-based airlaid nonwoven materials primarily used to manufacture consumer products for growing global end-user markets. The markets served by Advanced Airlaid Materials include:

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

Advanced Airlaid Materials serves customers who are industry leading consumer product companies as well as private label converters. We believe this business unit holds leading market share positions in many of the markets it serves. Advanced Airlaid Materials 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>	2017	2016	2015
Feminine hygiene	\$ 179,670	\$ 173,902	\$ 182,048
Specialty wipes	29,519	25,206	22,950
Adult incontinence	14,425	12,281	10,720
Home care	13,029	12,630	13,345
Other	19,458	20,243	15,526
Total	\$ 256,101	\$ 244,262	\$ 244,589

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 unfavorably affected the comparison of 2017 to 2016 by \$2.8 million. The effect of currency changes was minimal in 2016 compared with 2015.

The feminine hygiene category accounted for 70% of Advanced Airlaid Material's revenue in 2017. The majority of sales of this product 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.

The Advanced Airlaid Materials business unit operates state-of-the-art facilities in Falkenhagen, Germany and Gatineau, Canada. The Falkenhagen location operates three multi-bonded production lines and three proprietary single-lane festooners. The Gatineau

location consists of two airlaid production lines employing multi-bonded and thermal-bonded airlaid technologies and two proprietary single-lane festooners. In addition, a new production facility in Fort Smith, Arkansas with an annual capacity of approximately 22,000 short tons, will primarily serve the growing demand for wipes and hygiene airlaid products in North America.

The business unit's three facilities operate with the following combined attributes:

Airlaid Production Capacity (short tons)	Principal Raw Material ("PRM")	Estimated Annual Quantity of PRM (short tons)
129,000	Fluff pulp	98,560

In addition to the cost of critical raw materials, our cost to produce is impacted by energy. Advanced Airlaid Materials purchases substantially all of the electricity and natural gas used in its operations. Approximately 90% 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 Materials 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
Airlaid products	Georgia-Pacific LLC, Fitesa, McAirLaid's GmbH, Domtar

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.

Specialty Papers Our North America-based Specialty Papers business unit focuses on producing papers for the following markets:

- **Carbonless & non-carbonless forms** papers for credit card receipts, multi-part forms, security papers and other end-user applications;
- **Engineered products** for high speed ink jet printing, office specialty products, greeting cards, and other niche specialty applications;
- **Envelope and converting** papers primarily utilized for transactional and direct mail envelopes; and
- **Book publishing** papers for the production of high-quality hardbound books and other book publishing needs.

This business unit produces both commodity products and higher-value-added specialty products. Specialty Papers' revenue composition by market consisted of the following for the years indicated:

<i>In thousands</i>	2017	2016	2015
Carbonless & forms	\$ 292,071	\$ 319,648	\$ 349,831
Engineered products	189,930	189,463	190,943
Envelope & converting	154,291	173,362	178,067
Book publishing	152,576	157,541	152,647
Other	2,067	3,568	3,538
Total	\$ 790,935	\$ 843,582	\$ 875,026

Many of the market segments served by Specialty Papers are characterized by declining demand resulting in an industry with excess capacity, lower operating rates and pricing pressure. In addition, foreign producers create additional imbalance by shipping product to the U.S. when market pricing is favorable. In response, we and other producers have closed, reduced or repurposed production capacity in an attempt to bring supply balance to the market. In the third quarter of 2017, we permanently shut down a machine which represented approximately 10% of Specialty Papers' annual production. Maintaining the supply and demand balance will require the industry to continually remove capacity sufficient to match declining demand.

We have been successful at maintaining this business unit's shipments by leveraging the flexibility of our assets base to respond to new product and new business development opportunities, efficiently responding to changing customer demands and delivering superior customer service.

We are one of the leading suppliers of carbonless and book publishing papers in the United States. Although the markets for these products are declining, we have been successful in executing our strategy to offset, in large part, this lost volume with products such as envelope papers, business forms, and other value-added specialty engineered products.

Specialty Papers' highly technical engineered products include high speed ink jet printing papers, office specialty products, greeting cards, packaging, casting, release, transfer, playing card, postal, FDA-compliant food and other niche specialty applications. Such products comprise an array of distinct business niches that are in a continuous state of evolution. Many of these products are utilized for demanding, specialized customer and end-user applications. Some of our products are new and higher growth while others are more mature and further along in the product life cycle. Because many of these products are technically complex and involve substantial customer-supplier development collaboration, they typically command higher per ton prices and generally exhibit greater pricing stability relative to commodity grade paper products.

The Specialty Papers business unit operates two integrated pulp and paper making facilities with the following combined attributes:

Uncoated Production Capacity (short tons)	Principal Raw Material ("PRM")	Estimated Annual Quantity of PRM (short tons)
735,000	Pulpwood	2,340,000
	Wood- and other pulps	665,515

This business unit's pulp mills have a combined pulp making capacity of 620,000 tons of bleached pulp per year. The principal raw material used to produce pulp is pulpwood, including both hardwoods and softwoods. Pulpwood is obtained from a variety of locations including the states of Pennsylvania, Maryland, Delaware, New Jersey, New York, West Virginia, Virginia, Kentucky, Ohio and Tennessee. To protect our sources of pulpwood, we actively promote conservation and forest management among suppliers and woodland owners.

The Spring Grove facility includes four uncoated paper machines as well as an off-line blade coater and a specialty coater. Annual production capacity for coated paper is approximately 65,000 tons. The Chillicothe facility operates three paper machines producing uncoated and carbonless paper. Two of the machines have built-in coating capability which along with three additional coaters across the Ohio operations' facilities provide annual coated capacity of approximately 126,000 tons.

In addition to critical raw materials, the cost to produce Specialty Papers' products is influenced by energy. In 2017, the business unit generated all of its steam needed for production and generated more power than it consumes at the Spring Grove, PA facility, and it purchased

approximately 35% of its electricity needed for the Chillicothe, OH mill. The primary fuel source for both facilities is natural gas following the conversion of their boilers from coal.

In Specialty Papers' markets, competition is product line specific due to the necessity for technical expertise and specialized manufacturing for certain products. The following chart summarizes key competitors by market segment:

Market segment	Competitor
Carbonless paper and forms	Appvion, Inc., and to a lesser extent, Georgia Pacific, Fibria Celulose, Koehler Paper, Mitsubishi Paper, Nekoosa Coated Products, Packaging Corp and Asia Pulp and Paper Co.
Engineered products	Specialty papers divisions of International Paper, Domtar Corp., Packaging Corp, and Sappi Limited, among others.
Envelope & converting	Domtar, International Paper, Georgia Pacific and Packaging Corp
Book publishing	Domtar Corp., North Pacific Paper (NORPAC), Resolute Forest and others

Customer service, product performance, technological advances and product pricing are important competitive factors with respect to all our products. We believe our reputation in these areas continues to be excellent.

To be successful in the market environment in which Specialty Papers operates, our strategy is focused on:

- new product and new business development capabilities to ensure optimal utilization of our capacity and to maximize margins;
- leveraging our flexible operating platform to optimize product mix by shifting production among the machines in our system to more closely match output with changing demand trends;
- driving operational excellence by utilizing ongoing continuous improvement methodologies to ensure efficiencies and asset reliability; and
- maintaining superior customer service.

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 21.

Concentration of Customers For each of the past three years, no single customer represented more than

10% of our consolidated net sales. However, as discussed in Item 1A Risk Factors, one customer accounted for the majority of Advanced Airlaid Materials' net sales in 2017, 2016 and 2015.

Capital Expenditures Our business is capital intensive and requires significant expenditures for equipment enhancements to support growth strategies, research and development initiatives, environmental compliance and for normal upgrades or replacements. During the past two years, we incurred significant expenditures related to Specialty Papers' environmental compliance project and for Advanced Airlaid Materials' capacity expansion project. Capital expenditures totaled \$132.3 million, \$160.2 million and \$99.9 million in 2017, 2016 and 2015, respectively. The previously mentioned projects are substantially complete and capital expenditures in 2018 are estimated to total \$67 million to \$72 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 significant costs to comply with these regulations and we could incur additional costs as new regulations are developed or regulatory priorities change.

We have incurred material capital costs to comply with new air quality regulations including the U.S. EPA Best Available Retrofit Technology rule (BART; otherwise known as the Regional Haze Rule) and the Boiler Maximum Achievable Control Technology rule (Boiler MACT).

We are a defendant 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 20.

Employees As of December 31, 2017, we employed approximately 4,175 people worldwide, of whom approximately 68% are represented by unions or labor works councils. The United Steelworkers International Union and the Office and Professional Employees International Union represents approximately 1,380 hourly employees at our Chillicothe, OH and Spring Grove, PA facilities. We have separate labor agreements covering the Ohio and Pennsylvania operations. The three year agreement covering the Ohio operations expires in August 2019 and an agreement covering the Pennsylvania operations expires in November 2020. 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, Finance, 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 \$87.7 million of our revenue in 2017 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 29% of our net sales in 2017 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.

Our airlaid materials capacity expansion project may not be successful due to unanticipated costs, unforeseen delays in production of commercially saleable products or softness in the demand for airlaid products.

We invested approximately \$85 million to construct a new airlaid production facility in Fort Smith, Arkansas, to allow us to better meet the growing demands for airlaid materials. The success of this airlaid capacity expansion is dependent on a variety of factors including, among others:

- i. our ability to complete the project, in all material respects, within budget and on schedule;
- ii. availability and costs of a qualified workforce;
- iii. qualification, and acceptance by, customers of products produced;
- iv. demand for airlaid materials and market growth rates; and
- v. technological changes and innovations.

The construction phase of the project is substantially complete and we have begun product qualification. If we incur significant unforeseen delays or if we are unable to produce commercially acceptable airlaid materials to meet growing demands, our results of operations and/or financial position may be adversely affected.

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 €145 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 \$87.7 million of our revenue in 2017 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 and the availability of certain raw materials could become constrained.

We require access to sufficient and reasonably priced quantities of pulpwood, pulps, pulp substitutes, abaca fiber, synthetic fibers, colorformers and certain other raw materials, as well as access to reliable and abundant supplies of water to support many of our production facilities.

Our Specialty Papers' locations are vertically integrated manufacturing facilities that can generate approximately 90% of their annual pulp requirements.

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.

Our Advanced Airlaid Materials business unit requires access to sufficient quantities of fluff pulp, the supply of which is subject to availability of certain softwoods. Softwood availability can be limited by many factors, including weather in regions where softwoods are abundant.

The cost of many of our production materials, including petroleum based chemicals and freight charges, are influenced by the cost of oil. In addition, we recently completed the conversion of Specialty Papers' boilers to burn natural gas as opposed to coal. Natural gas is now the principal source of fuel for each of our facilities worldwide and has historically been more volatile than other fuels.

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 Materials' 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.

Specialty Papers The primary geographic market for our Specialty Papers business unit is the United States, which has been adversely affected by declining demand for uncoated free sheet, industry capacity exceeding demand, and increased imports from foreign competitors. As a result, the industry has historically taken steps to reduce capacity, although the timing of the reductions is uncertain. Slowing demand or increased competition could force us to lower our prices or to offer additional services at a higher cost to us, which could reduce our gross margins and net income. The greater financial resources of certain of our competitors may enable them to commit larger amounts of capital in response to changing market conditions. Certain competitors may also have the ability to develop product or service innovations that could put us at a competitive disadvantage.

There have been periods of supply/demand imbalance in our industry which have caused pulp prices and our products' selling prices to be volatile. The timing and magnitude of price increases or decreases in these markets have generally varied by region and by product type. A sustained period of weak demand or excess supply would likely adversely affect pulp prices and our products' selling prices. Continued imbalance could have a material adverse effect on our operating and financial results.

Some of the other factors that may adversely affect our ability to compete in Specialty Papers' markets include:

- the entry of new competitors into the markets we serve;
- the prevalence of imported product, particularly uncoated free sheet, into the U.S.;
- the willingness of commodity-based and coated producers to enter our markets when they are unable to compete or when demand softens in their traditional markets;
- 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;
- the impact of electronic-based substitutes for certain of our products such as carbonless and forms, book publishing, and envelope papers;
- the impact of replacement or disruptive technologies;
- changes in end-user preferences;
- our inability to develop new, improved or enhanced products;
- our inability to maintain the cost efficiency of our facilities; and
- the cost of regulatory environmental compliance requirements.

Composite Fibers and Advanced Airlaid Materials

The global markets in which we compete, although growing, are not as large as the markets for Specialty Papers. As a result, our ability to compete is more 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. The Clean Air Act, and similar regulations, has imposed significant compliance costs and required significant capital expenditures. Compliance with the Clean Air Act resulted in significant process modifications to the boilers at two of our facilities in 2017 and 2016.

We anticipate that environmental regulation of our operations will continue to become more burdensome and that capital and operating expenditures necessary to comply with environmental regulations will continue, and perhaps increase, in the future. Because environmental regulations are not consistent worldwide, our ability to compete globally may be adversely affected by capital and operating expenditures required for environmental compliance. In addition, 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. See Item 1 – Environmental Matters for an additional discussion of expected costs to comply with environmental regulations.

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 20, in 2016 and 2015, we increased our reserve for potential liabilities by \$40 million and \$10 million, respectively. The increase recorded in 2016 was primarily based on our evaluation of a consent decree between two other defendants and the government agencies. We have financial reserves for this matter but we cannot be certain that those reserves will be adequate to provide for future obligations related to this matter, that our share of costs and/or damages will not exceed our available resources, or that such obligations will not have a long-term, material adverse effect on our consolidated financial position, liquidity or results of operations.

Our environmental issues are complex and should be reviewed in the context set forth in more detail in Item 8 – Financial Statements and Supplementary Data – Note 20.

The Advanced Airlaid Materials business unit 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 70% of Advanced Airlaid Materials' net sales in 2017 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 Material's 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, we own and maintain two dams in York County, Pennsylvania, that were built to ensure a steady supply of water for the operation of our facility in Spring Grove which is a primary manufacturing location for our envelope papers and engineered products. Each of these dams is classified as “high hazard” by the Commonwealth of Pennsylvania because they are located in close proximity to inhabited areas. Any sudden failure of a dam, including as a result of natural disaster or act of terrorism or sabotage, would endanger occupants and residential, commercial and industrial structures, for which we could be liable. The failure of a dam could also be extremely disruptive and result in damage to, or the shut down of, our Spring Grove mill. Any losses or liabilities incurred due to the failure of one of our dams may not be fully covered by or may substantially exceed the limits of our insurance policies and could materially and adversely affect our operating results and financial condition.

In addition, many of our papermaking 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, each of our mills has had to modify operations 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 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 cyber attacks. 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 is capital intensive and requires significant expenditures to support growth strategies, research and development initiatives, environmental compliance, 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 existing 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; Pennsylvania; Ohio; 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 Moscow, Russia, Suzhou, China and our corporate offices in York, Pennsylvania. All of our properties, other than those that are leased, are free from any material liens or encumbrances. We consider all of 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, except with respect to the Fox River matter referred to below, 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 20.

EXECUTIVE OFFICERS

The following table sets forth certain information with respect to our executive officers and other senior management members as of February 23, 2018:

Name	Age	Office with the Company
Dante C. Parrini	53	Chairman and Chief Executive Officer
John P. Jacunski	52	Executive Vice President, Chief Financial Officer
Christopher W. Astley	45	Senior Vice President & Business Unit President, Advanced Airlaid Materials
Timothy R. Hess	51	Senior Vice President & Business Unit President, Specialty Papers
Martin Rapp	58	Senior Vice President & Business Unit President, Composite Fibers
Eileen L. Beck	55	Vice President, Human Resources
David C. Elder	49	Vice President, Finance
Samuel L. Hillard	36	Vice President, Corporate Development & Strategy
Kent K. Matsumoto	58	Vice President, General Counsel and Corporate Secretary
Joseph J. Zakutney	55	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.

Timothy R. Hess was named Senior Vice President & Business Unit President, Specialty Papers in January 2017. Prior to this, Mr. Hess served as Vice President Sales & Marketing, Specialty Papers since 2014, and he was the General Manager – Engineered & Converting Products Division from 2008 - 2014. Since joining our company in 1994, Mr. Hess has held various technical, manufacturing, sales and business development positions within Glatfelter.

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.

