
UNITED STATES SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
Form 10-K

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

or

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from to

COMMISSION FILE NUMBER: 001-33988

Graphic Packaging Holding Company

(Exact name of registrant as specified in its charter)

Delaware
(State of incorporation)
1500 Riveredge Parkway, Suite 100, Atlanta, Georgia
(Address of principal executive offices)

26-0405422
(I.R.S. employer identification no.)
30328
(Zip Code)

(770) 240-7200

Registrant's telephone number, including area code:

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

<u>Title of Each Class</u>	<u>Name of Each Exchange on Which Registered</u>
Common Stock, \$0.01 par value per share	New York Stock Exchange

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

None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes 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 the registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer Accelerated filer Smaller reporting company

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

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

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

The aggregate market value of voting and non-voting common equity held by non-affiliates at June 30, 2018 was approximately \$4.5 billion.

As of February 11, 2019 there were approximately 297,193,911 shares of the registrant's Common Stock, \$0.01 par value per share outstanding.

DOCUMENTS INCORPORATED BY REFERENCE:

Portions of the registrant's definitive Proxy Statement for the 2019 Annual Meeting of Stockholders are incorporated by reference into Part III of this Annual Report on Form 10-K.

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INFORMATION CONCERNING FORWARD-LOOKING STATEMENTS

Certain statements regarding the expectations of Graphic Packaging Holding Company (“GPHC” and, together with its subsidiaries, the “Company”), including, but not limited to, the availability of net operating losses to offset U.S. federal income taxes and the timing related to the Company’s future U.S. federal income tax payments, reclassification of gains on derivative instruments, capital investment, depreciation and amortization, interest expense, pension expense, and pension plan contributions, in this report constitute “forward-looking statements” as defined in the Private Securities Litigation Reform Act of 1995. Such statements are based on currently available operating, financial and competitive information and are subject to various risks and uncertainties that could cause actual results to differ materially from the Company’s historical experience and its present expectations. These risks and uncertainties include, but are not limited to, inflation of and volatility in raw material and energy costs, changes in consumer buying habits and product preferences, competition with other paperboard manufacturers and product substitution, the Company’s ability to implement its business strategies, including strategic acquisitions, the Company’s ability to successfully integrate acquisitions, productivity initiatives and cost reduction plans, including the North America Consumer Packaging business of International Paper Company (the “NACP Combination”), the Company’s debt level, currency movements and other risks of conducting business internationally, and the impact of regulatory and litigation matters, including those that could impact the Company’s ability to utilize its net operating losses to offset taxable income and those that impact the Company’s ability to protect and use its intellectual property. Undue reliance should not be placed on such forward-looking statements, as such statements speak only as of the date on which they are made and the Company undertakes no obligation to update such statements, except as may be required by law. Additional information regarding these and other risks is contained in Part I, Item 1A., Risk Factors.

PART I

ITEM 1. BUSINESS

Overview

Graphic Packaging Holding Company (“GPHC” and, together with its subsidiaries, the “Company”) is committed to providing consumer packaging that makes a world of difference. The Company is a leading provider of paper-based packaging solutions for a wide variety of products to food, beverage, foodservice and other consumer products companies. The Company operates on a global basis, is one of the largest producers of folding cartons in the United States (“U.S.”) and holds leading market positions in coated unbleached kraft paperboard (“CUK”), coated-recycled paperboard (“CRB”) and solid bleached sulfate paperboard (“SBS”).

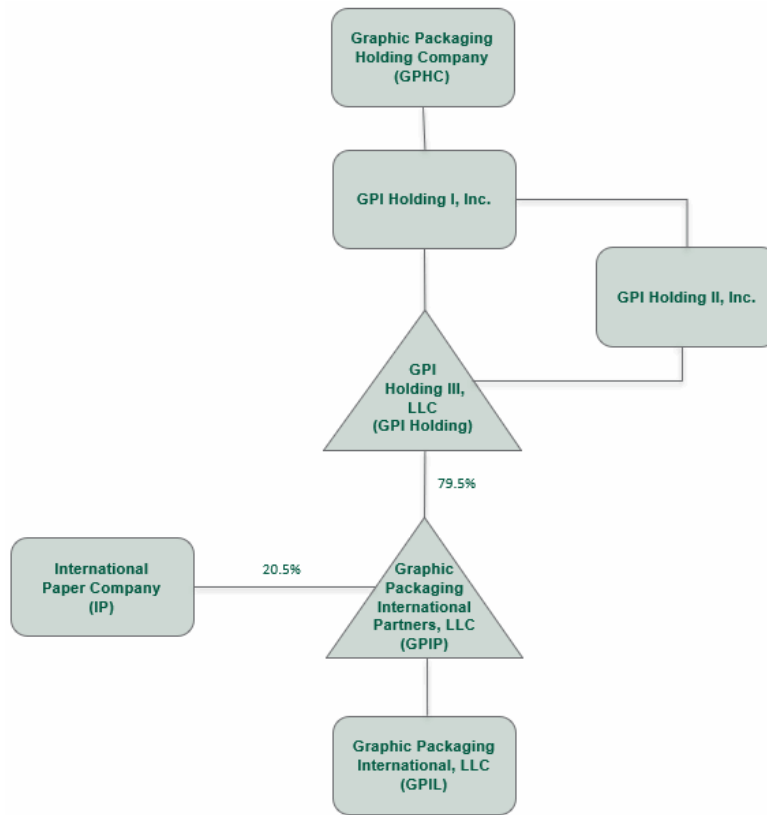
The Company’s customers include many of the world’s most widely recognized companies and brands with prominent market positions in beverage, food, foodservice and other consumer products. The Company strives to provide its customers with packaging solutions designed to deliver marketing and performance benefits at a competitive cost by capitalizing on its low-cost paperboard mills and converting plants, its proprietary carton, container and packaging designs, and its commitment to quality and service.

On January 1, 2018, GPHC, a Delaware corporation, International Paper Company, a New York corporation (“IP”), Graphic Packaging International Partners, LLC, a Delaware limited liability company formerly known as Gazelle Newco LLC and a wholly owned subsidiary of the Company (“GPIP”), and Graphic Packaging International, LLC, a Delaware limited liability company formerly known as Graphic Packaging International, Inc. and a subsidiary of GPIP (“GPIL”), completed a series of transactions pursuant to an agreement dated October 23, 2017, among the foregoing parties (the “Transaction Agreement”). Pursuant to the Transaction Agreement (i) a wholly owned subsidiary of the Company transferred its ownership interest in GPIL to GPIP; (ii) IP transferred its North America Consumer Packaging (“NACP”) business to GPIP, which was then subsequently transferred to GPIL; (iii) GPIP issued membership interests to IP, and IP was admitted as a member of GPIP; and (iv) GPIL assumed certain indebtedness of IP (the “NACP Combination”).

GPI Holding III, LLC, an indirect wholly-owned subsidiary of the Company (“GPI Holding”), is the managing member of GPIP.

At closing of the NACP Combination, GPIP issued 309,715,624 common units or 79.5% of the membership interests in GPIP to GPI Holding and 79,911,591 common units or 20.5% of the membership interests in GPIP to IP. Subject to certain restrictions, the common units held by IP are exchangeable into shares of common stock of GPHC or cash.

The following diagram illustrates the organization of the Company immediately subsequent to the transactions described above (not including subsidiaries of GPIL):



Acquisitions and Dispositions

2018

On September 30, 2018, the Company acquired substantially all the assets of the foodservice business of Letica Corporation, a subsidiary of RPC Group PLC ("Letica Foodservice"), a producer of paperboard-based cold and hot cups and cartons. The acquisition included two facilities located in Clarksville, Tennessee and Pittston, Pennsylvania. Letica Foodservice is included in the Americas Paperboard Packaging reportable segment.

On August 31, 2018, the Company sold its previously closed coated recycled paperboard mill site in Santa Clara, California.

On June 12, 2018, the Company acquired substantially all the assets of PFP, LLC and its related entity, PFP Dallas Converting, LLC (collectively, "PFP"), a converter focused on the production of paperboard-based air filter frames. The acquisition included two facilities located in Lebanon, Tennessee and Lancaster, Texas. PFP is included in the Americas Paperboard Packaging reportable segment.

As mentioned above, on January 1, 2018, the Company completed the NACP Combination. The NACP business produces SBS and paper-based foodservice products. The NACP business included two SBS mills located in Augusta, Georgia and Texarkana, Texas (included in Paperboard Mills reportable segment), three converting facilities in the U.S. (included in the Americas Paperboard Packaging reportable segment) and one in the United Kingdom ("U.K.") (included in the Europe Paperboard Packaging reportable segment).

2017

On December 1, 2017, the Company acquired the assets of Seydaco Packaging Corp. and its affiliates, National Carton and Coating Co., and Groupe Ecco Boites Pliantes Ltée (collectively, "Seydaco"), a folding carton producer focused on the foodservice, food, personal care, and household goods markets. The acquisition included three folding carton facilities located in Mississauga, Ontario, St.-Hyacinthe, Québec, and Xenia, Ohio.

On December 1, 2017, the Company closed its coated recycled paperboard mill in Santa Clara, California. This decision was made as a result of a thorough assessment of the facility's manufacturing capabilities and associated costs in the context of the Company's overall mill operating capabilities and cost structure.