Kent K. Matsumoto was appointed Vice President, General Counsel and Corporate Secretary in October 2013. Mr. Matsumoto joined us in June 2012 as Assistant General Counsel and also served as interim General Counsel from March 2013 to October 2013. From July 2008 until February 2012, he was Associate General Counsel for Wolters Kluwer.

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

Common Stock Prices and Dividends Declared Information

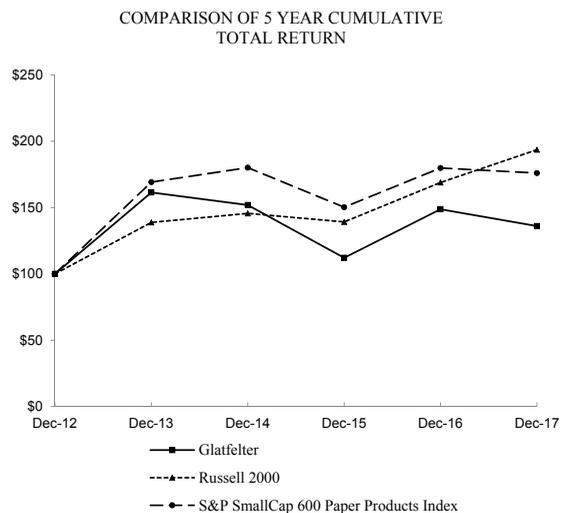
The following table shows the high and low prices of our common stock traded on the New York Stock Exchange under the symbol “GLT” and the dividend declared per share for each quarter during the past two years:

Quarter	High	Low	Dividend
2017			
Fourth	\$21.99	\$18.54	\$0.13
Third	20.72	16.53	0.13
Second	22.53	17.90	0.13
First	25.59	20.73	0.13
2016			
Fourth	\$25.49	\$17.50	\$0.125
Third	23.43	19.16	0.125
Second	23.81	18.50	0.125
First	20.94	14.09	0.125

As of February 20, 2018, we had 969 shareholders of record.

STOCK PERFORMANCE GRAPH

The following graph compares the cumulative 5-year total return of our common stock with the cumulative total returns of both a peer group and a broad market index. We compare our stock performance to the S&P Small Cap 600 Paper Products index comprised of us, Clearwater Paper Corp., Kapstone Paper & Packaging Corp., Neenah Paper Inc., and Schweitzer-Mauduit International. In addition, the chart includes a comparison to the Russell 2000, which we believe is an appropriate benchmark index for stocks such as ours. 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, 2012 and charts it through December 31, 2017.



ITEM 6 SELECTED FINANCIAL DATA

As of or for the year ended December 31
Dollars in thousands, except per share

	2017	2016	2015	2014	2013 ⁽²⁾
Net sales	\$1,591,297	\$1,604,797	\$1,661,084	\$1,802,415	\$1,722,615
Energy and related sales, net	5,126	6,141	5,664	7,927	3,153
Total revenue	1,596,423	1,610,938	1,666,748	1,810,342	1,725,768
(Losses) gains on dispositions of plant, equipment and timberlands, net	(26)	(216)	21,113	4,861	1,726
Net income	\$ 7,914 ⁽¹⁾	\$ 21,554	\$ 64,575	\$ 69,246	\$ 67,158
Earnings per share					
Basic	\$ 0.18	\$ 0.49	\$ 1.49	\$ 1.60	\$ 1.56
Diluted	0.18	0.49	1.47	1.57	1.52
Total assets	\$1,730,795	\$1,521,259	\$1,500,416	\$1,557,710	\$1,674,010
Total debt	481,396	372,608	360,662	400,818	437,925
Shareholders' equity	708,928	653,826	663,247	649,109	684,476
Cash dividends declared per common share	0.52	0.50	0.48	0.44	0.40
Depreciation, depletion and amortization	76,048	65,826	63,236	70,555	68,196
Capital expenditures	132,304	160,158	99,889	66,046	103,047
Net tons sold	1,032,322	1,045,121	1,051,911	1,059,881	1,029,819
Number of employees	4,175	4,346	4,375	4,516	4,403

(1) The 2017 results include a \$20.9 million non-cash charge related to the impact of the Tax Cuts and Jobs Act ("TCJA") which was signed into law on December 22, 2017.

(2) On April 30, 2013, we acquired Dresden Papier GmbH, the results of which are included prospectively from the acquisition date.

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, non-cash pension expense, 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 the impact of unplanned market-related downtime, variations in product pricing, or product substitution;
- ii. the impact of competition, both domestic and international, changes in industry production capacity, including the construction of new mills or new machines, 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, in particular pulpwood, pulp, pulp substitutes, synthetic pulp, colorformers, caustic soda, 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 interruption;
- ix. disruptions in production and/or increased costs due to labor disputes;
- x. the impact of exposure to volatile market-based pricing for sales of excess electricity;
- xi. the gain or loss of significant customers and/or on-going viability of such customers;
- xii. cost and other effects of environmental compliance, cleanup, damages, remediation or restoration, or personal injury or property damages related thereto, such as the costs of natural resource restoration or damages related to the presence of polychlorinated biphenyls ("PCBs") in the lower Fox River on which our former Neenah mill was located;
- xiii. adverse results in litigation in the Fox River matter;
- xiv. the impact of war and terrorism;
- xv. 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;
- xvi. enactment of adverse state, federal or foreign tax or other legislation or changes in government policy or regulation; and
- xvii. our ability to finance, consummate and integrate future acquisitions.

Introduction We manufacture a wide array of specialty papers and engineered materials. We manage our company along three business units:

- *Composite Fibers* with revenue from the sale of single-serve tea and coffee filtration papers, wallcovering base materials, metallized products, composite laminate papers, and many technically special papers including substrates for electrical applications;
- *Advanced Airlaid Materials* with revenue from the sale of airlaid nonwoven fabric-like materials used in feminine hygiene and adult incontinence products, specialty wipes, home care products and other airlaid applications; and
- *Specialty Papers* with revenue from the sale of papers for carbonless and other forms, envelopes, book publishing, and engineered products such as papers for high-speed ink jet printing, office specialty products, greeting cards, packaging, casting, release, transfer, playing card, postal, FDA-compliant food, and other niche specialty applications.

RESULTS OF OPERATIONS

2017 versus 2016

Overview Net income for the year ended December 31, 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, charges related to cost optimization actions including workforce efficiency and the reduction of underutilized capacity, costs related to our environmental compliance initiative, a capacity expansion project and a charge in 2016 related to the Fox River environmental matter. 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 \$51.5 million, or \$1.16 per diluted share for 2017, compared with \$60.7 million, or \$1.38 per diluted share, a year ago.

We generated \$104.3 million of cash from operations in 2017 compared with \$116.1 million a year ago. During 2017 and 2016, capital expenditures totaled \$132.3 million and \$160.2 million, respectively, reflecting spending in connection with the completion of multi-year major capital spending. We also returned additional cash to our shareholders in the form of a 4% increase in our dividend, the fifth consecutive year in which the dividend was increased.

The following table sets forth summarized consolidated results of operations:

<i>In thousands, except per share</i>	Year ended December 31	
	2017	2016
Net sales	\$ 1,591,297	\$ 1,604,797
Gross profit	192,510	218,603
Operating income	58,090	27,693
Net income	7,914	21,554
Earnings per diluted share	0.18	0.49

The Composite Fibers and Advanced Airlaid Materials business units reported 15% and 14% growth in operating profit, respectively. The performance of these businesses was driven by higher shipping volumes, strong operating performance, higher machine utilization and cost optimization and continuous improvement initiatives. However, Specialty Papers' profitability declined with selling prices reaching eleven year lows due to declining industry operating rates. The weakness of Specialty Papers more than offset meaningful growth in the engineered materials businesses.

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 consists of net income determined in accordance with GAAP adjusted to exclude the impact of the following:

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.

Specialty Papers environmental compliance. This adjustment reflects non-capitalized, one-time costs incurred by the business unit directly related to compliance with the U.S. EPA Best Available Retrofit Technology rule and the Boiler Maximum Achievable Control Technology rule. This adjustment includes one-time costs incurred during the construction and transition period in which the newly installed equipment was brought on-line.

U.S. Tax Reform. This adjustment reflects amounts recorded estimating the impact of the Tax Cuts and Jobs Act ("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%.

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.

Fox River environmental matter. This adjustment 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.

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, 2017 and 2016 :

<i>In thousands, except per share</i>	Year ended December 31			
	2017		2016	
	Amount	Diluted EPS	Amount	Diluted EPS
Net income	\$ 7,914	\$ 0.18	\$ 21,554	\$ 0.49
Adjustments (<i>pre-tax</i>)				
Airlaid capacity expansion costs	10,854		2,661	
Cost optimization actions	9,988		3,534	
Specialty Papers' environmental compliance	3,617		8,348	
Timberland sales and related costs	(188)		-	
Fox River environmental matter	-		40,000	
Pension settlement charge	-		7,306	
Total adjustments (<i>pre-tax</i>)	24,271		61,849	
Income taxes (1)	(1,641)		(22,719)	
U.S. Tax Reform	20,922		-	
Total after-tax adjustments	43,552	0.98	39,130	0.89
Adjusted earnings	\$ 51,466	\$ 1.16	\$ 60,684	\$ 1.38

(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		Specialty Papers		Other and Unallocated		Total	
	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016
	Net sales	\$ 544.3	\$ 517.0	\$ 256.1	\$ 244.3	\$ 790.9	\$ 843.6	\$ —	\$ —	\$ 1,591.3
Energy and related sales, net	—	—	—	—	5.1	6.1	—	—	5.1	6.1
Total revenue	544.3	517.0	256.1	244.3	796.0	849.7	—	—	1,596.4	1,610.9
Cost of products sold	437.6	416.4	216.7	209.5	734.2	752.6	15.4	13.9	1,403.9	1,392.3
Gross profit (loss)	106.7	100.6	39.4	34.8	61.8	97.1	(15.4)	(13.9)	192.5	218.6
SG&A	44.4	46.3	9.3	8.4	46.4	55.9	34.3	80.1	134.4	190.7
(Gains) losses on dispositions of plant, equipment and timberlands, net	—	—	—	—	—	—	—	0.2	—	0.2
Total operating income (loss)	62.3	54.3	30.1	26.4	15.4	41.2	(49.7)	(94.2)	58.1	27.7
Non-operating expense	—	—	—	—	—	—	(18.8)	(16.9)	(18.8)	(16.9)
Income (loss) before income taxes	\$ 62.3	\$ 54.3	\$ 30.1	\$ 26.4	\$ 15.4	\$ 41.2	\$ (68.5)	\$ (111.1)	\$ 39.3	\$ 10.8
Supplementary Data										
Net tons sold (<i>thousands</i>)	165.8	151.8	102.1	99.0	764.4	794.3	—	—	1,032.3	1,045.1
Depreciation, depletion and amortization	\$ 28.3	\$ 27.8	\$ 9.6	\$ 9.0	\$ 30.8	\$ 26.3	\$ 7.3	\$ 2.7	\$ 76.0	\$ 65.8
Capital expenditures	15.9	18.8	50.6	36.8	51.5	99.0	14.3	5.6	132.3	160.2

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 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.

Sales and Costs of Products Sold

<i>In thousands</i>	Year ended December 31		
	2017	2016	Change
Net sales	\$1,591,297	\$1,604,797	\$ (13,500)
Energy and related sales, net	5,126	6,141	(1,015)
Total revenues	1,596,423	1,610,938	(14,515)
Costs of products sold	1,403,913	1,392,335	11,578
Gross profit	\$ 192,510	\$ 218,603	\$ (26,093)
Gross profit as a percent of Net sales	12.1%	13.6%	

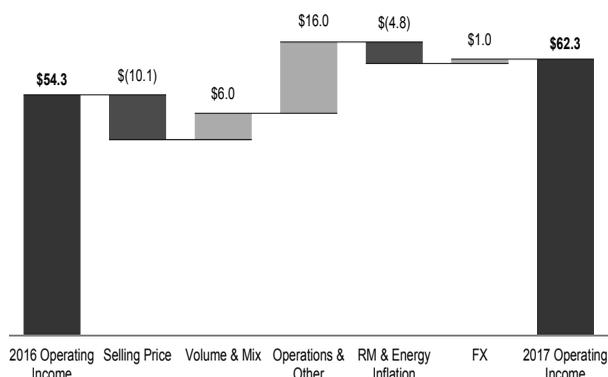
The following table sets forth the contribution to consolidated net sales by each business unit:

<i>Percent of Total</i>	Year ended December 31	
	2017	2016
Business Unit		
Composite Fibers	34.2%	32.2%
Advanced Airlaid Material	16.1	15.2
Specialty Papers	49.7	52.6
Total	100.0%	100.0%

Net sales on a consolidated basis totaled \$1,591.3 million and \$1,604.8 million in 2017 and 2016, respectively. The \$13.5 million decrease was primarily driven by \$29.7 million of lower selling prices partially offset by \$4.8 million of favorable currency translation. Shipping volumes decreased 1.2%.

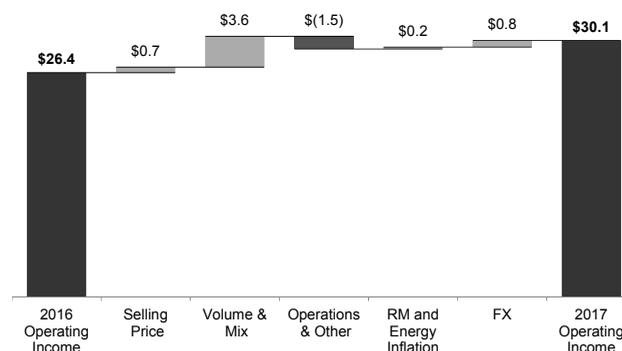
Composite Fibers' net sales increased \$27.3 million, or 5.3%, and totaled \$544.3 million in 2017. Shipping volumes in this business unit increased 9.2% and currency translation was favorable by \$2.0 million; however, selling prices unfavorably impacted the comparison by \$10.1 million.

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):



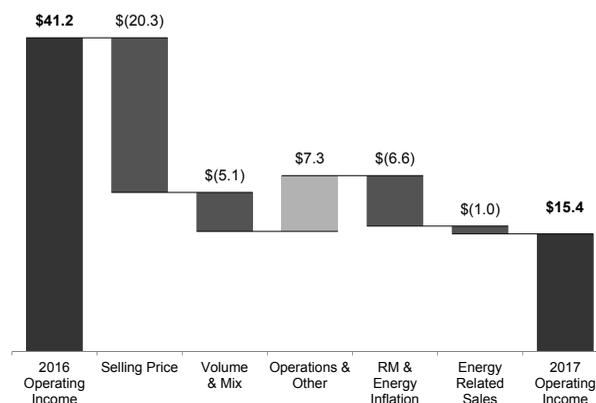
Advanced Airlaid Materials' net sales totaled \$256.1 million in 2017. Net sales increased \$11.8 million in the year-over-year comparison primarily due to higher shipping volumes which increased 3.1%.

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):



Specialty Papers' net sales decreased \$52.7 million, or 6.2% and totaled \$790.9 million in 2017. The decrease was due to a \$20.3 million impact from lower selling prices and a 3.8% decrease in shipping volumes.

Operating income totaled \$15.4 million, a decrease of \$25.8 million compared to the year ended December 31, 2016. The primary drivers of the change in operating income are summarized in the following chart (in millions):



The business unit was adversely impacted by a supply/demand imbalance affecting the broader uncoated freesheet market. The imbalance negatively impacted pricing and volume with a combined market impact \$25.4 million. Our cost optimization actions including a 15% reduction in salaried workforce, aggressive cost control actions, lower maintenance spending and improved

operating performance contributed to the \$7.3 million benefit from operations.

The following table summarizes Energy and related sales activity for the years of 2017 and 2016:

<i>In thousands</i>	Year ended December 31		
	2017	2016	Change
Energy sales	\$ 3,258	\$ 3,613	\$ (355)
Costs to produce	(3,986)	(3,972)	(14)
Net	(728)	(359)	(369)
Renewable energy credits	5,854	6,500	(646)
Total	\$ 5,126	\$ 6,141	\$ (1,015)

We sell excess power generated by the Spring Grove, PA facility. Renewable energy credits (“RECs”) represent sales of certified credits earned related to burning renewable sources of energy such as black liquor and wood waste. We sell RECs into an illiquid market. The extent and value of future revenues from REC sales is dependent on many factors outside of management’s control. Therefore, we may not be able to generate consistent additional sales of RECs in future periods.