On October 4, 2017, the Company acquired Norgraft Packaging, S.A. ("Norgraft"), a leading folding carton producer in Spain focused on the food and household goods markets. The acquisition included two folding carton facilities located in Miliña and Requejada, Spain.

On July 10, 2017, the Company acquired substantially all the assets of Carton Craft Corporation and its affiliate, Lithocraft, Inc. (collectively, "Carton Craft"). The acquisition included two folding carton facilities located in New Albany, Indiana, focused on the production of paperboard-based air filter frames and folding cartons.

The Seydaco, Norgraft, and Carton Craft transactions are referred to collectively as the "2017 Acquisitions." Seydaco and Carton Craft are included in the Americas Paperboard Packaging Segment. Norgraft is included in the Europe Paperboard Packaging Segment.

2016

On April 29, 2016, the Company acquired Colorpak Limited ("Colorpak"), a leading folding carton supplier in Australia and New Zealand. Colorpak operated three folding carton facilities that convert paperboard into folding cartons for the food, beverage and consumer product markets. The folding carton facilities are located in Melbourne and Sydney, Australia and Auckland, New Zealand.

On March 31, 2016, the Company acquired substantially all the assets of Metro Packaging & Imaging, Inc. ("Metro"), a single folding carton facility located in Wayne, New Jersey.

On February 16, 2016, the Company acquired Walter G. Anderson, Inc. ("WG Anderson"), a folding carton manufacturer with a focus on store branded food and consumer product markets. WG Anderson operated two sheet-fed folding carton facilities located in Hamel, Minnesota and Newton, Iowa.

On January 5, 2016, the Company acquired G-Box, S.A. de C.V., ("G-Box"). The acquisition included two folding carton facilities located in Monterrey, Mexico and Tijuana, Mexico that service the food, beverage, and consumer product markets.

The Colorpak, Metro, WG Anderson and G-Box transactions are referred to collectively as the "2016 Acquisitions." Metro, WG Anderson and G-Box are included in the Americas Paperboard Packaging Segment. Colorpak is included in Corporate/Other/Eliminations.

Capital Allocation Plan

On January 10, 2017, the Company's board of directors authorized a share repurchase program to allow the Company to purchase up to \$250 million of the Company's issued and outstanding shares of common stock through open market purchases, privately negotiated transactions and Rule 10b5-1 plans (the "2017 share repurchase program"). A prior \$250 million share repurchase program was authorized on February 4, 2015 (the "2015 share repurchase program").

The following presents the Company's share repurchases for the years ended December 31, 2018, 2017, and 2016:

<i>Amount repurchased in millions</i>	Amount Repurchased	Number of Shares Repurchased	Average Price
2018	\$ 120.0	10,566,144	\$ 11.35
2017	\$ 58.4	4,462,263 ^(a)	\$ 13.08
2016	\$ 168.8	13,202,425	\$ 12.77

^(a) Includes 1,440,697 shares under the 2015 share repurchase program thereby completing that program.

At December 31, 2018, the Company had approximately \$90 million of share repurchase authority remaining under the 2017 share repurchase program.

During 2018 and 2017, the Company paid cash dividends of \$93.1 million and \$93.4 million, respectively.

Products

The Company reports its results in three reportable segments as follows:

Paperboard Mills includes the eight North American paperboard mills which produce primarily CUK, CRB, and SBS, which is primarily consumed internally to produce paperboard packaging for the Americas and Europe Paperboard Packaging segments. The remaining paperboard is sold externally to a wide variety of paperboard packaging converters and brokers.

Americas Paperboard Packaging includes paperboard packaging, primarily folding cartons, sold primarily to Consumer Packaged Goods ("CPG") companies, and cups, lids and food containers sold primarily to foodservice companies and quick-service restaurants ("QSR"), all serving the food, beverage, and consumer product markets in the Americas.

Europe Paperboard Packaging includes paperboard packaging, primarily folding cartons, sold primarily to CPG companies serving the food, beverage and consumer product markets in Europe.

The Company operates in three geographic areas: the Americas, Europe and Asia Pacific.

For reportable segment and geographic area information for each of the last three fiscal years, see Note 15 in the Notes to Consolidated Financial Statements included herein under "Item 8. Financial Statements and Supplementary Data."

Paperboard Packaging

The Company's paperboard packaging products deliver brand, marketing and performance benefits at a competitive cost. The Company supplies paperboard cartons, carriers and containers designed to protect and hold products while providing:

- convenience through ease of carrying, storage, delivery, dispensing of product and food preparation for consumers;
- a smooth surface printed with high-resolution, multi-color graphic images that help improve brand awareness and visibility of products on store shelves; and
- durability, stiffness and wet and dry tear strength; leak, abrasion and heat resistance; barrier protection from moisture, oxygen, oils and greases, as well as enhanced microwave heating performance.

The Company provides a wide range of paperboard packaging solutions for the following end-use markets:

- beverage, including beer, soft drinks, energy drinks, teas, water and juices;
- food, including cereal, desserts, frozen, refrigerated and microwavable foods and pet foods;
- prepared food and drink, including snacks, quick-serve food and drink for restaurants and food service products;
- household products, including dishwasher and laundry detergent, health care and beauty aids, and tissues and papers; and
- air filter frames.

The Company's packaging applications meet the needs of its customers for:

Strength Packaging. The Company's products provide sturdiness to meet a variety of packaging needs, including tear and wet strength, puncture resistance, durability and compression strength (providing stacking strength to meet store display packaging requirements).

Promotional Packaging. The Company offers a broad range of promotional packaging options that help differentiate its customers' products in the marketplace. These promotional enhancements improve brand awareness and visibility on store shelves.

Convenience Packaging. These packaging solutions improve package usage and food preparation

- beverage multiple-packaging — multi-packs for beer, soft drinks, energy drinks, teas, water and juices;
- active microwave technologies — substrates that improve the heating and browning of foods in the microwave; and
- easy opening and closing features — dispensing features, pour spouts and sealable liners.

Barrier Packaging. The Company provides packages that protect against moisture, temperature (hot and cold), grease, oil, oxygen, sunlight, insects and other potential product-damaging factors.

Paperboard Mills and Folding Carton Facilities

The Company produces paperboard at its mills; prints, cuts, folds, and glues (“converts”) the paperboard into folding cartons and containers at its converting plants; and designs and manufactures specialized, proprietary packaging machines that package bottles and cans and, to a lesser extent, non-beverage consumer products. The Company also installs its packaging machines at customer plants and provides support, service and advanced performance monitoring of the machines.

The Company offers a variety of laminated, coated and printed packaging structures that are produced from its CUK, CRB and SBS, as well as other grades of paperboard that are purchased from third-party suppliers.

Below is the production at each of the Company’s paperboard mills during 2018:

Location	Product	# of Machines	2018 Net Tons Produced
West Monroe, LA	CUK	2	878,008
Macon, GA	CUK	2	686,694
Kalamazoo, MI	CRB	2	497,901
Battle Creek, MI	CRB	2	210,247
Middletown, OH	CRB	1	173,571
East Angus, Québec	CRB	1	93,849
Texarkana, TX	SBS	2	650,964
Augusta, GA	SBS	2	508,238
West Monroe, LA	Corrugated Medium	1	120,281

The Company consumes most of its coated board output in its converting operations, which is an integral part of the customer value proposition. In 2018, approximately 87% of mill sales of CUK and CRB and 37% of SBS, or 71% of combined mill sales of CUK, CRB and SBS, was consumed internally, respectively.

CUK Production. The Company is the largest of four worldwide producers of CUK. CUK is manufactured from pine-based wood fiber and is a specialized high-quality grade of coated paperboard with excellent wet and dry tear strength characteristics and printability for high resolution graphics that make it particularly well-suited for a variety of packaging applications. Both wood and recycled fibers are pulped, formed on paper machines, and clay-coated to provide an excellent printing surface for superior quality graphics and appearance characteristics.

CRB Production. The Company is the largest North American producer of CRB. CRB is manufactured entirely from recycled fibers, primarily old corrugated containers (“OCC”), doubled-lined kraft cuttings from corrugated box plants (“DLK”), old newspapers (“ONP”), and box cuttings. The recycled fibers are re-pulped, formed on paper machines, and clay-coated to provide an excellent printing surface for superior quality graphics and appearance characteristics.

SBS Production. The Company is one of the largest North American producers of SBS. SBS is manufactured from bleached pine and hardwood-based wood fiber and is the highest quality paperboard substrate with excellent wet and dry strength characteristics and superior printability for high-end packaging. Both wood and recycled fibers are pulped, formed on paper machines, and clay-coated to provide an excellent printing surface for superior quality graphics and appearance characteristics. SBS is also coated with polyethylene resin for wet strength liquid and food packaging end uses.

Corrugated Medium. The Company manufactures corrugated medium for internal use and sale in the open market. Corrugated medium is combined with linerboard to make corrugated containers.

The Company converts CUK, CRB and SBS, as well as other grades of paperboard, into cartons and containers at converting plants the Company operates in various locations globally, including a converting plant associated with the Company's joint venture in Japan, contract converters and at licensees outside the U.S. The converting plants print, cut, fold and glue paperboard into cartons and containers designed to meet customer specifications.