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 \$49.7 million for 2017 compared with \$94.2 million in 2016. The comparison reflects costs incurred related to the environmental compliance and capacity expansion projects and charges for cost optimization actions. The amounts reported in 2016 includes a charge of \$40.0 million to increase our reserve for potential costs related to the Fox River environmental matter and a \$7.3 million pension settlement charge discussed below. These charges are not allocated to a business unit and are recorded in the accompanying consolidated statements of income under the caption “Selling, general and administrative expenses.” The Fox River matter is more fully discussed in Item 8, Financial Statements and Supplementary Data, Note 20.

Pension Expense The following table summarizes the amounts of normal pension expense recognized, excluding the 2016 pension settlement charge, for the periods indicated:

<i>In thousands</i>	Year ended December 31		
	2017	2016	Change
<i>Recorded as:</i>			
Costs of products sold	\$ 3,381	\$ 2,346	\$ 1,035
SG&A expense	3,264	3,149	115
Total	\$ 6,645	\$ 5,495	\$ 1,150

During 2016, pension expense totaled \$12.8 million inclusive of a one-time pension settlement charge of \$7.3 million related to the settlement of \$24.2 million of benefits in connection with a voluntary program offered to deferred vested terminated participants.

The amount of pension expense recognized each year is dependent on various actuarial assumptions and certain other factors, including discount rates and the fair value of our pension assets. Pension expense for the full year of 2018 is expected to be approximately \$7.1 million compared with \$6.6 million in 2017.

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)
2017			
Timberlands	332	\$ 209	\$ 188
Other	n/a	19	(214)
Total		\$ 228	\$ (26)
2016			
Timberlands	—	\$ -	\$ -
Other	n/a	70	(216)
Total		\$ 70	\$ (216)
2015			
Timberlands	15,628	\$ 23,917	\$ 20,867
Other	n/a	542	246
Total		\$ 24,459	\$ 21,113

Income taxes For the year ended December 31, 2017, we recorded a \$31.4 million provision for income taxes on pretax income of \$39.3 million. The comparable amounts in 2016 were a provision of \$(10.7) million and pretax income of \$10.8 million. As more fully discussed in Item 8 - Financial Statements and Supplementary Data, Note 8, 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. On an annual basis, our euro denominated revenue exceeds euro expenses by an estimated €145 million. For 2017 compared to 2016 the average currency exchange rate of the euro strengthened relative to the U.S. dollar by approximately 2.0% in the year over year comparison, and the British pound sterling to the dollar declined approximately 5.0%. 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, 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 present the impact of certain competitive advantages or disadvantages of operating or competing in multi-currency markets.

2016 versus 2015

Overview Net income for 2016 was \$21.6 million, or \$0.49 per diluted share, compared with \$64.6 million, or \$1.47 per diluted share, in 2015. The GAAP-based results reflect the impact of significant unusual and non-recurring items including, among others, a \$40.0 million charge to earnings to increase our reserve in the Fox River environmental matter, a pension settlement charge, and costs related to our environmental compliance initiative and a capacity expansion project. Excluding these items from reported results, adjusted earnings, a non-GAAP measure, was \$60.7 million, or \$1.38 per diluted share for 2016, compared with \$58.9 million, or \$1.34 per diluted share, a year ago.

We generated \$116.1 million of cash flow from operations in 2016 compared with \$133.7 million in 2015. During 2016, capital expenditures totaled \$160.2 million primarily related to the environmental compliance project for Specialty Papers and a capacity expansion project for Advanced Airlaid Materials. We also returned additional cash to our shareholders in the form of a 4% increase in the quarterly dividend beginning with the 2016 first quarter dividend payment.

The following table sets forth summarized results of operations:

<i>In thousands, except per share</i>	Year ended December 31	
	2016	2015
Net sales	\$ 1,604,797	\$ 1,661,084
Gross profit	218,603	202,965
Operating income	27,693	96,372
Net income	21,554	64,575
Earnings per diluted share	0.49	1.47

Net sales on a consolidated basis for 2016 were \$1,604.8 million compared with \$1,661.1 million for 2015. On a constant currency basis, net sales declined \$56.3 million, or 3.4%. Shipping volumes declined less than one percent.

The following table sets forth the reconciliation of net income to adjusted earnings for the years ended December 31, 2016 and 2015.

<i>In thousands, except per share</i>	Year ended December 31			
	2016		2015	
	Amount	Diluted EPS	Amount	Diluted EPS
Net income	\$ 21,554	\$ 0.49	\$ 64,575	\$ 1.47
Adjustments (<i>pre-tax</i>)				
Pension settlement charge	7,306			
Specialty Papers' environmental compliance	8,348		-	
Fox River environmental matter	40,000		10,000	
Airlaid capacity expansion costs	2,661		50	
Cost optimization actions	3,534		2,461	
Asset impairment charge	-		1,201	
Timberland sales and related costs	-		(20,867)	
Acquisition and integration related costs	-		178	
Total adjustments (<i>pre-tax</i>)	61,849		(6,977)	
Income taxes (1) (2)	(22,719)		1,328	
Total after-tax adjustments	39,130	0.89	(5,649)	(0.13)
Adjusted earnings	\$ 60,684	\$ 1.38	\$ 58,926	\$ 1.34

- (1) Tax effect for adjustments calculated based on the tax rate of the jurisdiction in which each adjustment originated.
(2) Includes release of \$1.4 million of tax reserves on timberland sales in 2015.

Business Unit Performance

Year ended December 31 <i>Dollars in millions</i>	Advanced Airlaid				Other and Unallocated				Total	
	Composite Fibers		Materials		Specialty Papers		Unallocated		2016	2015
	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015
Net sales	\$ 517.0	\$ 541.5	\$ 244.3	\$ 244.6	\$ 843.6	\$ 875.0	\$ —	\$ —	\$ 1,604.8	\$ 1,661.1
Energy and related sales, net	—	—	—	—	6.1	5.7	—	—	6.1	5.7
Total revenue	517.0	541.5	244.3	244.6	849.7	880.7	—	—	1,610.9	1,666.8
Cost of products sold	416.4	434.4	209.5	215.7	752.6	804.5	13.9	9.2	1,392.3	1,463.8
Gross profit (loss)	100.6	107.1	34.8	28.9	97.1	76.2	(13.9)	(9.2)	218.6	203.0
SG&A	46.3	45.7	8.4	7.6	55.9	43.3	80.1	31.0	190.7	127.7
Gains on dispositions of plant, equipment and timberlands, net	—	—	—	—	—	—	0.2	(21.1)	0.2	(21.1)
Total operating income (loss)	54.3	61.4	26.4	21.3	41.2	32.9	(94.2)	(19.1)	27.7	96.4
Non-operating expense	—	—	—	—	—	—	(16.9)	(17.8)	(16.9)	(17.8)
Income (loss) before income taxes	\$ 54.3	\$ 61.4	\$ 26.4	\$ 21.3	\$ 41.2	\$ 32.9	\$ (111.1)	\$ (36.9)	\$ 10.8	\$ 78.6
Supplementary Data										
Net tons sold (<i>thousands</i>)	151.8	153.8	99.0	96.0	794.3	802.2	—	—	1,045.1	1,051.9
Depreciation, depletion and amortization	\$ 27.8	\$ 26.2	\$ 9.0	\$ 8.8	\$ 26.3	\$ 26.0	\$ 2.7	\$ 2.2	\$ 65.8	\$ 63.2
Capital expenditures	18.8	26.8	36.8	7.8	99.0	63.5	5.6	1.8	160.2	99.9

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		
	2016	2015	Change
Net sales	\$ 1,604,797	\$ 1,661,084	\$ (56,287)
Energy and related sales, net	6,141	5,664	477
Total revenues	1,610,938	1,666,748	(55,810)
Costs of products sold	1,392,335	1,463,783	(71,448)
Gross profit	\$ 218,603	\$ 202,965	\$ 15,638
Gross profit as a percent of Net sales	13.6%	12.2%	

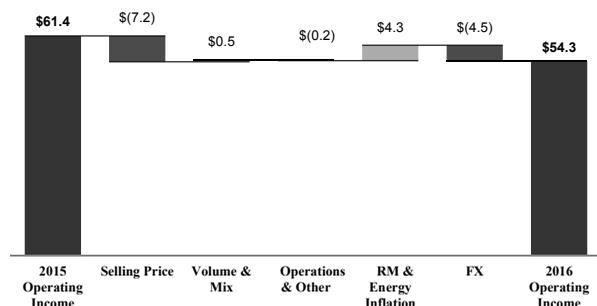
The following table sets forth the contribution to consolidated net sales by each business unit:

<i>Percent of Total</i>	Year ended December 31	
	2016	2015
Business Unit		
Composite Fibers	32.2%	32.6%
Advanced Airlaid Material	15.2	14.7
Specialty Papers	52.6	52.7
Total	100.0%	100.0%

Net sales on a consolidated basis totaled \$1,604.8 million and \$1,661.1 million in 2016 and 2015, respectively. The \$56.3 million decrease was primarily driven by \$30.8 million of lower selling prices and \$11.5 million of unfavorable currency translation. Shipping volumes decreased 0.6%.

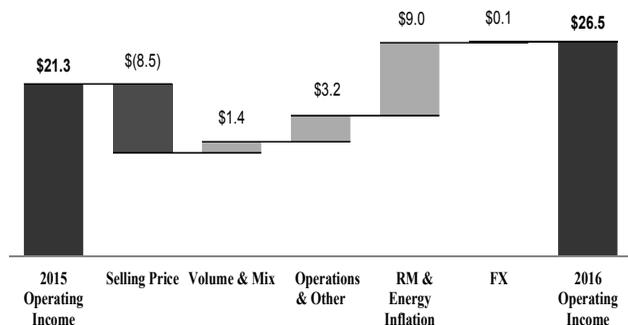
Composite Fibers' net sales decreased \$24.5 million, or 4.5%, primarily due to \$7.2 million of lower selling prices and \$11.1 million of unfavorable currency translation. Shipping volumes in this business unit decreased 1.3%.

Composite Fibers' operating income for the year ended December 31, 2016 decreased \$7.1 million to \$54.3 million. The primary drivers are summarized in the following chart (in millions):



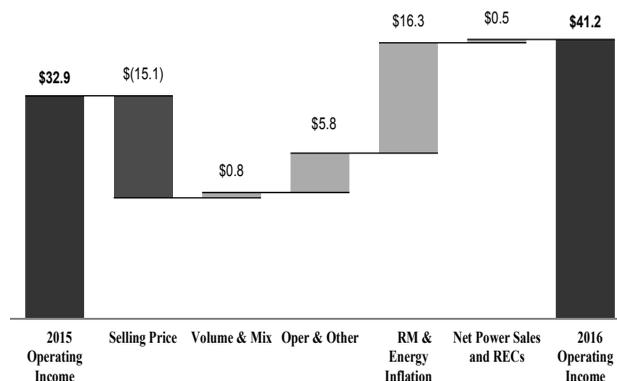
Advanced Airlaid Materials' net sales decreased \$0.3 million in the year-over-year comparison as the impact from higher shipping volumes was substantially offset by \$8.5 million of lower selling prices from the contractual adjustments due to changes in cost of certain raw materials. Shipping volumes increased 3.1%.

Advanced Airlaid Materials' operating income totaled \$26.4 million, an increase of \$5.1 million, or 23.9% compared to the same period a year ago. The primary drivers are summarized in the following chart (in millions):



Specialty Papers' net sales decreased \$31.4 million, or 3.6% due to a \$15.1 million impact from lower selling prices. Shipping volumes decreased 1.0%.

Operating income totaled \$41.2 million, an increase of \$8.3 million compared to the year ended December 31, 2015. The primary drivers are summarized in the following chart (in millions):



The following table summarizes Energy and related sales for 2016 and 2015:

In thousands	Year ended December 31		Change
	2016	2015	
Energy sales	\$ 3,613	\$ 5,315	\$ (1,702)
Costs to produce	(3,972)	(4,428)	456
Net	(359)	887	(1,246)
Renewable energy credits	6,500	4,777	1,723
Total	\$ 6,141	\$ 5,664	\$ 477

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 \$94.2 million in 2016 compared with \$19.1 million in 2015. The amounts include charges of \$40.0 million and \$10.0 million recorded in 2016 and 2015, respectively, to increase our reserve for potential 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 under the caption "Selling, general and administrative expenses." This matter is more fully discussed in Item 8, Financial Statements and Supplementary Data, Note 20. In addition, the comparison reflects \$21.1 million of lower gains in 2016 than 2015 from sales of timberlands. The remaining increase is due to the environmental compliance and capacity expansion projects, a pension settlement charge and a charge for cost optimization actions.

Pension Expense Pension expenses are not allocated to a business unit. The following table summarizes the amounts of pension expense, excluding a \$7.3 million pension settlement charge, recognized for the periods indicated:

<i>In thousands</i>	Year ended December 31		Change
	2016	2015	
<i>Recorded as:</i>			
Costs of products sold	\$ 2,346	\$ 7,043	\$ (4,697)
SG&A expense	3,149	2,038	1,111
Total	\$ 5,495	\$ 9,081	\$ (3,586)

The amount of pension expense recognized each year is dependent on various actuarial assumptions and certain other factors, including discount rates, mortality, and the fair value of our pension assets.

Gain (Loss) on Sales of Plant, Equipment and Timberlands, net During years indicated, we completed the following sales of assets:

<i>Dollars in thousands</i>	Acres	Proceeds	Gain (loss)
2016			
Other	n/a	\$ 70	\$ (216)
Total		\$ 70	\$ (216)
2015			
Timberlands	15,628	\$ 23,917	\$ 20,867
Other	n/a	542	246
Total		\$ 24,459	\$ 21,113

Income taxes For the year ended December 31, 2016, we recorded a \$10.7 million benefit from income taxes on pretax income of \$10.8 million. The comparable amounts in 2015 were a provision of \$14.0 million and pretax income of \$78.6 million. 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. The effective tax rate in each period reflects a greater proportion of earnings generated in lower tax foreign jurisdictions relative to the U.S.

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 2016, our euro denominated revenue exceeds euro expenses by an estimated €130 million. For 2016 compared to 2015 the average currency exchange rate of the euro to U.S. dollar was essentially unchanged in the year over year comparison, although the British pound sterling to the dollar declined approximately 17%. 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, 2016
	Favorable (unfavorable)
Net sales	\$ (11,502)
Costs of products sold	5,762
SG&A expenses	1,284
Income taxes and other	550
Net income	\$ (3,906)

The above table only presents the financial reporting impact of foreign currency translations assuming currency exchange rates in 2016 were the same as 2015. 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 is capital intensive and requires significant expenditures for new or enhanced equipment, research and development efforts, environmental compliance matters including, but not limited to, the Clean Air Act, and to support our business strategy including the capacity expansion project for Advanced Airlaid Materials. 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	
	2017	2016
Cash and cash equivalents at beginning of period	\$ 55,444	\$ 105,304
Cash provided (used) by		
Operating activities	104,262	116,110
Investing activities	(132,319)	(160,888)
Financing activities	81,588	(3,019)
Effect of exchange rate changes on cash	7,244	(2,063)
Net cash provided (used)	60,775	(49,860)
Cash and cash equivalents at end of period	\$ 116,219	\$ 55,444

At December 31, 2017, we had \$116.2 million in cash and cash equivalents held by both domestic and foreign subsidiaries. In addition to our cash and cash equivalents, \$67.5 million was available under our revolving credit agreement, which matures in March 2020. Substantially all of our cash and cash equivalents is held by our foreign subsidiaries but could be repatriated without incurring a significant amount of additional taxes.

Cash provided by operating activities totaled \$104.3 million in 2017 compared with \$116.1 million a year ago. The decrease in cash from operations primarily reflects cash paid for the cost optimization initiatives in Specialty Papers and Composite Fibers and costs associated with the Airlaid capacity expansion and movement in other accruals. The use of cash for these factors was partially offset by \$22.7 million from improved working capital.

Net cash used by investing activities decreased by \$28.6 million in the year-over-year comparison primarily due to lower capital expenditures for Specialty Papers' environmental compliance and Advanced Airlaid Materials' capacity expansion projects which totaled \$58.8 million in 2017 compared to \$100.2 million in 2016. These two major capital projects are substantially complete with spending related to them in 2018 expected to be approximately \$9 million. Capital expenditures are expected to total between \$67 million and \$72 million for 2018.

Net cash provided by financing activities totaled \$81.6 million in 2017 compared with a use of \$3.0 million in 2016. The increase in cash provided by financing activities primarily reflects additional borrowings under our revolving credit agreement to support capital

spending for our major capital programs.

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

<i>In thousands</i>	December 31	
	2017	2016
Revolving credit facility, due Mar. 2020	\$ 171,200	\$ 61,595
5.375% Notes, due Oct. 2020	250,000	250,000
2.40% Term Loan, due Jun. 2022	7,710	8,282
2.05% Term Loan, due Mar. 2023	33,607	35,163
1.30% Term Loan, due Jun. 2023	9,423	9,788
1.55% Term Loan, due Sep. 2025	11,390	10,333
Total long-term debt	483,330	375,161
Less current portion	(11,298)	(8,961)
Unamortized deferred issuance costs	(1,934)	(2,553)
Long-term debt, net of current portion	\$ 470,098	\$ 363,647

Our revolving credit facility contains a number of customary compliance covenants, the most restrictive of which is a maximum leverage ratio of 3.5x. As of December 31, 2017, the leverage ratio, as calculated in accordance with the definition in our amended credit agreement, was 2.5x, within the limits set forth in our credit agreement. Based on our expectations of future results of operations and capital needs, we do not believe the debt covenants will impact our operations or limit our ability to undertake financings that may be necessary to meet our capital needs.

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 credit agreement at maturity, or a default under the credit agreement that accelerates the debt outstanding thereunder. As of December 31, 2017, we met all of the requirements of our debt covenants. The significant terms of the debt instruments are more fully discussed in Item 8 - Financial Statements and Supplementary Data – Note 16.

Financing activities includes cash used for common stock dividends which reflects a 4% increase in our quarterly cash dividend rate in 2017. In 2017, we used \$22.5 million of cash for dividends on our common stock compared with \$21.6 million in 2016. 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.

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 significant costs to comply with these regulations and we could incur additional costs as new regulations are developed or regulatory priorities change. We have incurred material capital costs to comply with new air quality regulations including the U.S. EPA Best Available Retrofit Technology rule (BART; otherwise known as the Regional Haze Rule) and the Boiler Maximum Achievable Control Technology rule (Boiler MACT). These rules

required process modifications and/or installation of air pollution controls on boilers at two of our facilities. We converted or replaced five coal-fired boilers to natural gas and upgraded site infrastructure to accommodate the new boilers, including connecting to gas pipelines. Net of government grants, the total cost of these projects was \$105.6 million.

As more fully discussed in Item 8 - Financial Statements and Supplementary Data – Note 20 – Commitments, Contingencies and Legal Proceedings (“Note 20”), 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 response costs and long-term monitoring and maintenance related matters. Based on the recent developments more fully discussed in Note 20, it is conceivable the resolution of this matter may require us to spend in excess of \$28 million in 2018 to settle past and future costs and for certain monitoring activities. Although we are unable to determine

with any degree of certainty the amount we may be required to spend, the recent developments provide greater clarity to the extent of such amounts.

We expect to meet all of 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. However, as discussed in Note 20, an unfavorable outcome of the Fox River matters could have a material adverse impact on our consolidated financial position, liquidity and/or results of operations.

Off-Balance-Sheet Arrangements As of December 31, 2017 and 2016, 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.

Contractual Obligations The following table sets forth contractual obligations as of December 31, 2017:

<i>In millions</i>	Total	Payments Due During the Year Ended December 31,			
		2018	2019 to 2020	2021 to 2022	2023 and beyond
Long-term debt ⁽¹⁾	\$ 535	\$ 31	\$ 475	\$ 23	\$ 6
Operating leases ⁽²⁾	37	13	10	6	8
Purchase obligations ⁽³⁾	168	116	50	2	—
Other long term obligations ^{(4), (5)}	63	6	13	13	31
Total	\$ 803	\$ 166	\$ 548	\$ 44	\$ 45

- (1) Represents 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 16, “Long-term Debt.” The amounts set forth above include expected interest payments of \$52 million over the term of the underlying debt instruments based contractual rates or current market rates in the case of variable rate instruments. See Item 8 – Financial Statements, Note 16, “Long-Term Debt”.
- (2) Represents rental agreements for various buildings, vehicles, and computer and office equipment.
- (3) Represents open purchase order commitments 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, 2017.
- (4) Primarily represents expected benefits 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 8, “Income Taxes”, such amounts totaled \$27 million at December 31, 2017.

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-lived Assets We evaluate the recoverability of our long-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, on a discounted cash flow basis, during the third quarter of each year for impairment or more frequently if impairment indicators are present. 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 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 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:

	2017	2016	2015
Pension plans			
Weighted average discount rate for benefit expense	4.43%	4.65%	4.21%
for benefit obligation	3.85%	4.43%	4.65%
Expected long-term rate of return on plan assets ⁽¹⁾	7.25%	7.75%	8.00%
Rate of compensation increase	3.00%	3.50%	4.00%
Post-employment medical			
Weighted average discount rate for benefit expense	4.18%	4.38%	3.89%
for benefit obligation	3.68%	4.18%	4.38%
Health care cost trend rate assumed for next year	6.20%	6.50%	6.80%
Ultimate cost trend rate	4.50%	4.50%	4.50%
Year that the ultimate cost trend rate is reached	2037	2037	2037

- (1) For 2018, the expected long-term rate of return on plan assets was reduced to 7.00% 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, 2017	
	2018	2019	2020	2021	2022	Carrying Value	Fair Value
Long-term debt							
Average principal outstanding							
At fixed interest rates – Bond	\$250,000	\$250,000	\$218,750	\$ —	\$ —	\$ 250,000	\$ 253,823
At fixed interest rates – Term Loans	56,482	45,184	33,887	22,588	11,933	62,130	62,701
At variable interest rates	171,200	171,200	35,667	—	—	171,200	171,200
						<u>\$ 483,330</u>	<u>\$ 487,724</u>
Weighted-average interest rate							
On fixed rate debt – Bond	5.375%	5.375%	5.375%	—	—		
On fixed rate debt – Term Loans	1.88%	1.87%	1.85%	1.82%	1.77%		
On variable rate debt	2.99%	2.99%	2.99%	—	—		

The table above presents the average principal outstanding and related interest rates for the next five years for debt outstanding as of December 31, 2017. 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, 2017, we had \$481.4 million of long-term debt, net of deferred debt issuance costs. Approximately 35.4% 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, 2017, the interest rate paid was 2.99%. A hypothetical 100 basis point increase or decrease in the interest rate on variable rate debt would increase or decrease annual interest expense by \$1.7 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 18.

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. Our euro denominated revenue exceeds euro expenses by an estimated €145 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, 2017, 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). Management has determined that the Company's internal control over financial reporting as of December 31, 2017, 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, 2017, 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, 2017.

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, 2017, 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, 2017, 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, 2017, of the Company and our report dated February 23, 2018, expressed an unqualified opinion on those financial statements.

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.

DELOITTE & TOUCHE LLP

Philadelphia, Pennsylvania
February 23, 2018

**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, 2017 and 2016, the related consolidated statements of income, comprehensive income, shareholders' equity, and cash flows for each of the three years in the period ended December 31, 2017, 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, 2017 and 2016, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2017, 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, 2017, 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 23, 2018, 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.

DELOITTE & TOUCHE LLP

Philadelphia, Pennsylvania
February 23, 2018

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

<i>In thousands, except per share</i>	Year ended December 31		
	2017	2016	2015
Net sales	\$ 1,591,297	\$ 1,604,797	\$ 1,661,084
Energy and related sales, net	5,126	6,141	5,664
Total revenues	1,596,423	1,610,938	1,666,748
Costs of products sold	1,403,913	1,392,335	1,463,783
Gross profit	192,510	218,603	202,965
Selling, general and administrative expenses	134,394	190,694	127,706
Losses (gains) on dispositions of plant, equipment and timberlands, net	26	216	(21,113)
Operating income	58,090	27,693	96,372
Non-operating income (expense)			
Interest expense	(17,772)	(15,822)	(17,464)
Interest income	237	206	283
Other, net	(1,220)	(1,271)	(615)
Total non-operating expense	(18,755)	(16,887)	(17,796)
Income before income taxes	39,335	10,806	78,576
Income tax provision (benefit)	31,421	(10,748)	14,001
Net income	\$ 7,914	\$ 21,554	\$ 64,575
Earnings per share			
Basic	\$ 0.18	\$ 0.49	\$ 1.49
Diluted	0.18	0.49	1.47
Cash dividends declared per common share	\$ 0.52	\$ 0.50	\$ 0.48
Weighted average shares outstanding			
Basic	43,609	43,558	43,397
Diluted	44,439	44,129	43,942

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

P. H. GLATFELTER COMPANY AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

<i>In thousands</i>	Year ended December 31		
	2017	2016	2015
Net income	\$ 7,914	\$ 21,554	\$ 64,575
Foreign currency translation adjustments	58,609	(27,407)	(38,817)
Net change in:			
Deferred gains (losses) on cash flow hedges, net of taxes of \$1,930, \$(335) and \$880, respectively	(5,592)	1,725	(2,581)
Unrecognized retirement obligations, net of taxes of \$(6,293), \$(7,247) and \$(2,920), respectively	10,914	11,562	5,782
Other comprehensive income (loss)	63,931	(14,120)	(35,616)
Comprehensive income	<u>\$ 71,845</u>	<u>\$ 7,434</u>	<u>\$ 28,959</u>

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

P. H. GLATFELTER COMPANY AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS

<i>In thousands</i>	December 31	
	2017	2016
Assets		
Cash and cash equivalents	\$ 116,219	\$ 55,444
Accounts receivable (less allowance for doubtful accounts: 2017 - \$1,957; 2016 - \$1,719)	174,154	152,989
Inventories	252,064	249,669
Prepaid expenses and other current assets	42,534	36,157
Total current assets	584,971	494,259
Plant, equipment and timberlands, net	865,743	775,898
Goodwill	82,744	73,094
Intangible assets, net	58,859	56,259
Other assets	138,478	121,749
Total assets	\$ 1,730,795	\$ 1,521,259
Liabilities and Shareholders' Equity		
Current portion of long-term debt	\$ 11,298	\$ 8,961
Accounts payable	190,478	164,345
Dividends payable	5,678	5,455
Environmental liabilities	28,500	25,000
Other current liabilities	111,222	119,250
Total current liabilities	347,176	323,011
Long-term debt	470,098	363,647
Deferred income taxes	83,571	54,995
Other long-term liabilities	121,022	125,780
Total liabilities	1,021,867	867,433
Commitments and contingencies	—	—
Shareholders' equity		
Common stock, \$0.01 par value; authorized - 120,000,000; issued - 54,361,980 (including treasury shares: 2017 - 10,748,127; 2016 - 10,812,341)	544	544
Capital in excess of par value	62,594	57,917
Retained earnings	948,411	962,884
Accumulated other comprehensive loss	(140,675)	(204,606)
	870,874	816,739
Less cost of common stock in treasury	(161,946)	(162,913)
Total shareholders' equity	708,928	653,826
Total liabilities and shareholders' equity	\$ 1,730,795	\$ 1,521,259

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

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

<i>In thousands</i>	Year ended December 31		
	2017	2016	2015
Operating activities			
Net income	\$ 7,914	\$ 21,554	\$ 64,575
Adjustments to reconcile to net cash provided by operations:			
Depreciation, depletion and amortization	76,048	65,826	63,236
Amortization of debt issue costs and original issue discount	1,157	1,153	1,184
Pension expense, net of unfunded benefits paid	4,933	11,180	7,383
Charge for impairment of intangible asset	—	—	1,200
Deferred income tax provision (benefit)	19,026	(22,055)	(1,902)
(Gains) losses on dispositions of plant, equipment and timberlands, net	26	216	(21,113)
Share-based compensation	6,214	5,889	7,244
Change in operating assets and liabilities			
Accounts receivable	(10,189)	8,372	(13,312)
Inventories	9,198	(10,778)	(8,054)
Prepaid and other current assets	(6,300)	(2,430)	5,506
Accounts payable	13,065	(8,174)	26,042
Accruals and other current liabilities	(17,615)	43,195	(2,186)
Other	785	2,162	3,940
Net cash provided by operating activities	104,262	116,110	133,743
Investing activities			
Expenditures for purchases of plant, equipment and timberlands	(132,304)	(160,158)	(99,889)
Proceeds from disposals of plant, equipment and timberlands, net	228	70	24,459
Acquisition, net of cash acquired	—	—	(224)
Other investing	(243)	(800)	(1,600)
Net cash used by investing activities	(132,319)	(160,888)	(77,254)
Financing activities			
Net borrowings (repayments) under revolving credit facility	109,436	2,891	(22,294)
Payments of borrowing costs	—	(136)	(1,329)
Proceeds from term loans	—	19,428	2,873
Repayment of term loans	(9,771)	(8,205)	(5,229)
Payments of dividends	(22,480)	(21,589)	(20,443)
Proceeds from government grants	4,875	5,582	421
Payments related to share-based compensation awards and other	(472)	(990)	(2,015)
Net cash provided (used) by financing activities	81,588	(3,019)	(48,016)
Effect of exchange rate changes on cash	7,244	(2,063)	(3,006)
Net increase (decrease) in cash and cash equivalents	60,775	(49,860)	5,467
Cash and cash equivalents at the beginning of period	55,444	105,304	99,837
Cash and cash equivalents at the end of period	\$ 116,219	\$ 55,444	\$ 105,304
Supplemental cash flow information			
Cash paid for:			
Interest, net of amounts capitalized	\$ 16,476	\$ 14,569	\$ 16,256
Income taxes, net	9,336	14,020	15,849

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, 2017, 2016 and 2015

<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, 2015	\$ 544	\$ 54,342	\$ 919,468	\$ (154,870)	\$ (170,375)	\$ 649,109
Net income			64,575			64,575
Other comprehensive loss				(35,616)		(35,616)
Comprehensive income						28,959
Tax effect on exercise of stock awards		843				843
Cash dividends declared (\$0.48 per share)			(20,900)			(20,900)
Share-based compensation expense		4,403				4,403
Delivery of treasury shares						
RSUs and PSAs		(5,078)			3,102	(1,976)
401 (k) plans		838			2,010	2,848
Employee stock options exercised — net		(436)			397	(39)
Balance at December 31, 2015	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	<u>\$ 544</u>	<u>\$ 62,594</u>	<u>\$ 948,411</u>	<u>\$ (140,675)</u>	<u>\$ (161,946)</u>	<u>\$ 708,928</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 manufacturer of specialty papers and engineered materials. Headquartered in York, PA, U.S. operations include facilities in Fort Smith, Arkansas, Spring Grove, PA and Chillicothe and Fremont, OH. International operations include facilities in Canada, Germany, France, the United Kingdom and the Philippines. In addition to many of our manufacturing locations, we have sales and distribution offices in the U.S., Russia and China. Our products are marketed worldwide, either through wholesale paper merchants, brokers and agents, or directly to customers.

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.

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 inventories of our U.S. manufacturing operations are valued using the last-in, first-out (LIFO) method, and the supplies inventories are valued principally using the average-cost method. Inventories at our foreign operations are valued 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, on a discounted cash flow basis, during the third quarter of each year for impairment or more frequently if impairment indicators are present. 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 tradename, 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 recognize revenue on product sales when the customer takes title and assumes the risks and rewards of ownership. Substantially all of our revenue is earned pursuant to contracts under which we have one performance obligation that is satisfied at a point-in-time. Estimated costs for sales incentives, discounts and sales returns and allowances are recorded as sales deductions in the period in which the related revenue is recognized.

Revenue from energy sales is recognized when electricity is delivered to the customer. Certain costs associated with the production of electricity, such as fuel, labor, depreciation and maintenance are netted against energy sales for presentation on the consolidated statements of income.

Revenue from renewable energy credits is recorded under the caption "Energy and related sales, net" in the consolidated statements of income and is recognized when all risks, rights and rewards to the certificate are transferred to the counterparty.