Joint Venture

The Company, through its GPIL subsidiary, is a party to a joint venture, Rengo Riverwood Packaging, Ltd. (in Japan), in which it holds a 50% ownership interest. The joint venture agreement covers CUK supply, use of proprietary carton designs and marketing and distribution of packaging systems.

Marketing and Distribution

The Company markets its products principally to multinational beverage, food, QSR, and other well-recognized consumer product companies. The beverage companies include Anheuser-Busch, Inc., MillerCoors LLC, PepsiCo, Inc. and The Coca-Cola Company, among others. Consumer product customers include Kraft Heinz Company, General Mills, Inc., Nestlé USA, Inc., Kellogg Company, HAVI Global Solutions, LLC and Kimberly-Clark Corporation, among others. QSR customers include McDonald's, Wendy's, Panda Express, Dairy Queen, Chipotle, Panera and Kentucky Fried Chicken, among others. The Company also sells paperboard in the open market to independent and integrated paperboard converters.

Distribution of the Company's principal products is primarily accomplished through sales offices in the U.S., Australia, Brazil, China, France, Germany, Italy, Japan, Mexico, Spain, the Netherlands and the United Kingdom, and, to a lesser degree, through broker arrangements with third parties.

During 2018, the Company did not have any one customer that represented 10% or more of its net sales.

Competition

Although a relatively small number of large competitors hold a significant portion of the paperboard packaging market, the Company's business is subject to strong competition. The Company and WestRock Company ("WestRock") are the two major CUK producers in the U.S. Internationally, The Klabin Company in Brazil and Stora Enso in Sweden produce similar grades of paperboard.

In non-beverage consumer packaging and foodservice, the Company's paperboard competes with WestRock CUK, as well as CRB and SBS from numerous competitors, and internationally, folding boxboard and white-lined chip. There are a large number of producers in the paperboard markets. Suppliers of paperboard compete primarily on the basis of price, strength and printability of their paperboard, quality and service.

In beverage packaging, cartons made from CUK compete with substitutes such as plastics and corrugated packaging for packaging glass or plastic bottles, cans and other primary containers. Although plastics and corrugated packaging may be priced lower than CUK, the Company believes that cartons made from CUK offer advantages over these materials in areas such as distribution, brand awareness, carton designs, package performance, package line speed, environmental friendliness and design flexibility.

Raw Materials

The paperboard packaging produced by the Company comes from pine and hardwood trees and recycled fibers. Pine pulpwood, hardwood pulp, paper and recycled fibers (including DLK, OCC and ONP) and energy used in the manufacture of paperboard, as well as poly sheeting, plastic resins and various chemicals used in the coating of paperboard, represent the largest components of the Company's variable costs of paperboard production.

For the West Monroe, LA, Macon, GA, Texarkana, TX, and Augusta, GA mills, the Company relies on private landowners and the open market for all of its pine and hardwood pulp and recycled fiber requirements, supplemented by clippings that are obtained from its converting operations. The Company believes that adequate supplies from both private landowners and open market fiber sellers currently are available in close proximity to meet its fiber needs at these mills.

The paperboard grades produced at the Kalamazoo, MI, Battle Creek, MI, Middletown, OH and East Angus, Quebec mills are made from 100% recycled fiber. The Company procures its recycled fiber from external suppliers and internal converting operations. The market price of each of the various recycled fiber grades fluctuates with supply and demand. The Company's internal recycled fiber procurement function enables the Company to pay lower prices for its recycled fiber needs given the Company's highly fragmented supplier base. The Company believes there are adequate supplies of recycled fiber to serve its mills.

In North America, the Company also converts a variety of other paperboard grades, in addition to paperboard that is supplied to its converting operations from its own mills. The Company purchases such paperboard requirements, including additional CRB and SBS, from outside vendors. The majority of external paperboard purchases are acquired through long-term arrangements with other major industry suppliers. The Company's European converting plants consume CUK supplied from the Company's mills and also convert other paperboard grades such as white-lined chip and folding box board purchased from external suppliers.

Energy

Energy, including natural gas, fuel oil and electricity, represents a significant portion of the Company's manufacturing costs. The Company has entered into contracts designed to manage risks associated with future variability in cash flows and price risk related to future energy cost increases for a portion of its natural gas requirements at its U.S. mills. The Company's hedging program for natural gas is discussed in Note 9 in the Notes to Consolidated Financial Statements included herein under "Item 8., Financial Statements and Supplementary Data."

Backlog

Orders from the Company's principal customers are manufactured and shipped with minimal lead time. The Company did not have a material amount relating to backlog orders at December 31, 2018 or 2017.

Seasonality

The Company's net sales, income from operations and cash flows from operations are subject to moderate seasonality, with demand usually increasing in the late spring through early fall due to increases in demand for beverage and food products.

Research and Development

The Company's research and development team works directly with its sales, marketing and consumer insights personnel to understand long-term consumer and retailer trends and create relevant new packaging. These innovative solutions provide customers with differentiated packaging to meet customer needs. The Company's development efforts include, but are not limited to, extending the shelf life of customers' products; reducing production and waste costs; enhancing the heat-managing characteristics of food packaging; improving the sturdiness and compression strength of packaging to meet store display needs; and refining packaging appearance through new printing techniques and materials.

Sustainability represents one of the strongest trends in the packaging industry and the Company focuses on developing more sustainable and eco-friendly manufacturing processes and products. The Company's strategy is to combine sustainability with innovation to create new packaging solutions for its customers.

For more information on research and development expenses see Note 1 in the Notes to Consolidated Financial Statements included herein under "Item 8., Financial Statements and Supplementary Data."

Patents and Trademarks

As of December 31, 2018, the Company had a large patent portfolio, presently owning, controlling or holding rights to more than 2,200 U.S. and foreign patents, with more than 500 U.S. and foreign patent applications currently pending. The Company's patent portfolio consists primarily of patents relating to packaging machinery, manufacturing methods, structural carton designs, active microwave packaging technology and barrier protection packaging. These patents and processes are significant to the Company's operations and are supported by trademarks such as Fridge Vendor™, IntegraPak™, MicroFlex-Q™, MicroRite™, Quilt Wave™, Qwik Crisp™, Tite-Pak™, and Z-Flute™. The Company takes significant steps to protect its intellectual property and proprietary rights.

Culture and Employees

The Company's corporate vision — Inspired packaging. A world of difference. — and values of integrity, respect, accountability, relationships and teamwork guide employee behavior, expectations and relations. The Company's ongoing efforts to build a high-performance culture and improve the manner in which work is done across the Company includes a significant focus on continuous improvement utilizing processes like Lean Sigma and Six Sigma.

As of December 31, 2018, the Company had approximately 18,000 employees worldwide, of which approximately 50% were represented by labor unions and covered by collective bargaining agreements or covered by works councils in Europe. As of December 31, 2018, 931 of the Company's employees were working under expired contracts, which are currently being negotiated, and 1,617 were covered under collective bargaining agreements that expire within one year. The Company considers its employee relations to be satisfactory.

Environmental Matters

The Company is subject to a broad range of foreign, federal, state and local environmental and health and safety regulations and employs a team of professionals in order to maintain compliance at each of its facilities. For additional information on such regulation and compliance, see "Environmental Matters" in "Item 7., Management's Discussion and Analysis of Financial Condition and Results of Operations" and Note 13 in the Notes to Consolidated Financial Statements included herein under "Item 8., Financial Statements and Supplementary Data."

The Company did not have material capital expenditures for environmental control or compliance in 2018.

Available Information

The Company's website is located at <http://www.graphicpkg.com>. The Company makes available, free of charge through its website, its Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as soon as reasonably practicable after such materials are electronically filed or furnished to the Securities and Exchange Commission (the "SEC"). The Company also makes certain investor presentations and access to analyst conference calls available through its website. The information contained or incorporated into the Company's website is not a part of this Annual Report on Form 10-K.

The SEC maintains an Internet website that contains reports, proxy and information statements, and other information regarding issuers like the Company that file electronically with the SEC at <http://www.SEC.gov>.

**Item 1A. RISK
FACTORS**

The following risks could affect (and in some cases have affected) the Company's actual results and could cause such results to differ materially from estimates or expectations reflected in certain forward-looking statements:

The Company's financial results could be adversely impacted if there are significant increases in prices for raw materials, energy, transportation and other necessary supplies, and the Company is unable to raise prices, or improve productivity to reduce costs.

Limitations on the availability of, and increases in, the costs of raw materials, including secondary fiber, petroleum-based materials, energy, wood, transportation and other necessary goods and services, could have an adverse effect on the Company's financial results. Because negotiated sales contracts and the market largely determine the pricing for its products, the Company is at times limited in its ability to raise prices and pass through to its customers any inflationary or other cost increases that the Company may incur.

The Company uses productivity improvements to reduce costs and offset inflation. These include global continuous improvement initiatives that use statistical process control to help design and manage many types of activities, including production and maintenance. The Company's ability to realize anticipated savings from these improvements is subject to significant operational, economic and competitive uncertainties and contingencies, many of which are beyond the Company's control. If the Company cannot successfully implement cost savings plans, it may not be able to continue to compete successfully against other manufacturers. In addition, any failure to generate the anticipated efficiencies and savings could adversely affect the Company's financial results.

Changes in consumer buying habits and preferences for products could have an effect on our sales volumes.

Changing consumer dietary habits and preferences have slowed sales growth for many of the food and beverage products the Company packages. If these trends continue, the Company's financial results could be adversely affected.

Competition and product substitution could have an adverse effect on the Company's financial results.

The Company competes with other paperboard manufacturers and carton converters, both domestically and internationally. The Company's products compete with those made from other manufacturers' CUK, as well as SBS and CRB, and other board substrates. Substitute products include plastic, shrink film and corrugated containers. In addition, while the Company has long-term relationships with many of its customers, the underlying contracts may be re-bid or renegotiated from time to time, and the Company may not be successful in renewing such contracts on favorable terms or at all. The Company works to maintain market share through efficiency, product innovations and strategic sourcing to its customers; however, pricing and other competitive pressures may occasionally result in the loss of a customer relationship.

The Company's future growth and financial results could be adversely impacted if the Company is unable to identify strategic acquisitions and to successfully integrate the acquired businesses.

The Company has made a significant number of acquisitions in recent years, including the NACP Combination. The Company's ability to continue to make strategic acquisitions from time to time and to integrate the acquired businesses successfully, including obtaining anticipated cost savings or synergies and expected operating results within a reasonable period of time, is an important factor in the Company's future growth. If the Company is unable to properly estimate, account for and realize the expected revenue and cash flow growth and other benefits from its acquisitions, the Company may be required to spend additional time or money on integration efforts that would otherwise have been spent on the development and expansion of its business.

The Company may not be able to develop and introduce new products and adequately protect its intellectual property and proprietary rights, which could harm its future success and competitive position.

The Company works to increase market share and profitability through product innovation and the introduction of new products. The inability to develop new or better products that satisfy customer and consumer preferences in a timely manner may impact the Company's competitive position.

The Company's future success and competitive position also depends, in part, upon its ability to obtain and maintain protection for certain proprietary carton and packaging machine technologies used in its value-added products, particularly those incorporating the Fridge Vendor, IntegraPak, MicroFlex-Q, MicroRite, Quilt Wave, Qwik Crisp, Tite-Pak, and Z-Flute technologies. Failure to protect the Company's existing intellectual property rights may result in the loss of valuable technologies or may require it to license other companies' intellectual property rights. It is possible that any of the patents owned by the Company may be invalidated, rendered unenforceable, circumvented, challenged or licensed to others or any of its pending or future patent applications may not be issued within the scope of the claims sought by the Company, if at all. Further, others may develop technologies that are similar or superior to the Company's technologies, duplicate its technologies or design around its patents, and steps taken by the Company to protect its technologies may not prevent misappropriation of such technologies.

The Company could experience material disruptions at our facilities.

Although the Company takes appropriate measures to minimize the risk and effect of material disruptions to the business conducted at our facilities, natural disasters such as hurricanes, tornadoes, floods and fires, as well as other unexpected disruptions such as the unavailability of critical raw materials, power outages and equipment failures can reduce production and increase manufacturing costs. These types of disruptions could materially adversely affect our earnings, depending upon the duration of the disruption and our ability to shift business to other facilities or find other sources of materials or energy. Any losses due to these events may not be covered by our existing insurance policies or may be subject to certain deductibles. In addition, given the Company's integrated supply chain, managing board supply and properly planning for mill outages and downtime must be integrated with the converting plants forecast. Any inability to do so could adversely affect the Company's financial results.

The Company is subject to the risks of doing business in foreign countries.

The Company has converting plants and one mill in 11 countries outside of the U.S. and sells its products worldwide. For 2018, before intercompany eliminations, net sales from operations outside of the U.S. represented approximately 20% of the Company's net sales. The Company's revenues from foreign sales fluctuate with changes in foreign currency exchange rates. The Company pursues a currency hedging program in order to reduce the impact of foreign currency exchange fluctuations on financial results. In addition, at December 31, 2018, approximately 15% of the Company's total assets were denominated in currencies other than the U.S. dollar.

The Company is also subject to the following significant risks associated with operating in foreign countries:

- Compliance with and enforcement of environmental, health and safety and labor laws and other regulations of the foreign countries in which the Company operates;
- Export compliance;
- Imposition or increase of withholding and other taxes on remittances and other payments by foreign subsidiaries; and
- Imposition of new or increases in capital investment requirements and other financing requirements by foreign governments.

In addition to these general risks, uncertainties surrounding the United Kingdom's pending withdrawal from the European Union (commonly referred to as "Brexit") could adversely affect our U.K. business, including potentially the Company's relationships with customers, suppliers and employees. The effects of Brexit will depend on the agreements, if any, the U.K. makes to retain access to European markets either during a transition period or more permanently.

The Company's information technology systems could suffer interruptions, failures or breaches and our business operations could be disrupted adversely affecting results of operations and the Company's reputation.

The Company's information technology systems, some of which are dependent on services provided by third parties, serve an important role in the operation of the business. These systems could be damaged or cease to function properly due to any number of causes, such as catastrophic events, power outages, security breaches, computer viruses or cyber-based attacks. The Company has contingency plans in place to prevent or mitigate the impact of these events, however, if they are not effective on a timely basis, business interruptions could occur which may adversely impact results of operations.

The Company has been, and likely will continue to be, subject to computer hacking, acts of vandalism or theft, malware, computer viruses or other malicious codes, phishing, employee error or malfeasance, catastrophes, unforeseen events or other cyber-attacks. To date, the Company has seen no material impact on our business or operations from these attacks or events. Any future significant compromise or breach of data security, whether external or internal, or misuse of customer, associate, supplier or Company data, could result in significant costs, lost sales, fines, lawsuits, and damage to the Company's reputation. However, the ever-evolving threats mean the Company and its third-party service providers and vendors must continually evaluate and adapt respective systems and processes and overall security environment, as well as those of any companies acquired. There is no guarantee that these measures will be adequate to safeguard against all data security breaches, system compromises or misuses of data. In addition, as the regulatory environment related to information security, data collection and use, and privacy becomes increasingly rigorous, with new and constantly changing requirements applicable to the Company's business, compliance with those requirements could also result in additional costs.

The Company is subject to environmental, health and safety laws and regulations, and costs to comply with such laws and regulations, or any liability or obligation imposed under new laws or regulations, could negatively impact its financial condition and results of operations.

The Company is subject to a broad range of foreign, federal, state and local environmental, health and safety laws and regulations, including those governing discharges to air, soil and water, the management, treatment and disposal of hazardous substances, the investigation and remediation of contamination resulting from releases of hazardous substances, and the health and safety of employees. The Company cannot currently assess the impact that future emission standards, climate control initiatives and enforcement practices will have on the Company's operations and capital expenditure requirements. Environmental liabilities and obligations may result in significant costs, which could negatively impact the Company's financial position, results of operations or cash flows. See Note 13 in the Notes to Consolidated Financial Statements included herein under "Item 8., Financial Statements and Supplementary Data."

The Company's indebtedness may adversely affect its financial condition and its ability to react to changes in its business.

As of December 31, 2018, the Company had an aggregate principal amount of \$2,967.7 million of outstanding debt. Subsequent to December 31, 2017, in connection with the consummation of the NACP Combination, GPIL entered into a Third Amended and Restated Credit Agreement dated as of January 1, 2018 (the "Amended and Restated Credit Agreement"). There were no additional borrowings under the Amended and Restated Credit Agreement in connection with the consummation of the NACP Combination. However, GPI entered into an Amended and Restated Credit Agreement dated as of January 1, 2018 and effective as of January 8, 2018 (the "Term Loan Credit Agreement") by which GPIL assumed a \$660.0 million term loan previously incurred by IP. See Note 5 in the Notes to Consolidated Financial Statements included herein under "Item 8., Financial Statements and Supplementary Data."

Because of the Company's debt level, a portion of its cash flows from operations are dedicated to payments on indebtedness and the Company's ability to obtain additional financing for working capital, capital expenditures, acquisitions or general corporate purposes may be restricted in the future.

Additionally, the Company's Amended and Restated Credit Agreement, Term Loan Credit Agreement and the indentures governing the 4.75% Senior Notes due 2021, 4.875% Senior Notes due 2022, and 4.125% Senior Notes due 2024 (the "Indentures") may prohibit or restrict, among other things, the disposal of assets, the incurrence of additional indebtedness (including guarantees), the incurrence of liens, payment of dividends, share repurchases, the making of acquisitions and other investments and certain other types of transactions. These restrictions could limit the Company's flexibility to respond to changing market conditions and competitive pressures. The debt obligations and restrictions may also leave the Company more vulnerable to a downturn in general economic conditions or its business, or unable to carry out capital expenditures that are necessary or important to its growth strategy and productivity improvement programs.

As of December 31, 2018, approximately 41% of the Company's debt is subject to variable rates of interest and exposes the Company to increased debt service obligations in the event of increased market interest rates.

The Company's capital spending may not achieve the desired benefits.