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 per share is computed by dividing net income 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. 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 March 2016, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update (“ASU”) No. 2016-09, *Compensation – Stock Compensation (Topic 718) Improvements to Employee Share-Based Payment Accounting* designed to simplify certain aspects of accounting for share-based awards. The new ASU requires entities to recognize as a component of income tax expense all excess tax benefits or deficiencies arising from the difference between compensation costs recognized and the intrinsic value at the time an option is exercised or, in the case of restricted stock and similar awards, the fair value upon vesting of an award. Previously such differences were recognized in additional paid in capital as part of an “APIC pool.” The ASU also requires entities to exclude excess tax benefits and tax deficiencies from the calculation of common share equivalents for purposes of calculating earnings per share. In addition, as permitted by the ASU, we have elected to account for the impact of forfeitures as they occur rather than to estimate forfeitures for purposes of recognizing compensation expense. We adopted this standard effective January 1, 2017, on a prospective basis; however, the adoption of the new standard did not have a material impact on our reported results of operations or financial position.

In May 2014, the FASB issued ASU No. 2014-09, *Revenue from Contracts with Customers* which clarifies the principles for recognizing revenue and develops a common revenue standard for GAAP and International Financial Reporting Standards. The new standard is required to be adopted retrospectively for fiscal years beginning after December 15, 2017. The ASU requires additional disclosure about the nature, amount, timing and uncertainty of revenue and cash flows arising from customer contracts, including significant judgments and

changes in judgments. Substantially all of our revenue is earned pursuant to contracts under which we have one performance obligation that is satisfied at a point-in-time. We have completed our review of our contracts and have determined this ASU will not have an impact on the timing or amount of revenue recognition, our results of operations or our financial position. We have elected to use the modified retrospective method of adoption.

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 will be 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. ASU 2017-07 is effective for fiscal years and interim periods beginning after December 15, 2017, and early adoption is permitted. We will adopt this standard beginning with first quarter 2018 financial statements and all previously presented consolidated statements of income will be represented to reflect the reclassification and will result in a reduction of operating income of \$2.7 million in 2017 and an increase of \$3.4 million for 2016. Such amounts will be reclassified to “Non-operating income (expense).”

In February 2016, the FASB issued ASU No. 2016-02, *Leases (Topic 842)*. This ASU will require organizations such as us that lease assets to recognize on the balance sheet the assets and liabilities for the rights and obligations created by those leases. The new guidance will be effective for annual periods beginning after December 15, 2018, and interim periods therein. Early adoption is permitted. We are in the process of assessing the impact this standard will have on us and expect to follow a modified retrospective method provided for under the standard.

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. We are currently evaluating the impact the adoption of ASU 2017-12 will have 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. ENERGY AND RELATED SALES, NET

We sell excess power generated by the Spring Grove, PA facility. We also sell renewable energy credits generated by the Spring Grove, PA and Chillicothe, OH facilities representing sales of certified credits earned related to burning renewable sources of energy such as black liquor and wood waste.

The following table summarizes this activity for each of the past three years:

<i>In thousands</i>	Year ended December 31		
	2017	2016	2015
Energy sales	\$ 3,258	\$ 3,613	\$ 5,315
Costs to produce	(3,986)	(3,972)	(4,428)
Net	(728)	(359)	887
Renewable energy credits	5,854	6,500	4,777
Total	\$ 5,126	\$ 6,141	\$ 5,664

4. GAIN ON DISPOSITIONS OF PLANT, EQUIPMENT AND TIMBERLANDS

During 2017, 2016 and 2015, we completed the following sales of assets:

<i>Dollars in thousands</i>	Acres	Proceeds	Gain (loss)
2017			
Timberlands	332	\$ 209	\$ 188
Other	n/a	19	(214)
Total		\$ 228	\$ (26)
2016			
Timberlands	—	\$ -	\$ -
Other	n/a	70	(216)
Total		\$ 70	\$ (216)
2015			
Timberlands	15,628	\$ 23,917	\$ 20,867
Other	n/a	542	246
Total		\$ 24,459	\$ 21,113

5. ASSET IMPAIRMENT CHARGES

In connection with our annual test of potential impairment of indefinite lived intangible assets, in 2015 we recorded a non-cash impairment charge of \$1.2 million. No such charges were recorded in 2017 or 2016. A trade name intangible asset was acquired in connection with our Composite Fibers business unit's 2013 Dresden acquisition. The charge was due to changes in the estimated fair value of the trade name, primarily driven by lower forecasted revenues associated with the business, an increase in discount rates related to Dresden's business in Russia and Ukraine and this region's political and economic instability. The fair value of the asset was estimated using a discounted cash flow model under a relief from royalty method. The significant assumptions used included projected financial performance and discount rates, which resulted in a Level 3 fair value classification.

The charge is recorded in the accompanying consolidated statements of income under the caption "Selling, general and administrative expenses." For additional information on Goodwill and Intangible Assets, see Note 13.

6. EARNINGS PER SHARE

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

<i>In thousands, except per share</i>	Year ended December 31		
	2017	2016	2015
Net income	\$ 7,914	\$21,554	\$64,575
Weighted average common shares outstanding used in basic EPS	43,609	43,558	43,397
Common shares issuable upon exercise of dilutive stock options and PSAs / RSUs	830	571	545
Weighted average common shares outstanding and common share equivalents used in diluted EPS	44,439	44,129	43,942
Earnings per share			
Basic	\$ 0.18	\$ 0.49	\$ 1.49
Diluted	0.18	0.49	1.47

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		
	2017	2016	2015
Potential common shares	610	596	678

7. 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, 2017, 2016 and 2015.

<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, 2017	\$ (100,448)	\$ 1,500	\$ (110,656)	\$ 4,998	\$ (204,606)
Other comprehensive income 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	\$ (41,839)	\$ (4,092)	\$ (98,295)	\$ 3,551	\$ (140,675)
Balance at January 1, 2016	\$ (73,041)	\$ (225)	\$ (120,714)	\$ 3,494	\$ (190,486)
Other comprehensive income 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	\$ (100,448)	\$ 1,500	\$ (110,656)	\$ 4,998	\$ (204,606)
Balance at January 1, 2015	\$ (34,224)	\$ 2,356	\$ (120,260)	\$ (2,742)	\$ (154,870)
Other comprehensive income before reclassifications (net of tax)	(38,817)	1,620	(12,995)	6,266	(43,926)
Amounts reclassified from accumulated other comprehensive income (net of tax)	—	(4,201)	12,541	(30)	8,310
Net current period other comprehensive income (loss)	(38,817)	(2,581)	(454)	6,236	(35,616)
Balance at December 31, 2015	\$ (73,041)	\$ (225)	\$ (120,714)	\$ 3,494	\$ (190,486)

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
	2017	2016	2015	
Description				
Cash flow hedges (Note 18)				
(Gains) losses on cash flow hedges	\$ (532)	\$ 551	\$ (5,752)	Costs of products sold
Tax expense (benefit)	122	(73)	1,551	Income tax provision (benefit)
Net of tax	(410)	478	(4,201)	
Retirement plan obligations (Note 10)				
Amortization of deferred benefit pension plan items				
Prior service costs	2,122	2,026	2,300	Costs of products sold
	704	672	762	Selling, general and administrative
Actuarial losses	9,134	9,798	12,745	Costs of products sold
	3,145	3,373	4,388	Selling, general and administrative
Settlement recognition	—	7,306	—	Selling, general and administrative
	15,105	23,175	20,195	
Tax expense (benefit)	(5,725)	(8,783)	(7,654)	Income tax provision (benefit)
Net of tax	9,380	14,392	12,541	
Amortization of deferred benefit other plan items				
Prior service costs	(150)	(150)	(230)	Costs of products sold
	(32)	(32)	(50)	Selling, general and administrative
Actuarial losses	(311)	(621)	190	Costs of products sold
	(67)	(134)	41	Selling, general and administrative
	(560)	(937)	(49)	
Tax expense (benefit)	212	355	19	Income tax provision (benefit)
Net of tax	(348)	(582)	(30)	
Total reclassifications, net of tax	\$ 8,622	\$ 14,288	\$ 8,310	

8. INCOME TAXES

Effects of the Tax Cuts and Jobs Act

On December 22, 2017, the Tax Cuts and Jobs Act of 2017 (“TCJA”) was signed into U.S. law. Among other things, the TCJA reduces the U.S. federal corporate tax rate from 35% to 21% beginning in 2018 and requires 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, requires companies to recognize the effect of tax law changes in the period of enactment even though the effective date for most provisions is for tax years beginning after December 31, 2017.

Given the significance of the legislation, the U.S. Securities and Exchange Commission (the “SEC”) staff issued Staff Accounting Bulletin No. 118 (“SAB 118”), which allows registrants to record provisional amounts during a one year “measurement period” similar to that used when accounting for business combinations. However, the measurement period is deemed to have ended earlier when the registrant has obtained, prepared, and analyzed the information necessary to finalize its accounting. During the measurement period, impacts of the law are expected to be recorded at the time a reasonable estimate for all or a portion of the effects can be made, and provisional amounts can be recognized and adjusted as information becomes available, prepared, or analyzed.

SAB 118 summarizes a three-step process to be applied at each reporting period to account for and qualitatively disclose: (1) the effects of the change in tax law for which accounting is complete; (2) provisional amounts (or adjustments to provisional amounts) for the effects of the tax law where accounting is not complete, but that a reasonable estimate has been determined; and (3) a reasonable estimate cannot yet be made and therefore taxes are reflected in accordance with law prior to the enactment of the Tax Cuts and Jobs Act.

Amounts recorded where we consider accounting to be complete for the year ended December 31, 2017, principally relate to the reduction in the U.S. corporate income tax rate to 21%, which resulted in us recording an income tax benefit of \$18.1 million to remeasure net deferred taxes liabilities.

The TCJA includes a one-time mandatory repatriation transition tax on the net accumulated earnings and profits of a U.S. taxpayer’s foreign subsidiaries. We performed a preliminary earnings and profits analysis which resulted in us recording provisional U.S. federal income tax expense of \$41.8 million, \$3.8 million of non-US taxes and \$0.3 million of state taxes associated with the repatriation of such earnings and profits. Although we have made a reasonable estimate of the tax associated with our net accumulated earnings, a final determination of the TCJA’s impact remains incomplete pending a full analysis of the provisions and their interpretations.

Other significant provisions that are not yet effective but may impact income taxes in future years include: an exemption from U.S. tax on dividends of future earnings, limitation on the current deductibility of net interest expense in excess of 30% of adjusted taxable income, a limitation of the use of net operating losses generated after fiscal 2018 to 80% of taxable income but with an indefinite carryforward period, an incremental tax (base erosion anti-abuse tax or “BEAT”) on excessive amounts paid to foreign related parties, and a minimum tax on certain foreign earnings in excess of 10% of the foreign subsidiaries’ tangible assets (i.e., global intangible low-taxed income or “GILTI”). We are still evaluating whether to make a policy election to treat the GILTI tax as a period expense or to provide U.S. deferred taxes on foreign temporary differences that are expected to generate GILTI when they reverse in future years.

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 operations consisted of the following:

<i>In thousands</i>	Year ended December 31		
	2017	2016	2015
Current taxes			
Federal	\$ (1,961)	\$ 2,216	\$ 5,047
State	64	(1,112)	(1,680)
Foreign	14,292	10,203	12,536
	12,395	11,307	15,903
Deferred taxes and other			
Federal	11,662	(24,411)	(7,287)
State	3,388	(1,723)	564
Foreign	3,976	4,079	4,821
	19,026	(22,055)	(1,902)
Income tax provision (benefit)	\$ 31,421	\$ (10,748)	\$ 14,001

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

<i>In thousands</i>	Year ended December 31		
	2017	2016	2015
United States	\$ (40,920)	\$ (63,315)	\$ 2,382
Foreign	80,255	74,121	76,194
Total pretax income	\$ 39,335	\$ 10,806	\$ 78,576

A reconciliation between the income tax provision, computed by applying the statutory federal income tax rate of 35% to income before income taxes, and the actual income tax provision is as follows:

	Year ended December 31		
	2017	2016	2015
Federal income tax provision at statutory rate	35.0%	35.0%	35.0%
State income taxes, net of federal income tax benefit	0.4	(15.0)	0.3
Foreign income tax rate differential	(28.7)	(96.3)	(8.6)
Rate changes due to enacted legislation	(0.6)	(6.7)	—
Tax effect of credits	(16.1)	(30.3)	(1.9)
Provision for (resolution of) tax matters	16.9	2.8	(2.1)
State benefit due to enacted legislation	(4.1)	—	—
Effect of U.S. tax law change ⁽¹⁾	53.2	—	—
Valuation allowance	23.3	7.1	0.4
Permanent differences on non-U.S. earnings	—	—	(4.4)
Other	0.6	3.9	(0.9)
Actual tax rate	79.9%	(99.5)%	17.8%

- (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 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 for the year ended December 31, 2017.

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

<i>In thousands</i>	2017	2016
Reserves	\$ 3,145	\$ 4,625
Environmental	11,189	20,868
Compensation	6,782	8,950
Post-retirement benefits	12,570	18,318
Research & development expenses	6,787	6,949
Inventories	1,891	1,464
Tax carryforwards	21,988	14,438
Other	2,106	993
Deferred tax assets	66,458	76,605
Valuation allowance	(7,405)	(4,066)
Net deferred tax assets	59,053	72,539
Property	(98,809)	(81,837)
Intangible assets	(17,647)	(16,561)
Pension	(21,941)	(29,041)
Other	(4,110)	—
Deferred tax liabilities	(142,507)	(127,439)
Net deferred tax liabilities	\$ (83,454)	\$ (54,900)

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

<i>In thousands</i>	December 31	
	2017	2016
Other assets	\$ 117	\$ 95
Deferred income taxes	83,571	54,995

At December 31, 2017 we had federal, state and foreign tax net operating loss (“NOL”) carryforwards of \$47.9 million, \$188.4 million and \$3.7 million, respectively. These NOL carryforwards are available to offset future taxable income, if any. The federal NOL carryforward expires in 2037, state NOLs expire at various times and in various amounts beginning in 2018 and through 2037. Certain foreign NOL carryforwards begin to expire after 2023.

The state and foreign NOL carryforwards and federal tax credits 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 \$9.1 million which begin to expire after 2035, state tax credit carryforwards totaling \$0.2 million, which begin to expire in 2018, and foreign investment tax credits of \$2.4 million which begin to expire after 2027.

As of December 31, 2017 and 2016, we had a valuation allowance of \$7.4 million and \$4.1 million, respectively, against net deferred tax assets, primarily due to uncertainty regarding the ability to utilize 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 \$6.3 million, \$1.1 million and \$1.5 million in 2017, 2016 and 2015, respectively, related to research and development credits and fuels tax credits.

As a result of the mandatory deemed repatriation provisions in the TCJA, we recorded a provisional estimate on \$397.8 million of undistributed earnings of foreign subsidiaries in U.S. taxable income at the reduced tax rates. With respect to other basis differences in connection with our foreign subsidiaries at December 31, 2017, we assert that such basis differences are indefinite

in duration, and as a result, no deferred taxes have been provided.

As of December 31, 2017, 2016 and 2015, we had \$26.9 million, \$14.2 million and \$12.2 million of gross unrecognized tax benefits, respectively. As of December 31, 2017, if such benefits were to be recognized, approximately \$16.8 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>	2017	2016	2015
Balance at January 1	\$ 14.2	\$ 12.2	\$ 14.9
Increases in tax positions for prior years	1.7	2.0	0.0
Decreases in tax positions for prior years	—	(1.4)	(4.3)
Increases in tax positions for current year	11.9	1.9	1.9
Settlements	—	(0.2)	0.0
Lapse in statutes of limitation	(0.9)	(0.3)	(0.3)
Balance at December 31	\$ 26.9	\$ 14.2	\$ 12.2

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	2014 - 2017	N/A
State	2013 - 2017	2014
Canada ⁽¹⁾	2010-2013; 2017	2014 - 2016
Germany ⁽¹⁾	2016 - 2017	2011 - 2015
France	2015 - 2017	2012
United Kingdom	2016 - 2017	N/A
Philippines	2015, 2017	2016

(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 \$0.6 million. The majority of this range relates to tax positions taken in 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,		
	2017	2016	2015
Accrued interest payable	\$ 0.8	\$ 0.5	\$ 0.6
Interest expense (income)	0.3	(0.1)	—
Penalties	—	—	—

9. 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, 2017, there were 2,188,572 shares of common stock available for future issuance under the LTIP.