The Company invests significant amounts of cash on capital projects each year which have expected returns to the Company. As these investments start up, the Company may experience unanticipated business disruptions and not achieve the desired benefits. In addition, the Company's acquisitions may require more capital than expected to achieve synergies or expected operating results. Additional spending and unachieved benefits may adversely affect the Company's cash flow and results of operations.

The Company may face a shortage of a skilled workforce at its facilities.

The Company's ability to maintain or expand its business depends on attracting, training and retaining a skilled workforce. Changing demographics and workforce trends may result in a loss of knowledge and skills as experienced workers retire. Failure to attract and retain a skilled workforce may result in operational inefficiencies or require additional capital investments to reduce reliance on labor, which may adversely impact the Company's results.

**ITEM 1B. UNRESOLVED STAFF
COMMENTS**

None.

ITEM 2. PROPERTIES

Headquarters

The Company leases its principal executive offices in Atlanta, GA.

Operating Facilities

A listing of the principal properties owned or leased and operated by the Company is set forth below. The Company's buildings are adequate and suitable for the business of the Company and have sufficient capacity to meet current requirements. The Company also leases certain smaller facilities, warehouses and office space throughout the U.S. and in foreign countries from time to time.

Location	Related Products or Use of Facility
Mills:	
Augusta, GA	SBS
Battle Creek, MI	CRB
East Angus, Québec	CRB
Kalamazoo, MI	CRB
Macon, GA	CUK
Middletown, OH	CRB
Texarkana, TX	SBS
West Monroe, LA	CUK; Corrugated Medium; Research and Development
Other:	
Atlanta, GA ^(a)	Headquarters, Research and Development, Packaging Machinery and Design
Concord, NH ^(a)	Research and Development, Design Center
Crosby, MN	Packaging Machinery Engineering, Design and Manufacturing
Louisville, CO ^(a)	Research and Development
Menomonee Falls, WI	Foodservice Rebuild Center

North American Converting Plants:

Atlanta, GA^(a)
Carol Stream, IL
Centralia, IL
Charlotte, NC
Clarksville, TN
Cobourg, Ontario^(a)
Elk Grove, IL^{(a)(b)}
Fort Smith, AR^(b)
Gordonsville, TN^(a)
Gresham, OR^(a)
Hamel, MN
Irvine, CA

Kalamazoo, MI
Kendallville, IN

Kenton, OH
Lancaster, TX
Lawrenceburg, TN
Lebanon, TN ^(a)
Lumberton, NC
Marion, OH
Mississauga, Ontario^{(a)(b)}
Mitchell, SD
Monroe, LA ^(a)
Monterrey, Mexico^(a)

New Albany, IN^(b)
Newton, IA
North Portland, OR
Oroville, CA^(a)
Pacific, MO
Perry, GA
Pittston, PA
Prosperity, SC
Queretaro, Mexico^(a)
Shelbyville, IL
Solon, OH
Staunton, VA

St.-Hyacinthe, Québec^(a)
Tijuana, Mexico^(a)

Tuscaloosa, AL
Vancouver, WA^(a)
Valley Forge, PA
Visalia, CA
Wayne, NJ
Wausau, WI
West Monroe, LA^(b)
Xenia, OH^(a)
Winnipeg, Manitoba

International Converting Plants:

Auckland, New Zealand^(a)
Bremen, Germany^(a)
Bristol, United Kingdom
Coalville, United Kingdom^(a)
Gateshead, United Kingdom^(a)
Hoogerheide, Netherlands
Newcastle Upon Tyne, United Kingdom^(a)
Igalada, Spain
Jundiai, Sao Paulo, Brazil
Leeds, United Kingdom
Masnieres, France^(a)
Melbourne, Australia^(a)
Miliaño, Spain

Portlaoise, Ireland^(a)
Requejada, Spain

Sneek, Netherlands
Sydney, Australia^(a)
Winsford, United Kingdom ^(a)

Note:

^(a) Leased facility.

^(b) Multiple facilities in this location.

**ITEM 3. *LEGAL
PROCEEDINGS***

The Company is a party to a number of lawsuits arising in the ordinary conduct of its business. Although the timing and outcome of these lawsuits cannot be predicted with certainty, the Company does not believe that disposition of these lawsuits will have a material adverse effect on the Company's consolidated financial position, results of operations or cash flows. See Note 13 in the Notes to Consolidated Financial Statements included herein under "Item 8., Financial Statements and Supplementary Data."

**ITEM 4. *MINE SAFETY
DISCLOSURES***

Not Applicable.

EXECUTIVE OFFICERS OF THE REGISTRANT

Pursuant to General Instruction G.(3) of Form 10-K, the following list is included as an unnumbered item in Part I of this Report in lieu of being included in the definitive proxy statement that will be filed within 120 days after December 31, 2018.

Michael P. Doss, 52, is the President and Chief Executive Officer of Graphic Packaging Holding Company. Prior to January 1, 2016, Mr. Doss held the position of President and Chief Operating Officer from May 20, 2015 through December 31, 2015 and Chief Operating Officer from January 1, 2014 until May 19, 2015. Prior to these positions he served as the Executive Vice President, Commercial Operations of Graphic Packaging Holding Company. Prior to this Mr. Doss held the position of Senior Vice President, Consumer Packaging Division. Prior to March 2008, he had served as Senior Vice President, Consumer Products Packaging of Graphic Packaging Corporation since September 2006. From July 2000 until September 2006, he was the Vice President of Operations, Universal Packaging Division. Mr. Doss was Director of Web Systems for the Universal Packaging Division prior to his promotion to Vice President of Operations. Since joining Graphic Packaging International Corporation in 1990, Mr. Doss has held positions of increasing management responsibility, including Plant Manager at the Gordonsville, TN and Wausau, WI plants. Mr. Doss serves on the Board of Directors for the American Forest & Paper Association, the Sustainable Forest Initiative, the Paper Recycling Coalition, the Atlanta Area Council of the Boy Scouts of America and the Paper & Packaging Check-off Board. He is also active in the Metro Atlanta Chamber of Commerce.

Stephen R. Scherger, 54, is the Executive Vice President and Chief Financial Officer of Graphic Packaging Holding Company. From October 1, 2014 through December 31, 2014, Mr. Scherger was the Senior Vice President - Finance. From April 2012 through September 2014, Mr. Scherger served as Senior Vice President, Consumer Packaging Division. Mr. Scherger joined Graphic Packaging Holding Company in April of 2012 from MeadWestvaco Corporation, where he served as President, Beverage and Consumer Electronics. Mr. Scherger was with MeadWestvaco Corporation from 1986 to 2012 and held positions including Vice President, Corporate Strategy; Vice President and General Manager, Beverage Packaging; Vice President and Chief Financial Officer, Papers Group, Vice President Asia Pacific and Latin America, Beverage Packaging, Chief Financial Officer Beverage Packaging and other executive-level positions.

Carla J. Chaney, 48, is the Executive Vice President, Human Resources of Graphic Packaging Holding Company. She joined the Company on July 15, 2013. Ms. Chaney joined Graphic Packaging Holding Company from Exide Technologies. Ms. Chaney was with Exide Technologies from February 2012 to July 2013 and served most recently as Executive Vice President, Human Resources and Communications. Prior to Exide Technologies, Ms. Chaney held a variety of leadership roles with Newell Rubbermaid, Inc. from 2004 to 2011, including Group Vice President, Human Resources for the Home & Family business segment, Regional Vice President, Human Resources, EMEA; Corporate Vice President, Global Organization and People Development; and Vice President, Human Resources, Culinary Lifestyles Business. Ms. Chaney also worked for Georgia-Pacific from 1992 to 2004.

Michael Farrell, 52, became the Executive Vice President, Mills Division of Graphic Packaging Holding Company in September 2018. Prior to that, he served as the Senior Vice President, Supply Chain from January to October 2018. Prior to January 2018, Mr. Farrell served as Vice President, Recycled Board Mills of Graphic Packaging International, LLC and its predecessor companies ("GPI") from January 1, 2013; and Senior Manufacturing Manager of GPI from October 28, 2009 until December 31, 2012. From December 11, 2008 until October 27, 2009, Mr. Farrell was the Manufacturing Manager of the West Monroe, Louisiana mill and from September 1, 2006 until December 10, 2008 he was the General Manager of the Middletown, Ohio mill of GPI.

Lauren S. Tashma, 52, is the Executive Vice President, General Counsel and Secretary of Graphic Packaging Holding Company. She joined the Company in February 2014. Previously, Ms. Tashma served as Senior Vice President, General Counsel and Secretary of Fortune Brands Home & Security, Inc., where she led the legal, compliance and EHS functions. Prior to that, Ms. Tashma had various roles with Fortune Brands, Inc., including Vice President and Associate General Counsel.

Hilde Van Moeseke, 49, is the Senior Vice President & President, Europe, Middle East and Africa of Graphic Packaging Holding Company. From January 2017 to July 1, 2017, Ms. Van Moeseke served as Vice President, Finance Europe and Interim EMEA Leader of Graphic Packaging International, Inc. From July 2015 until January 2017, Ms. Van Moeseke was the Vice President, Finance Europe of Graphic Packaging International Inc. Ms. Van Moeseke joined the Company in January 2014 as Director Controlling and was promoted to Director, Finance Europe in July 2014. Prior to January 2014, Ms. Van Moeseke held the position of Group Controller, Project Management, Shared Service Center and Accounting at Azelis Corporate Services S.A. for two years. She has also worked for the Walt Disney Company in Europe for six years in the positions of Director Finance and Controllership, Director Regional Studio Controllership, Regional Studio Controllership and Senior Manager.

Joseph P. Yost, 51, is the Executive Vice President, and President, Americas Converting of Graphic Packaging Holding Company. Prior to January 5, 2017, Mr. Yost served as Senior Vice President, Global Beverage and Europe from September 1, 2015 to January 4, 2017, Senior Vice President, Europe from March 1, 2014 to August 31, 2015 and Senior Vice President, European Chief Integration Officer/Chief Financial Officer from February 2013 until February 2014. From 2009 until February 2013, Mr. Yost was the Senior Vice President, Supply Chain of Graphic Packaging Holding Company. From 2006 to 2009, he served as Vice President, Operations Support - Consumer Packaging for Graphic Packaging International. Mr. Yost has also served in the following positions: Director, Finance and Centralized Services from 2003 to 2006 with Graphic Packaging International and from 2000 to 2003 with Graphic Packaging Corporation; Manager, Operations Planning and Analysis - Consumer Products Division from 1999 to 2000 with Graphic Packaging Corporation; and other management positions from 1997 to 1999 with Fort James Corporation.

PART II

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

GPHC's common stock (together with the associated stock purchase rights) is traded on the New York Stock Exchange under the symbol "GPK." The historical range of the high and low sales price per share and dividend per share declared in each quarter of 2018 and 2017 are as follows:

	Common Stock Market Price		Dividends Declared
	High	Low	
2018			
First Quarter	\$ 16.74	\$ 14.33	\$ 0.075
Second Quarter	16.61	13.61	0.075
Third Quarter	15.22	13.71	0.075
Fourth Quarter	14.15	10.04	0.075
2017			
First Quarter	\$ 13.85	\$ 12.00	\$ 0.075
Second Quarter	14.18	12.68	0.075
Third Quarter	13.98	12.65	0.075
Fourth Quarter	15.85	13.94	0.075

During 2018 and 2017, GPHC paid cash dividends of \$93.1 million and \$93.4 million, respectively.

GPHC depends on GPIL for cash to pay dividends. Unless GPHC receives dividends, distributions or transfers from its subsidiaries, it cannot pay cash dividends on its common stock, because it has no independent operations. Such dividends, distributions or transfers from GPHC's subsidiaries may be restricted because the terms of GPIL's debt agreements and indentures limit its ability to make such payments to GPHC. See "Item 1A-Risk Factors" and Note - 5 in the Notes to Consolidated Financial Statements in "Item 8-Financial Statements and Supplementary Data."

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The following presents the Company's share repurchases for the years ended December 31, 2018, 2017, and 2016:

<i>Amount repurchased in millions</i>	Amount Repurchased	Number of Shares Repurchased	Average Price
2018	\$ 120.0	10,566,144	\$ 11.35
2017	\$ 58.4	4,462,263 ^(a)	\$ 13.08
2016	\$ 168.8	13,202,425	\$ 12.77

^(a) Includes 1,440,697 shares repurchased under the 2015 share repurchase program, thereby completing that program.

During the fourth quarter of 2018, pursuant to the 2017 share repurchase program, the Company purchased shares of its common stock as follows:

Issuer Purchases of Equity Securities

Period (2018)	Total Number of Shares Purchased	Average Price Paid Per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Maximum Number of Shares That May Yet Be Purchased Under the Publicly Announced Program (a)
October 1, through October 31,	1,274,475	\$ 10.98	23,564,374	17,803,540
November 1, through November 30,	6,443,082	\$ 11.62	30,007,456	10,105,642
December 1, through December 31,	2,848,587	\$ 10.92	32,856,043	8,464,154
Total	10,566,144			

^(a) Based on the closing price of the Company's common stock as of the end of each period.

On January 28, 2019 the board of directors authorized a new \$500 million share repurchase program.

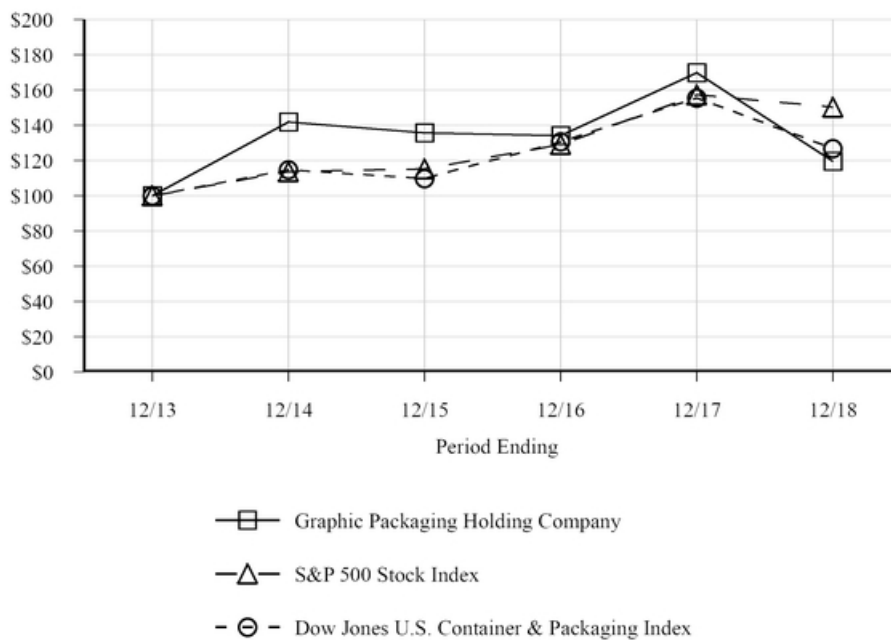
There were no sales of unregistered securities of the Company during 2018.

On February 11, 2019, there were 1,262 stockholders of record and approximately 37,000 beneficial holders of GPHC's common stock.

Total Return to Stockholders

The following graph compares the total returns (assuming reinvestment of dividends) of the common stock of Graphic Packaging Holding Company, the Standard & Poor's ("S&P") 500 Stock Index and the Dow Jones ("DJ") U.S. Container & Packaging Index. The graph assumes \$100 invested on December 31, 2013 in GPHC's common stock and each of the indices. The stock price performance on the following graph is not necessarily indicative of future stock price performance.

COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN



	12/31/2013	12/31/2014	12/31/2015	12/31/2016	12/31/2017	12/31/2018
Graphic Packaging Holding Company	\$ 100.00	\$ 141.88	\$ 135.60	\$ 134.18	\$ 169.84	\$ 119.58
S&P 500 Stock Index	100.00	113.69	115.26	129.05	157.22	150.33
Dow Jones U.S. Container & Packaging Index	100.00	114.71	109.77	130.69	155.55	126.85

**ITEM 6. *SELECTED FINANCIAL
DATA***

The selected consolidated financial data set forth below should be read in conjunction with “Item 7., Management’s Discussion and Analysis of Financial Condition and Results of Operations” and the Consolidated Financial Statements of the Company and the Notes to Consolidated Financial Statements included herein under “Item 8., Financial Statements and Supplementary Data.”

<i>In millions, except per share amounts</i>	Year Ended December 31,				
	2018	2017	2016	2015	2014
Statement of Operations Data:					
Net Sales	\$ 6,023.0	\$ 4,403.7	\$ 4,298.1	\$ 4,160.2	\$ 4,240.5
Income from Operations	458.2	327.9	407.4	430.1	222.1
Net Income	294.0	300.2	228.0	230.1	89.0
Net (Income) Loss Attributable to Noncontrolling Interests	(72.9)	—	—	—	0.7
Net Income Attributable Graphic Packaging Holding Company	221.1	300.2	228.0	230.1	89.7
Net Income Attributable to Graphic Packaging Holding Company Per Share Basis:					
Basic	\$ 0.71	\$ 0.97	\$ 0.71	\$ 0.70	\$ 0.27
Diluted	\$ 0.71	\$ 0.96	\$ 0.71	\$ 0.70	\$ 0.27
Balance Sheet Data:					
<i>(as of period end)</i>					
Cash and Cash Equivalents	\$ 70.5	\$ 67.4	\$ 59.1	\$ 54.9	\$ 81.6
Total Assets	7,059.2	4,863.0	4,603.4	4,256.1	4,137.6
Total Debt	2,957.1	2,274.5	2,151.9	1,875.5	1,957.7
Total Equity	2,018.5	1,291.9	1,056.5	1,101.7	1,012.3
Additional Data:					
Depreciation and Amortization	\$ 430.6	\$ 330.3	\$ 299.3	\$ 280.5	\$ 270.0
Capital Spending, including Packaging Machinery	395.2	260.1	294.6	244.1	201.4
Dividends Declared per Share	0.30	0.30	0.225	0.20	—

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

INTRODUCTION

This management's discussion and analysis of financial conditions and results of operations is intended to provide investors with an understanding of the Company's past performance, financial condition and prospects. The following will be discussed and analyzed:

Overview of Business

Overview of 2018 Results

Results of Operations

Financial Condition, Liquidity and Capital Resources

Critical Accounting Policies

New Accounting Standards

Business Outlook

OVERVIEW OF BUSINESS

The Company's objective is to strengthen its position as a leading provider of paper-based packaging solutions. To achieve this objective, the Company offers customers its paperboard, cartons, cups, lids, foodservice containers and packaging machines, either as an integrated solution or separately. Cartons, carriers and containers are designed to protect and hold products. Product offerings include a variety of laminated, coated and printed packaging structures that are produced from the Company's CUK, CRB, and SBS. Innovative designs and combinations of paperboard, films, foils, metallization, holographics and embossing are customized to the individual needs of the customers.