Since the approval 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 on a graded scale over a three, four, and five-year period. Beginning in March of 2011, PSAs were issued annually to members of senior management and each respective grant cliff vests each December 31, assuming the achievement of predetermined, multi-year cumulative performance targets. 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. For both RSUs and PSAs, the grant date fair value of the awards, which is equal to 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. 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>	2017	2016	2015
Balance at January 1,	679,038	674,523	888,942
Granted	375,435	302,722	164,666
Forfeited	(96,306)	(148,232)	(92,183)
Shares delivered	(28,781)	(149,975)	(286,902)
Balance at December 31,	929,386	679,038	674,523
	2017	2016	2015
Compensation expense	\$ 4,843	\$ 3,154	\$ 1,758

The amount granted in 2017, 2016 and 2015 includes 163,274, 199,693 and 105,017 PSAs, respectively, exclusive of reinvested dividends. The weighted average grant date fair value per unit for awards in 2017, 2016 and 2015 was \$22.32, \$18.08 and \$24.62, respectively. As of December 31, 2017, unrecognized compensation expense for outstanding RSUs and PSAs totaled \$6.7 million. The weighted average remaining period over which the expense will be recognized is 1.9 years.

Stock Only Stock Appreciation Rights
SOSARS:

The following table sets forth information related to outstanding

SOSARS	2017		2016		2015	
	Shares	Wtd Avg Exercise Price	Shares	Wtd Avg Exercise Price	Shares	Wtd Avg Exercise Price
Outstanding at January 1,	2,736,616	\$ 17.64	2,199,742	\$ 17.82	1,864,707	\$ 16.20
Granted	—	—	743,925	17.54	423,590	24.62
Exercised	(157,140)	13.76	(61,190)	10.70	(70,347)	14.12
Canceled / forfeited	(17,630)	18.46	(145,861)	22.80	(18,208)	25.41
Outstanding at December 31,	2,561,846	\$ 17.87	2,736,616	\$ 17.64	2,199,742	\$ 17.82
Exercisable at December 31,	2,011,075	17.56	1,740,591	16.19	1,504,599	14.48
Vested and expected to vest	2,561,846		2,725,611		2,178,708	
SOSAR Grants						
Weighted average grant date fair value per share	—		\$ 4.07		\$ 7.46	
Aggregate grant date fair value (in thousands)	—		\$ 3,013		\$ 3,134	
Black-Scholes assumptions						
Dividend yield	—		2.85%		1.94%	
Risk free rate of return	—		1.34%		1.64%	
Volatility	—		31.97%		36.38%	
Expected life	—		6		6	
Compensation expense (in thousands)	\$ 1,371		\$ 2,735		\$ 2,645	

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 2017. As of December 31, 2017, the intrinsic value of SOSARs vested and expected to vest totaled \$12.4 million and the remaining weighted average contractual life of outstanding SOSARs was 5.2 years.

10. 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. 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 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. Participation is closed to any hourly union employees in our Pennsylvania operations hired after January 16, 2011. Hourly union employees in our Ohio operations are eligible to participate upon attaining age 55 with five years of service. 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.

<i>In millions</i>	Pension Benefits		Other Benefits	
	2017	2016	2017	2016
Change in Benefit Obligation				
Balance at beginning of year	\$ 552.0	\$ 541.9	\$ 47.9	\$ 51.0
Service cost	10.7	10.5	1.2	1.1
Interest cost	23.8	24.5	2.0	2.0
Plan amendments	4.1	5.5	—	—
Participant contributions	—	—	1.1	1.0
Actuarial (gain)/loss	45.5	17.0	1.5	(3.4)
Benefits paid	(36.5)	(22.9)	(3.0)	(3.8)
One-time settlement	—	(24.2)	—	—
Effect of currency rate changes	1.2	(0.3)	—	—
Balance at end of year	\$ 600.8	\$ 552.0	\$ 50.7	\$ 47.9

Change in Plan Assets				
Fair value of plan assets at beginning of year	\$ 610.7	\$ 594.9	\$ —	\$ —
Actual return on plan assets	96.8	60.8	—	—
Total contributions	2.1	2.1	3.0	3.8
Benefits paid	(36.5)	(22.9)	(3.0)	(3.8)
One-time settlement	—	(24.2)	—	—
Fair value of plan assets at end of year	\$ 673.1	610.7	—	—
Funded status at end of year	\$ 72.3	\$ 58.7	\$ (50.7)	\$ (47.9)

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.

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

<i>In millions</i>	Pension Benefits		Other Benefits	
	2017	2016	2017	2016
Other assets	\$ 115.5	\$ 96.7	\$ —	\$ —
Current liabilities	(2.2)	(2.0)	(3.5)	(3.2)
Other long-term liabilities	(41.0)	(36.0)	(47.2)	(44.7)
Net amount recognized	\$ 72.3	\$ 58.7	\$ (50.7)	\$ (47.9)

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	
	2017	2016	2017	2016
Prior service cost/(credit)	\$ 16.1	\$ 14.8	\$ (0.5)	\$ (0.6)
Net actuarial loss	145.6	165.9	(5.6)	(7.4)

The accumulated benefit obligation for all defined benefit pension plans was \$584.3 million and \$537.6 million at December 31, 2017 and 2016, respectively.

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

	Pension Benefits		Other Benefits	
	2017	2016	2017	2016
Discount rate – benefit obligation	3.85%	4.43%	3.68%	4.18%
Future compensation growth rate	3.00	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, 2017 ranged from 1.90% to 4.55% for pension plans and from 4.02% to 4.21% 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>	2017	2016
Projected benefit obligation	\$ 43.1	\$ 37.9
Accumulated benefit obligation	38.6	34.6
Fair value of plan assets	—	—

Net periodic benefit cost includes the following components:

<i>In millions</i>	Year Ended December 31		
	2017	2016	2015
Pension Benefits			
Service cost	\$ 10.7	\$ 10.5	\$ 11.6
Interest cost	23.8	24.5	23.3
Expected return on plan assets	(43.0)	(45.4)	(46.0)
Amortization of prior service cost	2.8	2.7	3.1
Amortization of actuarial loss	12.3	13.2	17.1
One-time settlement charge	—	7.3	—
Total net periodic benefit cost	\$ 6.6	\$ 12.8	\$ 9.1
Other Benefits			
Service cost	\$ 1.2	\$ 1.1	\$ 1.4
Interest cost	2.0	2.0	2.0
Amortization of prior service cost/(credit)	(0.2)	(0.2)	(0.3)
Amortization of actuarial loss	(0.4)	(0.8)	0.2
Total net periodic benefit cost	\$ 2.6	\$ 2.1	\$ 3.3

The prior service cost and actuarial net loss for our defined benefit pension plans that will be amortized from accumulated other comprehensive income (loss) into our results of operations as a component of net periodic benefit cost over the next fiscal year are \$3.1 million and \$13.5 million, respectively. The comparable amounts of expected amortization for other benefit plans are a credit of \$0.2 million and \$0.3 million, respectively.

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	
	2017	2016
Pension Benefits		
Actuarial (gain) loss	\$ (8.3)	\$ 1.4
Plan amendments	4.1	5.5
Recognized prior service cost	(2.8)	(2.7)
Recognized actuarial losses	(12.3)	(20.5)
Total recognized in other comprehensive loss	(19.3)	(16.3)
Total recognized in net periodic benefit cost and other comprehensive loss	\$ (12.7)	\$ (3.5)
Other Benefits		
Actuarial (gain) loss	\$ 1.5	\$ (3.4)
Amortization of prior service cost	0.2	0.2
Amortization of actuarial losses	0.4	0.8
Total recognized in other comprehensive (income) loss	2.1	(2.4)
Total recognized in net periodic benefit cost and other comprehensive (income) loss	\$ 4.7	\$ (0.3)

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

	Year Ended December 31		
	2017	2016	2015
Pension Benefits			
Discount rate – benefit expense	4.43%	4.65%	4.21%
Future compensation growth rate	3.00	3.50	4.00
Expected long-term rate of return on plan assets	7.25	7.75	8.00
Other Benefits			
Discount rate – benefit expense	4.18%	4.38%	3.89%

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:

	2017	2016
Health care cost trend rate assumed for next year	6.20%	6.50%
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

Assumed health care cost trend rates have a significant effect on the amounts reported for health care plans. A one percentage-point change in assumed health care cost trend rates would have the following effects:

<i>In millions</i>	One Percentage Point	
	Increase	Decrease
Effect on:		
Post-retirement benefit obligation	\$ 3.9	\$ (3.5)
Total of service and interest cost components	0.3	(0.3)

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.

Risk is minimized by diversification by asset class, by style of each manager and by sector and industry limits when applicable. The targeted range of investment allocations of Plan assets is as follows:

	Range		
Domestic Equity	35%	-	45%
International equity	8	-	14
Real Estate Investment Trusts (REIT)	2	-	6
Fixed income, cash and cash equivalents	55	-	35

Diversification of plan assets is achieved by:

- i. placing restrictions on the percentage of equity investments in any one company, percentage of investment in any one industry, limiting the amount of assets placed with any one manager; and
- ii. 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.

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:

In millions	December 31, 2017			
	Total	Level 1	Level 2	Level 3
Domestic Equity				
Large cap	\$ 214.9	\$ 12.4	\$ 202.5	\$ —
Small and mid cap	46.2	46.2	—	—
International equity	81.4	7.2	74.2	—
REIT	27.6	27.6	—	—
Fixed income	290.9	24.0	266.9	—
Cash and equivalents	12.1	0.1	12.0	—
Total	\$ 673.1	\$ 117.5	\$ 555.6	\$ —

In millions	December 31, 2016			
	Total	Level 1	Level 2	Level 3
Domestic Equity				
Large cap	\$ 201.9	\$ 7.1	\$ 194.8	\$ —
Small and mid cap	50.9	50.9	—	—
International equity	79.5	38.8	40.7	—
REIT	27.9	27.9	—	—
Fixed income	237.7	28.5	209.2	—
Cash and equivalents	12.8	—	12.8	—
Total	\$ 610.7	\$ 153.2	\$ 457.5	\$ —

Cash Flow We were not required to make contributions to our qualified pension plan in 2017 nor do we expect to make any to this plan in 2018. Benefit payments expected to be made in 2018 under our non-qualified pension plans and other benefit plans are summarized below:

In thousands	
Nonqualified pension plans	\$ 2,160
Other benefit plans	3,500

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:

In thousands	Pension Benefits	Other Benefits
2018	\$ 41,106	\$ 3,500
2019	39,993	4,129
2020	39,468	4,500
2021	39,375	4,663
2022	39,041	4,620
2023 through 2027	188,907	21,053

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. Through November 2015, we matched a portion of the employee's contribution, subject to certain limitations, in the form of shares of Glatfelter common stock out of treasury. Company matches are now made in cash. The expense associated with our 401(k) match was \$2.3 million, \$2.0 million and \$2.1 million in 2017, 2016 and 2015, respectively.

11. INVENTORIES

Inventories, net of reserves were as follows:

<i>In thousands</i>	December 31	
	2017	2016
Raw materials	\$ 60,806	\$ 66,359
In-process and finished	116,678	112,507
Supplies	74,580	70,803
Total	\$ 252,064	\$ 249,669

We value all of our U.S. inventories, excluding supplies, on the LIFO method. If we had valued these inventories using the first-in, first-out method, inventories would have been \$22.7 million and \$21.3 million higher than reported at December 31, 2017 and 2016, respectively.

12. PLANT, EQUIPMENT AND TIMBERLANDS

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

<i>In thousands</i>	2017	2016
Land and buildings	\$ 221,436	\$ 192,877
Machinery and equipment	1,484,545	1,335,669
Furniture, fixtures, and other	174,462	142,110
Accumulated depreciation	(1,125,203)	(1,036,825)
	755,240	633,831
Construction in progress	105,673	137,665
Timberlands, less depletion	4,830	4,402
Total	\$ 865,743	\$ 775,898

As of December 31, 2017 and 2016, we had \$21.0 million and \$24.3 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		
	2017	2016	2015
Interest cost incurred	\$ 19,852	\$ 17,431	\$ 17,815
Interest capitalized	2,080	1,609	351
Interest expense	\$ 17,772	\$ 15,822	\$ 17,464

13. GOODWILL AND INTANGIBLE ASSETS

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

<i>In thousands</i>	December 31	
	2017	2016
Goodwill – Composite Fibers	\$ 82,744	\$ 73,094
Specialty Papers		
Customer relationships	\$ 6,155	\$ 6,155
Composite Fibers		
Tradename	4,773	4,195
Technology and related	40,686	35,874
Customer relationships and related	36,705	32,310
Advanced Airlaid Materials		
Technology and related	1,488	1,377
Customer relationships and related	3,001	2,638
Total intangibles	92,808	82,549
Accumulated amortization	(33,949)	(26,290)
Net intangibles	\$ 58,859	\$ 56,259

The change in the gross value of goodwill and intangible assets was due to currency translation adjustments. Other than non-amortizable goodwill and 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>	2017	2016	2015
Aggregate amortization expense:	\$ 4,773	\$ 4,852	\$ 5,340
Estimated amortization expense:			
2018	4,773		
2019	4,773		
2020	4,639		
2021	4,254		
2022	4,139		

The remaining weighted average useful life of intangible assets was 12.2 years at December 31, 2017.

14. OTHER LONG-TERM ASSETS

Other long-term assets consist of the following:

<i>In thousands</i>	December 31	
	2017	2016
Pension	\$ 115,482	\$ 96,699
Other	22,996	25,050
Total	\$ 138,478	\$ 121,749

15. OTHER CURRENT LIABILITIES

Other current liabilities consist of the following:

<i>In thousands</i>	December 31	
	2017	2016
Accrued payroll and benefits	\$ 39,375	\$ 48,306
Other accrued compensation and retirement benefits	7,864	6,828
Income taxes payable	1,927	211
Accrued rebates	16,126	14,329
Other accrued expenses	45,930	49,576
Total	\$ 111,222	\$ 119,250

16. LONG-TERM DEBT

Long-term debt is summarized as follows:

<i>In thousands</i>	December 31	
	2017	2016
Revolving credit facility, due Mar. 2020	\$ 171,200	\$ 61,595
5.375% Notes, due Oct. 2020	250,000	250,000
2.40% Term Loan, due Jun. 2022	7,710	8,282
2.05% Term Loan, due Mar. 2023	33,607	35,163
1.30% Term Loan, due Jun. 2023	9,423	9,788
1.55% Term Loan, due Sep. 2025	11,390	10,333
Total long-term debt	483,330	375,161
Less current portion	(11,298)	(8,961)
Unamortized deferred issuance costs	(1,934)	(2,553)
Long-term debt, net of current portion	\$ 470,098	\$ 363,647

On March 12, 2015, we amended our revolving credit agreement with a consortium of banks (the “Revolving Credit Facility”) which increased the amount available for borrowing to \$400 million, extended the maturity of the facility to March 12, 2020, and instituted a revised interest rate pricing grid. On February 1, 2017, the Revolving Credit Agreement was further amended to, among other things, 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 3.5x. As of December 31, 2017, the leverage ratio, as calculated in accordance with the definition in our amended credit agreement was 2.5x. 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 publically 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, 2017, we met all of the requirements of our debt covenants.

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 \$3.0 million at December 31, 2017. 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 \$1.2 million in 2017.

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>	
2018	\$ 11,298
2019	11,297
2020	432,497
2021	11,297
2022	10,441
Thereafter	6,500

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, 2017 and 2016, we had \$5.2 million and \$5.1 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.

17. 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>	2017		2016	
	Carrying Value	Fair Value	Carrying Value	Fair Value
Variable rate debt	\$ 171,200	\$171,200	\$ 61,595	\$ 61,595
Fixed-rate bonds	250,000	253,823	250,000	256,563
2.40% Term loan	7,710	7,889	8,282	8,877
2.05% Term loan	33,607	34,122	35,163	37,089
1.30% Term Loan	9,423	9,370	9,788	10,062
1.55% Term loan	11,390	11,320	10,333	10,082
Total	\$ 483,330	\$487,724	\$ 375,161	\$384,268

As of December 31, 2017 and 2016, 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 18.

18. 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 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	
	2017	2016
Derivative		
<i>Sell/Buy - sell notional</i>		
Philippine Peso / British Pound	19,047	—
Euro / British Pound	13,586	10,373
Euro / U.S. Dollar	1,048	—
U.S. Dollar / Euro	946	—
<i>Sell/Buy - buy notional</i>		
Euro / Philippine Peso	890,096	699,279
British Pound / Philippine Peso	797,496	557,025
Euro / U.S. Dollar	60,519	43,951
U.S. Dollar / Canadian Dollar	32,265	35,290
British Pound / Euro	335	—
U.S. Dollar / Euro	4,253	15,379

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 under the caption "Other, net."