The Company is implementing strategies (i) to expand market share in its current markets and to identify and penetrate new markets; (ii) to capitalize on the Company's customer relationships, business competencies, and mills and folding carton assets; (iii) to develop and market innovative, sustainable products and applications; and (iv) to continue to reduce costs by focusing on operational improvements. The Company's ability to fully implement its strategies and achieve its objectives may be influenced by a variety of factors, many of which are beyond its control, such as inflation of raw material and other costs, which the Company cannot always pass through to its customers, and the effect of overcapacity in the worldwide paperboard packaging industry.

Significant Factors That Impact the Company's Business and Results of Operations

Impact of Inflation/Deflation. The Company's cost of sales consists primarily of energy (including natural gas, fuel oil and electricity), pine and hardwood pulp, chemicals, secondary fibers, purchased paperboard, aluminum foil, ink, plastic films and resins, depreciation expense and labor. Costs increased year over year by \$73.6 million in 2018 and increased year over year by \$95.8 million in 2017. The higher costs in 2018 were due to freight (\$25.9 million), labor and benefit costs (\$20.9 million), chemicals (\$19.4 million), external board (\$17.7 million), and other costs, net (\$4.2 million), partially offset by lower secondary fiber cost (\$14.5 million).

Because the price of natural gas experiences significant volatility, the Company has entered into contracts designed to manage risks associated with future variability in cash flows caused by changes in the price of natural gas. The Company has entered into natural gas swap contracts to hedge prices for a portion of its expected usage for 2019. Since negotiated sales contracts and the market largely determine the pricing for its products, the Company is at times limited in its ability to raise prices and pass through to its customers any inflationary or other cost increases that the Company may incur.

Commitment to Cost Reduction. In light of continuing margin pressure throughout the packaging industry, the Company has programs in place that are designed to reduce costs, improve productivity and increase profitability. The Company utilizes a global continuous improvement initiative that uses statistical process control to help design and manage many types of activities, including production and maintenance. This includes a Six Sigma process focused on reducing variable and fixed manufacturing and administrative costs. The Company has expanded the continuous improvement initiative to include the deployment of Lean Sigma principles into manufacturing and supply chain services.

The Company's ability to continue to successfully implement its business strategies and to realize anticipated savings and operating efficiencies is subject to significant business, economic and competitive uncertainties and contingencies, many of which are beyond the Company's control. If the Company cannot successfully implement the strategic cost reductions or other cost savings plans it may not be able to continue to compete successfully against other manufacturers. In addition, any failure to generate the anticipated efficiencies and savings could adversely affect the Company's financial results.

Competition and Market Factors. As some products can be packaged in different types of materials, the Company's sales are affected by competition from other manufacturers' CUK, CRB, SBS, folding box board, and recycled clay-coated news. Additional substitute products also include plastic, shrink film and corrugated containers. In addition, while the Company has long-term relationships with many of its customers, the underlying contracts may be re-bid or renegotiated from time to time, and the Company may not be successful in renewing on favorable terms or at all. The Company works to maintain market share through efficiency, product innovation and strategic sourcing to its customers; however, pricing and other competitive pressures may occasionally result in the loss of a customer relationship.

In addition, the Company's sales historically are driven by consumer buying habits in the markets its customers serve. Changes in consumer dietary habits and preferences, increases in the costs of living, unemployment rates, access to credit markets, as well as other macroeconomic factors, may negatively affect consumer spending behavior. New product introductions and promotional activity by the Company's customers and the Company's introduction of new packaging products also impact its sales.

Debt Obligations. The Company had an aggregate principal amount of \$2,967.7 million of outstanding debt obligations as of December 31, 2018. This debt has consequences for the Company, as it requires a portion of cash flow from operations to be used for the payment of principal and interest, exposes the Company to the risk of increased interest rates and may restrict the Company's ability to obtain additional financing. Covenants in the Company's Amended and Restated Credit Agreement, the Term Loan Credit Agreement and Indentures may, among other things, restrict the ability of the Company to dispose of assets, incur guarantee obligations, prepay other indebtedness, repurchase stock, pay dividends, make other restricted payments and make acquisitions or other investments. The Amended and Restated Credit Agreement and the Term Loan Credit Agreement also require compliance with a maximum consolidated leverage ratio and a minimum consolidated interest coverage ratio. The Company's ability to comply in future periods with the financial covenants will depend on its ongoing financial and operating performance, which in turn will be subject to many other factors, many of which are beyond the Company's control. See "Covenant Restrictions" in "Financial Condition, Liquidity and Capital Resources" for additional information regarding the Company's debt obligations.

The debt and the restrictions under the Amended and Restated Credit Agreement, the Term Loan Credit Agreement and the Indentures could limit the Company's flexibility to respond to changing market conditions and competitive pressures. The outstanding debt obligations and the restrictions may also leave the Company more vulnerable to a downturn in general economic conditions or its business, or unable to carry out capital expenditures that are necessary or important to its growth strategy and productivity improvement programs.

OVERVIEW OF RESULTS

This management's discussion and analysis contains an analysis of Net Sales, Income from Operations and other information relevant to an understanding of the Company's results of operations. On a consolidated basis:

- Net Sales in 2018 increased by \$1,619.3 million or 36.8%, to \$6,023.0 million from \$4,403.7 million in 2017 due to the NACP Combination, the 2017 and 2018 Acquisitions discussed below, higher selling prices, and favorable foreign currency exchange rates.
- Income from Operations in 2018 increased by \$130.3 million or 39.7%, to \$458.2 million from \$327.9 million in 2017 due to the NACP Combination, the 2017 and 2018 Acquisitions, the higher selling prices, gain on sale of assets, and cost savings through continuous improvement and other programs. These increases were partially offset by higher inflation and the Augusta, Georgia mill outage.

Acquisitions and Dispositions

- On September 30, 2018, the Company acquired substantially all the assets of the foodservice business of Letica Foodservice, a producer of paperboard-based cold and hot cups and cartons. The acquisition included two facilities located in Clarksville, Tennessee and Pittston, Pennsylvania. Letica Foodservice is included in the Americas Paperboard Packaging reportable segment.
- On August 31, 2018, the Company sold its previously closed coated recycled paperboard mill site in Santa Clara, California, resulting in a gain on sale of assets of \$37.1 million.
- On June 12, 2018, the Company acquired substantially all the assets of PFP, a converter focused on the production of paperboard-based air filter frames. The acquisition included two facilities located in Lebanon, Tennessee and Lancaster, Texas. PFP and Letica Foodservice are referred to collectively as the "2018 Acquisitions."
- On January 1, 2018, the Company closed the NACP Combination. NACP was a leading producer of SBS and paper-based foodservice products. The NACP business included two SBS mills located in Augusta, Georgia and Texarkana, Texas, three converting facilities in the U.S. and one in the United Kingdom.
- During 2017, the Company completed the 2017 Acquisitions which included Seydaco, Norgraft and Carton Craft.
- During 2016, the Company completed the 2016 Acquisitions which included G-Box, WG Anderson, Metro and Colorpak.

Capital Allocations

- During 2018, the Company repurchased 10,566,144 shares of its outstanding common stock, or approximately \$120.0 million, at an aggregate average price of \$11.35. At December 31, 2018, the Company had approximately \$90 million available for additional repurchases under the 2017 share repurchase program.
- During 2018, GPHC declared and paid cash dividends of \$92.3 million and \$93.1 million, respectively.