<i>In thousands</i>	December 31	
	2017	2016
Derivative		
<i>Sell/Buy - sell notional</i>		
U.S. Dollar / Euro	—	—
U.S. Dollar / British Pound	17,500	10,500
Euro / British Pound	—	—
British Pound / Euro	1,000	2,500
<i>Sell/Buy - buy notional</i>		
Euro / U.S. Dollar	4,500	3,500
British Pound / Euro	13,000	18,500

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	
	2017	2016	2017	2016
Balance sheet caption	Prepaid Expenses and Other Current Assets		Other Current Liabilities	
Designated as hedging:				
Forward foreign currency exchange contracts	\$ 1,066	\$ 2,625	\$ 4,787	\$ 1,493
Not designated as hedging:				
Forward foreign currency exchange contracts	\$ 151	\$ 60	\$ 43	\$ 104

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 where the results are recorded:

<i>In thousands</i>	Year ended December 31		
	2017	2016	2015
Designated as hedging:			
Forward foreign currency exchange contracts:			
Effective portion – cost of products sold	\$ 532	\$ (551)	\$ 5,752
Ineffective portion – other – net	182	(166)	(152)
Not designated as hedging:			
Forward foreign currency exchange contracts:			
Other – net	\$ 882	\$ 806	\$ 599

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>	2017	2016
Balance at January 1,	\$ 1,882	\$ (178)
Deferred (losses) gains on cash flow hedges	(6,990)	1,509
Reclassified to earnings	(532)	551
Balance at December 31,	\$ (5,640)	\$ 1,882

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.

19. SHAREHOLDERS’ EQUITY

The following table summarizes outstanding shares of common stock:

<i>In thousands</i>	Year ended December 31		
	2017	2016	2015
Shares outstanding at beginning of year	43,550	43,420	43,054
Treasury shares issued for:			
Restricted stock awards	28	108	206
401(k) plan	—	—	134
Employee stock options exercised	36	22	26
Shares outstanding at end of year	43,614	43,550	43,420

20. 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
2018	\$ 12,683	\$ 115,710
2019	5,926	31,415
2020	4,393	18,674
2021	3,276	1,705
2022	2,932	4
Thereafter	8,431	1

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

At December 31, 2017, required minimum annual payments due under operating leases and other similar contractual obligations aggregated \$37.6 million and \$167.5 million, respectively.

Fox River - Neenah, Wisconsin

Background. We have 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”). 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 Site has been subject to certain studies, demonstration projects and interim cleanups. The permanent cleanup, known as a “remedial action” under the Comprehensive Environmental Response, Compensation and Liability Act (“CERCLA”), consists of sediment dredging, installation of engineered caps and placement of sand covers in various areas in the bed of the river.

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 and WTM I Company, one of the PRPs, implemented the remedial action in OU1 under a consent decree with the Governments; Menasha Corporation made a financial contribution to that work. That project began in 2004 and the 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 that work to date 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 through 2019. However, as discussed below, under a consent decree between the United States, Wisconsin, NCR and Appvion we are not responsible for any additional cleanup at the Site.

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.” After several summary judgment rulings and a trial, the trial court entered judgment in the Whiting Litigation allocating to NCR 100% of the costs of (a) the OU2-5 cleanup, (b) NRDs, (c) past and future costs incurred by the Governments in OU2-5, and (d) past and future costs incurred by any of the other parties net of an appropriate equitable adjustment for insurance recoveries.

On appeal, the United States Court of Appeals for the Seventh Circuit affirmed the district court’s ruling, holding that if knowledge and fault were the only equitable factors governing allocation of costs and NRDs at the Site, NCR would owe 100% of all costs and damages in OU2-5, but would not have a share of costs in OU1 -- which is upstream of the outfall of the facilities for which NCR is responsible -- solely as an “arranger for disposal” of PCB-containing waste paper by recycling it at our mill. However, the court of appeals vacated the judgment and remanded the case for the district court’s further consideration of whether any other equitable factors might cause the district court to alter its allocation to something less than 100% to NCR.

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’ costs 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. On March 29, 2017, the United States moved for entry of a somewhat revised version of the NCR/Appvion consent decree, which the federal district court entered on August 23, 2017. Under the consent decree, if it were to withstand appeal, we would only face 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”).

In addition, 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 would be 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 would exceed our fair share of costs for this site. If we prevail on appeal, the circumstances that caused us to prevail would lead us to anticipate that, while all costs would again be subject to reallocation, that reallocation to be in our favor.

Cost estimates. The NCR/Appvion consent decree, as revised, states that all parties combined have spent more than \$1 billion through March 2017 towards remedial actions and NRDs, of which we have contributed approximately \$75 million. In addition, work to complete the remaining site remedy under the UAO was anticipated to cost approximately \$200 million at the beginning of the 2017 remediation season. So long as the NCR/Appvion consent decree remains in effect, we are not exposed to reallocation of any of those amounts, and no other party will be exposed to reallocation of any of the amounts that we have incurred or may incur in the future.

So long as the NCR/Appvion consent decree remains in effect, we (and not NCR) would remain responsible for the Governments' unreimbursed past costs. Many parties have entered into settlements with the Governments over time, including us, that have called for payments of cash or in-kind provision of natural resource restoration projects. Certain amounts were allocated to the United States and the State to reimburse their costs, and other amounts were allocated to the Natural Resource Damages Assessment and Restoration ("NRDAR") Fund to pay for natural resource damages assessment, if any, and restoration projects. The Governments may not recover costs from us that anyone has reimbursed previously. As of the end of 2015, the United States claimed to have

incurred about \$34 million in unreimbursed costs, an amount that we dispute. The State had no unreimbursed costs, and had on hand approximately \$4 million of unspent settlement money. Further, the NRDAR Fund had received what the Governments claim to have been approximately \$104 million in settlement payments, of which more than \$60 million remained unspent. On February 5, 2018, the district court decided that the Governments' recovery of costs would be reduced by the funds held by the State at the end of 2015 and by any amount by which the Governments had applied settlement payments to natural resource damages in excess of the actual amount of natural resource damages. We contend that the natural resource restoration projects already constructed fully compensate the public for any natural resource damages, and therefore that the entire unspent balance in the NRDAR Fund remains as an off-set, an amount likely to exceed all of the Governments' past and future costs of response. The Governments disagree. No date has yet been set for trial of the issue.

So long as the NCR/Appvion consent decree remains in effect, we would also remain subject to our obligations under the OU1 consent decree, which now consist of long term monitoring and maintenance that we expect earlier contributions to the OU1 escrow account to fund these costs. Furthermore, we, along with Georgia Pacific, but not NCR, would be responsible for long term monitoring and maintenance required pursuant to the Lower Fox River 100% Remedial Design Report dated December 2009 – Long Term Monitoring Plan (the "Plan"). The Plan requires long term monitoring of each of OU2 through OU5 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. Each operable unit is required to be monitored; however, because of our settlement with Georgia Pacific, our obligations are in OU1-OU4a. Although we are unable to determine with certainty the timing of cash expenditures for the above matters, they are reasonably likely to extend over a period of at least 30 years.

Reserves for the Site. Our reserve for all remaining claims against us relating to PCB contamination is set forth below:

<i>In thousands</i>	Year ended December 31	
	2017	2016
Balance at January 1,	\$ 52,788	\$ 17,105
Payments	(9,644)	(4,317)
Accruals	-	40,000
Balance at December 31,	\$ 43,144	\$ 52,788

The payments set forth above represent cash paid towards completion of remediation activities in connection with the 2016 and 2015 Work Plans, the Georgia-Pacific settlement and ongoing monitoring activities. Of our total reserve for the Fox River, \$28.5 million is recorded in the accompanying December 31,

2017 consolidated balance sheet under the caption “Environmental liabilities” and the remaining \$14.6 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 believe it is reasonably possible that our costs associated with the Fox River matter could exceed the aggregate amounts accrued by amounts ranging from insignificant to approximately \$30 million. We believe the likelihood of an outcome in the upper end of the monetary range is less than other possible outcomes within the range and the possibility of an outcome in excess of the upper end of the monetary range is remote.

Summary. Our current assessment is we will be able to manage this environmental matter without a long-term, material adverse impact on the Company. This matter could, however, at any particular time or for any particular year or years, have a material adverse effect on our consolidated financial position, liquidity and/or results of operations or could result in a default under our debt covenants. Moreover, there can be no assurance our reserves will be adequate to provide for future obligations related to this matter, or our share of costs and/or damages will not exceed our available resources, or those obligations will not have a material adverse effect on our consolidated financial position, liquidity and results of operations and might result in a default under our loan covenants.

21. SEGMENT AND GEOGRAPHIC INFORMATION

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

For the year ended December 31, 2017 <i>In millions</i>	Composite Fibers	Advanced Airlaid Materials	Specialty Papers	Other and Unallocated	Total
Net sales	\$ 544.3	\$ 256.1	\$ 790.9	\$ —	\$ 1,591.3
Energy and related sales, net	—	—	5.1	—	5.1
Total revenue	544.3	256.1	796.0	—	1,596.4
Cost of products sold	437.6	216.7	734.2	15.4	1,403.9
Gross profit	106.7	39.4	61.8	(15.4)	192.5
SG&A	44.4	9.3	46.4	34.3	134.4
Loss on dispositions of plant, equipment and timberlands, net	—	—	—	—	—
Total operating income (loss)	62.3	30.1	15.4	(49.7)	58.1
Non-operating expense	—	—	—	(18.8)	(18.8)
Income (loss) before income taxes	\$ 62.3	\$ 30.1	\$ 15.4	\$ (68.5)	\$ 39.3
Supplementary Data					
Plant, equipment and timberlands, net	\$ 254.0	\$ 235.6	\$ 360.5	\$ 15.6	\$ 865.7
Depreciation, depletion and amortization	28.3	9.6	30.8	7.3	76.0
Capital expenditures	15.9	50.6	51.5	14.3	132.3

For the year ended December 31, 2016 <i>In millions</i>	Composite Fibers	Advanced Airlaid Materials	Specialty Papers	Other and Unallocated	Total
Net sales	\$ 517.0	\$ 244.3	\$ 843.6	\$ —	\$ 1,604.8
Energy and related sales, net	—	—	6.1	—	6.1
Total revenue	517.0	244.3	849.7	—	1,610.9
Cost of products sold	416.4	209.5	752.6	13.9	1,392.3
Gross profit	100.6	34.8	97.1	(13.9)	218.7
SG&A	46.3	8.4	55.9	80.1	190.7
Gains on dispositions of plant, equipment and timberlands, net	—	—	—	0.2	0.2
Total operating income (loss)	54.3	26.4	41.2	(94.2)	27.8
Non-operating expense	—	—	—	(16.9)	(16.9)
Income (loss) before income taxes	\$ 54.3	\$ 26.4	\$ 41.2	\$ (111.1)	\$ 10.9
Supplementary Data					
Plant, equipment and timberlands, net	\$ 235.1	\$ 179.3	\$ 352.9	\$ 8.6	\$ 775.9
Depreciation, depletion and amortization	27.8	9.0	26.3	2.7	65.8
Capital expenditures	18.8	36.8	99.0	5.6	160.2

For the year ended December 31, 2015 <i>In millions</i>	Composite Fibers	Advanced Airlaid Materials	Specialty Papers	Other and Unallocated	Total
Net sales	\$ 541.5	\$ 244.6	\$ 875.0	\$ —	\$ 1,661.1
Energy and related sales, net	—	—	5.7	—	5.7
Total revenue	541.5	244.6	880.7	—	1,666.8
Cost of products sold	434.4	215.7	804.5	9.2	1,463.8
Gross profit	107.1	28.9	76.2	(9.2)	203.0
SG&A	45.7	7.6	43.3	31.0	127.7
Gains on dispositions of plant, equipment and timberlands, net	—	—	—	(21.1)	(21.1)
Total operating income (loss)	61.4	21.3	32.9	(19.1)	96.4
Non-operating expense	—	—	—	(17.8)	(17.8)
Income (loss) before income taxes	\$ 61.4	\$ 21.3	\$ 32.9	\$ (36.9)	\$ 78.6
Supplementary Data					
Plant, equipment and timberlands, net	\$ 258.1	\$ 153.5	\$ 282.0	\$ 5.7	\$ 698.9
Depreciation, depletion and amortization	26.2	8.8	26.0	2.2	63.2
Capital expenditures	26.8	7.8	63.5	1.8	99.9

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.

Composite Fibers' revenue composition by market consisted of the following for the years indicated:

<i>In thousands</i>	2017	2016	2015
Food & beverage	\$ 268,474	\$ 258,463	\$ 274,865
Wallcovering	103,011	90,767	91,620
Technical specialties and other	76,991	71,558	71,689
Composite laminates	38,696	35,107	34,897
Metallized	57,088	61,059	68,397
Total	\$ 544,260	\$ 516,954	\$ 541,468

The Advanced Airlaid Materials business unit is a leading global supplier of highly absorbent cellulose-based airlaid nonwoven materials primarily used to manufacture consumer products for growing global end-user markets. These products include:

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

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

<i>In thousands</i>	2017	2016	2015
Feminine hygiene	\$ 179,670	\$ 173,902	\$ 182,048
Specialty wipes	29,519	25,206	22,950
Adult incontinence	14,425	12,281	10,720
Home care	13,029	12,630	13,345
Other	19,458	20,243	15,526
Total	\$ 256,101	\$ 244,262	\$ 244,589

Our Specialty Papers business unit focuses on producing papers for the following markets:

- **Carbonless & non-carbonless forms** papers for credit card receipts, multi-part forms, security papers and other end-user applications;
- **Engineered products** for high speed ink jet printing, office specialty products, greeting cards, and other niche specialty applications;
- **Envelope and converting** papers primarily utilized for transactional and direct mail envelopes; and
- **Book publishing** papers for the production of high quality hardbound books and other book publishing needs.

Specialty Papers' revenue composition by market consisted of the following for the years indicated:

<i>In thousands</i>	2017	2016	2015
Carbonless & forms	\$ 292,071	\$ 319,648	\$ 349,831
Engineered products	189,930	189,463	190,943
Envelope & converting	154,291	173,362	178,067
Book publishing	152,576	157,541	152,647
Other	2,067	3,568	3,538
Total	\$ 790,935	\$ 843,582	\$ 875,026

No individual customer accounted for more than 10% of our consolidated net sales in 2017, 2016 and 2015. However, one customer accounted for the majority

of Advanced Airlaid Materials' net sales in each of the past three years ended December 31, 2017.

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>	2017		2016		2015	
	Net sales	Plant, Equipment and Timberlands – Net	Net sales	Plant, Equipment and Timberlands – Net	Net sales	Plant, Equipment and Timberlands – Net
United States	\$ 880,708	\$ 456,223	\$ 918,567	\$ 391,977	\$ 959,730	\$ 287,447
Germany	450,668	240,932	427,520	220,380	444,009	232,340
United Kingdom	76,594	55,495	78,759	51,903	86,442	62,931
Canada	120,434	78,220	115,902	79,727	118,568	81,201
Other	62,893	34,873	64,049	31,911	52,335	34,945
Total	\$ 1,591,297	\$ 865,743	\$ 1,604,797	\$ 775,898	\$ 1,661,084	\$ 698,864

22. 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, including comprehensive income and cash flows for the years ended December 31, 2017, 2016 and 2015 and our condensed consolidating balance sheets as of December 31, 2017 and 2016.

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	\$ 790,933	\$ 89,787	\$ 798,603	\$ (88,026)	\$ 1,591,297
Energy and related sales, net	5,126	—	—	—	5,126
Total revenues	796,059	89,787	798,603	(88,026)	1,596,423
Costs of products sold	747,736	85,196	659,007	(88,026)	1,403,913
Gross profit	48,323	4,591	139,596	—	192,510
Selling, general and administrative expenses	69,483	2,598	62,313	—	134,394
(Gain) loss on dispositions of plant equipment and timberlands, net	223	(188)	(9)	—	26
Operating income (loss)	(21,383)	2,181	77,292	—	58,090
Other non-operating income (expense)					
Interest expense	(20,394)	(971)	(1,801)	5,394	(17,772)
Interest income	599	4,947	85	(5,394)	237
Equity in earnings of subsidiaries	18,864	60,871	—	(79,735)	—
Other, net	2,241	(6,776)	3,315	—	(1,220)
Total other non-operating income (expense)	1,310	58,071	1,599	(79,735)	(18,755)
Income (loss) before income taxes	(20,073)	60,252	78,891	(79,735)	39,335
Income tax provision (benefit)	(27,987)	41,388	18,020	—	31,421
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	\$ 843,582	\$ 75,000	\$ 755,860	\$ (69,645)	\$ 1,604,797
Energy and related sales, net	6,141	—	—	—	6,141
Total revenues	849,723	75,000	755,860	(69,645)	1,610,938
Costs of products sold	763,109	70,991	627,880	(69,645)	1,392,335
Gross profit	86,614	4,009	127,980	—	218,603
Selling, general and administrative expenses	133,387	(156)	57,463	—	190,694
Loss on dispositions of plant equipment and timberlands, net	177	—	39	—	216
Operating income (loss)	(46,950)	4,165	70,478	—	27,693
Other non-operating income (expense)					
Interest expense	(17,436)	(41)	(3,060)	4,715	(15,822)
Interest income	687	4,177	57	(4,715)	206
Equity in earnings of subsidiaries	61,007	58,347	—	(119,354)	—
Other, net	(2,312)	(3,966)	5,007	—	(1,271)
Total other non-operating income (expense)	41,946	58,517	2,004	(119,354)	(16,887)
Income (loss) before income taxes	(5,004)	62,682	72,482	(119,354)	10,806
Income tax provision (benefit)	(26,558)	1,675	14,135	—	(10,748)
Net income	21,554	61,007	58,347	(119,354)	21,554
Other comprehensive loss	(14,120)	(25,916)	(25,176)	51,092	(14,120)
Comprehensive income	\$ 7,434	\$ 35,091	\$ 33,171	\$ (68,262)	\$ 7,434

**Condensed Consolidating Statement of Income for the
year ended December 31, 2015**

<i>In thousands</i>	Parent Company	Guarantors	Non Guarantors	Adjustments/ Eliminations	Consolidated
Net sales	\$ 875,026	\$ 84,704	\$ 779,380	\$ (78,026)	\$ 1,661,084
Energy and related sales, net	5,664	—	—	—	5,664
Total revenues	880,690	84,704	779,380	(78,026)	1,666,748
Costs of products sold	811,329	80,455	650,025	(78,026)	1,463,783
Gross profit	69,361	4,249	129,355	—	202,965
Selling, general and administrative expenses	71,751	821	55,134	—	127,706
Gain on dispositions of plant equipment and timberlands, net	(19,720)	(1,183)	(210)	—	(21,113)
Operating income	17,330	4,611	74,431	—	96,372
Other non-operating income (expense)					
Interest expense	(18,147)	—	(36,859)	37,542	(17,464)
Interest income	673	37,127	26	(37,543)	283
Equity in earnings of subsidiaries	61,946	24,737	—	(86,683)	—
Other, net	(3,389)	(1,471)	4,245	—	(615)
Total other non-operating income (expense)	41,083	60,393	(32,588)	(86,684)	(17,796)
Income before income taxes	58,413	65,004	41,843	(86,684)	78,576
Income tax provision (benefit)	(6,162)	2,922	17,241	—	14,001
Net income	64,575	62,082	24,602	(86,684)	64,575
Other comprehensive income (loss)	(35,616)	(41,010)	29,680	11,330	(35,616)
Comprehensive income	\$ 28,959	\$ 21,072	\$ 54,282	\$ (75,354)	\$ 28,959

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	249,293	217,822	279,626	(277,989)	468,752
Plant, equipment and timberlands, net	375,231	80,992	409,520	—	865,743
Investments in subsidiaries	829,895	653,128	—	(1,483,023)	—
Other assets	139,552	—	140,529	—	280,081
Total assets	\$ 1,595,263	\$ 952,662	\$ 943,882	\$ (1,761,012)	\$ 1,730,795
Liabilities and Shareholders' Equity					
Current liabilities	\$ 402,787	\$ 54,640	\$ 167,738	\$ (277,989)	\$ 347,176
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	100,971	313	19,738	—	121,022
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	\$ 1,595,263	\$ 952,662	\$ 943,882	\$ (1,761,012)	\$ 1,730,795

Condensed Consolidating Balance Sheet as of December 31, 2016

<i>In thousands</i>	Parent Company	Guarantors	Non Guarantors	Adjustments/ Eliminations	Consolidated
Assets					
Cash and cash equivalents	\$ 5,082	\$ 1,461	\$ 48,901	\$ —	\$ 55,444
Other current assets	206,002	256,289	242,187	(265,663)	438,815
Plant, equipment and timberlands, net	360,521	31,455	383,922	—	775,898
Investments in subsidiaries	789,565	540,029	—	(1,329,594)	—
Other assets	123,010	—	128,092	—	251,102
Total assets	\$ 1,484,180	\$ 829,234	\$ 803,102	\$ (1,595,257)	\$ 1,521,259
Liabilities and Shareholders' Equity					
Current liabilities	\$ 426,628	\$ 26,085	\$ 135,961	\$ (265,663)	\$ 323,011
Long-term debt	283,686	14,000	65,961	—	363,647
Deferred income taxes	10,221	(729)	45,503	—	54,995
Other long-term liabilities	109,819	313	15,648	—	125,780
Total liabilities	830,354	39,669	263,073	(265,663)	867,433
Shareholders' equity	653,826	789,565	540,029	(1,329,594)	653,826
Total liabilities and shareholders' equity	\$ 1,484,180	\$ 829,234	\$ 803,102	\$ (1,595,257)	\$ 1,521,259

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

<i>In thousands</i>	Parent Company	Guarantors	Non Guarantors	Adjustments/ Eliminations	Consolidated
Net cash provided (used) by					
Operating activities	\$ (4,259)	\$ (3,506)	\$ 112,027	\$ —	\$ 104,262
Investing activities					
Expenditures for purchases of plant, equipment and timberlands	(65,822)	(45,644)	(20,838)	—	(132,304)
Proceeds from disposals of plant, equipment and timberlands, net	11	209	8	—	228
Repayments from intercompany loans	—	12,000	—	(12,000)	—
Advances of intercompany loans	—	(14,400)	—	14,400	—
Intercompany capital contributed	(14,000)	(400)	—	14,400	—
Acquisitions, net of cash acquired	—	—	—	—	—
Other	(243)	—	—	—	(243)
Total investing activities	(80,054)	(48,235)	(20,830)	16,800	(132,319)
Financing activities					
Net long-term borrowings	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)	—
Proceeds from government grants	4,875	—	—	—	4,875
Payments related to share-based compensation awards and other	(472)	—	—	—	(472)
Total financing activities	80,523	51,000	(33,135)	(16,800)	81,588
Effect of exchange rate on cash	—	—	7,244	—	7,244
Net increase (decrease) in cash	(3,790)	(741)	65,306	—	60,775
Cash at the beginning of period	5,082	1,461	48,901	—	55,444
Cash at the end of period	\$ 1,292	\$ 720	\$ 114,207	\$ —	\$ 116,219

**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	\$ 33,109	\$ 1,275	\$ 81,726	\$ —	\$ 116,110
Investing activities					
Expenditures for purchases of plant, equipment and timberlands	(104,595)	(30,682)	(24,881)	—	(160,158)
Proceeds from disposals of plant, equipment and timberlands, net	41	—	29	—	70
Repayments from intercompany loans	—	15,601	—	(15,601)	—
Advances of intercompany loans	—	(18,330)	—	18,330	—
Intercompany capital (contributed) returned	(17,000)	(500)	—	17,500	—
Other	(800)	—	—	—	(800)
Total investing activities	(122,354)	(33,911)	(24,852)	20,229	(160,888)
Financing activities					
Net repayments of indebtedness	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 (returned) received	—	17,000	500	(17,500)	—
Payment of intercompany dividend	—	632	(632)	—	—
Proceeds from government grants	3,582	2,000	—	—	5,582
Payments related to share-based compensation awards and other	(990)	—	—	—	(990)
Total financing activities	35,197	33,632	(51,619)	(20,229)	(3,019)
Effect of exchange rate on cash	—	—	(2,063)	—	(2,063)
Net increase (decrease) in cash	(54,048)	996	3,192	—	(49,860)
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

**Condensed Consolidating Statement of Cash Flows for the year
ended December 31, 2015**

<i>In thousands</i>	Parent Company	Guarantors	Non Guarantors	Adjustments/ Eliminations	Consolidated
Net cash provided (used) by					
Operating activities	\$ 34,391	\$ 627	\$ 98,725	\$ —	\$ 133,743
Investing activities					
Expenditures for plant, equipment and timberlands	(65,265)	(109)	(34,515)	—	(99,889)
Proceeds from disposal plant, equipment and timberlands, net	22,741	1,213	505	—	24,459
Repayments from intercompany loans	—	57,855	—	(57,855)	—
Advances of intercompany loans	—	(49,230)	—	49,230	—
Intercompany capital contributed, net	10,100	(300)	—	(9,800)	—
Acquisitions, net of cash acquired	—	—	(224)	—	(224)
Other	(1,600)	—	—	—	(1,600)
Total investing activities	(34,024)	9,429	(34,234)	(18,425)	(77,254)
Financing activities					
Net proceeds from indebtedness	—	—	(24,650)	—	(24,650)
Payments of note offering costs	(1,329)	—	—	—	(1,329)
Payment of dividends to shareholders	(20,443)	—	—	—	(20,443)
Repayments of intercompany loans	(9,158)	—	(48,697)	57,855	—
Borrowings of intercompany loans	49,230	—	—	(49,230)	—
Intercompany capital (returned) received	—	(10,100)	300	9,800	—
Proceeds from government grants	421	—	—	—	421
Payments related to share-based compensation awards and other	(2,166)	—	151	—	(2,015)
Total financing activities	16,555	(10,100)	(72,896)	18,425	(48,016)
Effect of exchange rate on cash	—	—	(3,006)	—	(3,006)
Net increase (decrease) in cash	16,922	(44)	(11,411)	—	5,467
Cash at the beginning of period	42,208	509	57,120	—	99,837
Cash at the end of period	\$ 59,130	\$ 465	\$ 45,709	\$ —	\$ 105,304

23. QUARTERLY RESULTS (UNAUDITED)

<i>In thousands, except per share</i>	Net sales		Gross profit		Net income (loss)		Earnings (loss) per share	
	2017	2016	2017	2016	2017	2016	2017	2016
First	\$ 390,713	\$ 402,218	\$ 56,929	\$ 57,843	\$ 11,603	\$ 16,168	\$ 0.26	\$ 0.37
Second	387,342	406,413	30,436	42,723	(5,714)	1,965	(0.13)	0.04
Third	413,325	405,301	54,735	61,170	12,105	19,601	0.27	0.44
Fourth	399,917	390,865	50,410	56,867	(10,080)	(16,180)	(0.23)	(0.37)

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, 2017, 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

During the fourth quarter of 2017, we completed the implementation of a new enterprise resource planning and manufacturing system for our Advanced Airlaid Materials' North America locations. There were no other changes in our internal control over financial reporting during the three months ended December 31, 2017, 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 30, 2018. 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 30, 2018.

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 30, 2018.

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 30, 2018.

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 30, 2018.

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 for the years ended December 31, 2017, 2016 and 2015
 - ii. Consolidated Statements of Comprehensive Income for the years ended December 31, 2017, 2016 and 2015
 - iii. Consolidated Balance Sheets as of December 31, 2017 and 2016
 - iv. Consolidated Statements of Cash Flows for the years ended December 31, 2017, 2016 and 2015
 - v. Consolidated Statements of Shareholders' Equity for the years ended December 31, 2017, 2016 and 2015
 - 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, 2017

(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) (the 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).	2.1	Form 10-Q filed May 9, 2013
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 February 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 October 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 February 26, 2016
10.1	Second Amended and Restated Credit Agreement, dated as of March 12, 2015, 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, J.P. Morgan Securities LLC 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 March 16, 2015
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 on February 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
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	Restricted Stock Unit Award Certificate, dated as of December 13, 2013, for Dante C. Parrini **	10.1	Form 8-K filed December 17, 2013

Exhibit Number	Description of Documents	Incorporated by Reference to	
		Exhibit	Filing
10.17	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
10.18	Retention agreement between P. H. Glatfelter Company and Timothy R. Hess, dated January 7, 2017 **	10.17	Form 10-K filed February 24, 2017
10.19	Restricted Stock Unit Award Certificate for Timothy R. Hess, dated as of January 6, 2017 **	10.18	Form 10-K filed February 24, 2017
10.20	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
10.21	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
10.21	(A) Schedule of Change in Control Employment Agreements, filed herewith **		
10.22	Summary of Non-Employee Director Compensation, effective January 1, 2005 **	10.1	Form 8-K filed December 20, 2004
10.23	P. H. Glatfelter Company Deferred Compensation Plan for Directors, effective as of January 1, 2007 **	10(k)	Form 10-K filed March 8, 2013
10.24	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
10.25	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
10.26	Form of Director's and Officer's Indemnification Agreement **	10.1	Form 8-K filed December 19, 2017
10.27	Guidelines for Executive Severance **	10.2	Form 8-K filed July 6, 2010
10.28	Agreement between the State of Wisconsin and Certain Companies Concerning the Fox River, dated as of January 31, 1997, among P. H. Glatfelter Company, Fort Howard Corporation, NCR Corporation, Appleton Papers Inc., Riverside Paper Corporation, U.S. Paper Mills, Wisconsin Tissue Mills Inc. and the State of Wisconsin	10(i)	Form 10-K filed March 28, 1997
10.29	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
10.29	(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
10.29	(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
10.29	(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
10.30	Administrative Order for Remedial Action dated November 13, 2007, issued by the United States Environmental Protection Agency	10.2	Form 8-K filed November 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		

** Management contract or compensatory plan

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

For each of the three years ended December 31, 2017

Valuation and Qualifying Accounts

<i>In thousands</i>	Doubtful Accounts			Allowance for Sales Discounts and Deductions		
	2017	2016	2015	2017	2016	2015
Balance, beginning of year	\$ 1,719	\$ 2,239	\$ 2,703	\$ 1,462	\$ 1,593	\$ 1,809
Provision	49	32	7	4,610	4,283	3,856
Write-offs, recoveries and discounts allowed	(29)	(497)	(275)	(4,697)	(4,368)	(3,649)
Other (a)	218	(55)	(196)	68	(46)	(423)
Balance, end of year	\$ 1,957	\$ 1,719	\$ 2,239	\$ 1,443	\$ 1,462	\$ 1,593

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.

[THIS PAGE INTENTIONALLY LEFT BLANK]

DIRECTORS AND OFFICERS

OFFICERS AND MANAGEMENT

Dante C. Parrini

Chairman and Chief Executive Officer

John P. Jacunski

Executive Vice President and
Chief Financial Officer

Christopher W. Astley

Senior Vice President & Business Unit
President, Advanced Airlaid Materials

Timothy R. Hess

Senior Vice President & Business Unit
President, Specialty Papers

Martin Rapp

Senior Vice President & Business Unit
President, Composite Fibers

Eileen L. Beck

Vice President, Human Resources

David C. Elder

Vice President, Finance

Samuel L. Hillard

Vice President, Corporate Development
& Strategy

Kent K. Matsumoto

Vice President, General Counsel &
Corporate Secretary

Ramesh Shettigar

Vice President & Treasurer

John A. Stachowiak

Vice President, Internal Audit

Amy R. Wannemacher

Vice President, Tax

Joseph J. Zakutney

Vice President & Chief Information Officer

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

Retired Chairman and Chief Executive Officer
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 3, 2018, 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. OPERATING LOCATIONS

Spring Grove Facility*

228 South Main Street
Spring Grove, PA 17362

Chillicothe Facility*

232 East Eighth Street
Chillicothe, OH 45601

Fremont Facility

2275 Commerce Drive
Fremont, OH 43420

Fort Smith Facility

8201 Chad Colley Boulevard
Fort Smith, AR 72916

INTERNATIONAL OPERATING LOCATIONS

Gernsbach Facility*

Hördener Straße 5
76593 Gernsbach
Germany

Dresden Facility*

Bergstraße 76
01099 Dresden
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

Gatineau Facility*

1680 rue Atmec
Gatineau, QC J8P 7G7
Canada

Falkenhagen Facility*

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

Newtech Pulp Facility

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

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

OTHER LOCATIONS

China

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

* Also a Sales Office



GLATFELTER
Beyond Paper