RESULTS OF OPERATIONS

<i>In millions</i>	Year Ended December 31,		
	2018	2017	2016
Net Sales	\$ 6,023.0	\$ 4,403.7	\$ 4,298.1
Income from Operations	\$ 458.2	\$ 327.9	\$ 407.4
Nonoperating Pension and Postretirement Benefit Income (Expense)	14.9	14.8	(11.4)
Interest Expense, Net	(123.7)	(89.7)	(76.6)
Loss on Modification or Extinguishment of Debt	(1.9)	—	—
Income before Income Taxes and Equity Income of Unconsolidated Entity	\$ 347.5	\$ 253.0	\$ 319.4
Income Tax (Expense) Benefit	(54.7)	45.5	(93.2)
Income before Equity Income of Unconsolidated Entity	\$ 292.8	\$ 298.5	\$ 226.2
Equity Income of Unconsolidated Entity	1.2	1.7	1.8
Net Income	\$ 294.0	\$ 300.2	\$ 228.0

2018 COMPARED WITH 2017
Net Sales

The components of the change in Net Sales are as follows:

<i>In millions</i>	Year Ended December 31,							
	2017	Variances			2018	Increase	Percent Change	
		Price	Volume/Mix	Foreign Exchange				
Consolidated	\$ 4,403.7	\$ 52.9	\$ 1,547.3	\$ 19.1	\$ 6,023.0	\$ 1,619.3	36.8%	

The Company's Net Sales in 2018 increased by \$1,619.3 million or 36.8%, to \$6,023.0 million from \$4,403.7 million for the same period in 2017, due to Net Sales of \$1,547.9 million from the NACP Combination and the 2017 Acquisitions and the 2018 Acquisitions, higher selling prices and favorable currency exchange rates, primarily the Euro and the British Pound. These increases were offset by lower open market volumes as the Company internalized more paperboard due to the shutdown of the Santa Clara mill site in the fourth quarter of 2017. Core volumes were stable due to new product introductions offset by lower beverage volumes. The higher selling prices are the result of announced price increases which benefit open market sales as well as inflationary pass throughs in the converting businesses.

Income from Operations

The components of the change in Income from Operations are as follows:

<i>In millions</i>	Year Ended December 31,								
	2017	Variances					2018	Increase	Percent Change
		Price	Volume/Mix ^(a)	Inflation	Foreign Exchange	Other ^(b)			
Consolidated	\$ 327.9	\$ 52.9	\$ 38.2	\$ (73.6)	\$ 1.5	\$ 111.3	\$ 458.2	\$ 130.3	39.7%

^(a) Includes expenses related to the Augusta, Georgia mill outage and inflation for the NACP Combination of approximately \$26 million.

^(b) Includes the Company's cost reduction initiatives and expenses related to business combinations, gain on sale of assets and shutdown and other special charges.

The Company's Income from Operations for 2018 increased \$130.3 million or 39.7%, to \$458.2 million from \$327.9 million for the same period in 2017 due to the NACP Combination, the 2017 Acquisitions and the 2018 Acquisitions, the higher selling prices, a gain of \$37.1 million from the sale of the Santa Clara mill, cost savings through continuous improvement and other programs and the impact related to planned downtime taken in 2017 to upgrade a paper machine in West Monroe, LA. These increases were partially offset by inflation, the Augusta, Georgia mill outage (approximately \$52 million), expenses related to the NACP Combination and integration activities and higher incentive compensation costs. Inflation for 2018 increased due to freight (\$25.9 million), labor and benefit costs (\$20.9 million), chemicals (\$19.4 million), external board (\$17.7 million), and other costs, net (\$4.2 million), partially offset by lower secondary fiber cost (\$14.5 million).

Interest Expense, Net

Interest Expense, Net increased by \$34.0 million to \$123.7 million in 2018 from \$89.7 million in 2017. Interest Expense, Net increased due primarily to higher average debt balances and interest rates as compared to the prior year. As of December 31, 2018, approximately 41% of the Company's total debt was subject to floating interest rates.

Income Tax Expense

During 2018, the Company recognized Income Tax Expense of \$54.7 million on Income before Income Taxes and Equity Income of Unconsolidated Entity of \$347.5 million. During 2017, the Company recognized Income Tax Benefit of \$45.5 million on Income before Income Taxes and Equity Income of Unconsolidated Entity of \$253.0 million. The effective tax rate for 2018 is lower than the statutory rate primarily due to the tax effect of domestic income attributable to noncontrolling interests as well as the mix and levels of earnings between foreign and domestic tax jurisdictions. In addition, during 2018, the Company recorded discrete benefits of approximately \$4 million, \$11 million and \$2 million associated with the indirect impacts of the NACP Combination, an adjustment to the estimated tax effects of the Tax Cuts and Jobs Act (the "Act") and the release of a valuation allowance against the net deferred tax assets of the Company's wholly-owned subsidiary in France, respectively.

The Company has available net operating losses ("NOLs") of approximately \$168 million for U.S. federal income tax purposes which may be used to offset future taxable income. Based on these NOLs and other tax benefits as well as the impact of U.S. tax reform on projections of future taxable income, the Company does not expect to be a meaningful U.S. federal cash taxpayer until 2021.

Equity Income of Unconsolidated Entity

Equity Income of Unconsolidated Entity was \$1.2 million in 2018 and \$1.7 million in 2017 and is related to the Company's equity investment through its GPIL subsidiary, in the joint venture, Rengo Riverwood Packaging, Ltd.

2017 COMPARED WITH 2016

Net Sales

The components of the change in Net Sales are as follows:

<i>In millions</i>	Year Ended December 31,						
	2016			Variances		2017	
		Price	Volume/Mix	Foreign Exchange		Increase	Percent Change
Consolidated	\$ 4,298.1	\$ (27.1)	\$ 135.6	\$ (2.9)	\$ 4,403.7	\$ 105.6	2.5%

The Company's Net Sales in 2017 increased by \$105.6 million, or 2.5% to \$4,403.7 million from \$4,298.1 million in 2016, due to Net Sales of \$106.9 million from the 2017 Acquisitions and the 2016 Acquisitions and increased converting volume, including new product introductions. These increases were partially offset by lower selling prices and unfavorable currency exchange rates, primarily the British pound. Global beverage volume increased, while softness continued in certain consumer product markets (cereal and dry foods).

Income from Operations

The components of the change in Income from Operations are as follows:

In millions	Year Ended December 31,								
	2016	Variances					2017	Decrease	Percent Change
		Price	Volume/Mix	Inflation	Foreign Exchange	Other ^(a)			
Consolidated	\$ 407.4	\$ (27.1)	\$ (0.8)	\$ (95.8)	\$ (3.0)	\$ 47.2	\$ 327.9	\$ (79.5)	(19.5)%

^(a) Includes the Company's cost reduction initiatives, sales of assets, expenses related to acquisitions, integration activities, and shutdown costs.

The Company's Income from Operations for 2017 decreased \$79.5 million or 19.5%, to \$327.9 million from \$407.4 million for the same period in 2016 due to higher inflation, including the impact of the hurricanes, the lower selling prices, and higher depreciation and amortization expense related to the acquisitions and the shutdown of Santa Clara. These decreases were partially offset by cost savings through continuous improvement and other programs, lower restricted stock unit expense and lower costs associated with acquisitions and integration. Inflation for 2017 increased primarily due to secondary fiber (\$40.1 million), labor and benefits (\$22.5 million), freight (\$15.6 million), chemicals (\$14.3 million) and other costs, net (\$3.3 million).

Interest Expense, Net

Interest Expense, Net increased by \$13.1 million to \$89.7 million in 2017 from \$76.6 million in 2016. Interest Expense, Net increased due primarily to higher average interest rates as compared to the same period in the prior year.

Income Tax Expense

During 2017, the Company recognized Income Tax Benefit of \$45.5 million on Income before Income Taxes and Equity Income of Unconsolidated Entity of \$253.0 million. During 2016, the Company recognized Income Tax Expense of \$93.2 million on Income before Income Taxes and Equity Income of Unconsolidated Entity of \$319.4 million. The effective tax rate for 2017 is significantly different than the statutory rate primarily due to the effect of the enactment of the Tax Cuts and Jobs Act (the "Act") on December 22, 2017. The Act significantly reduced U.S. federal corporate income tax rates, which resulted in an income tax benefit of \$156.3 million as a result of the remeasurement of the Company's domestic net Deferred Tax Liabilities. In addition, the Act required companies to record a one-time transition tax impact based on foreign earnings and profits which resulted in additional tax expense in the current year of \$20.5 million.

Equity Income of Unconsolidated Entity

Equity Income of Unconsolidated Entity was \$1.7 million in 2017 and \$1.8 million in 2016 and is related to the Company's equity investment through its GPIL subsidiary in the joint venture, Rengo Riverwood Packaging, Ltd.

Segment Reporting

The Company has three reportable segments as follows:

Paperboard Mills includes the eight North American paperboard mills which produce primarily CUK, CRB, and SBS, which is primarily consumed internally to produce paperboard packaging for the Americas and Europe Paperboard Packaging segments. The remaining paperboard is sold externally to a wide variety of paperboard packaging converters and brokers. The Paperboard Mills segment Net Sales represent the sale of paperboard only to external customers. The effect of intercompany transfers to the paperboard packaging segments has been eliminated from the Paperboard Mills segment to reflect the economics of the integration of these segments.

Americas Paperboard Packaging includes paperboard packaging folding cartons and cups, lids, and food containers sold primarily to consumer packaged goods, quick-service restaurants and foodservice companies serving the food, beverage, and consumer product markets in the Americas.

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Europe Paperboard Packaging includes paperboard packaging primarily folding cartons sold primarily to consumer packaged goods companies serving the food, beverage and consumer product markets in Europe.

The Company allocates certain mill and corporate costs to the reportable segments to appropriately represent the economics of these segments. The Corporate and Other caption includes the Pacific Rim and Australia operating segments and unallocated corporate and one-time costs.

These segments are evaluated by the chief operating decision maker based primarily on Income from Operations, as adjusted for depreciation and amortization. The accounting policies of the reportable segments are the same as those described in Note 1 in the Notes to Consolidated Financial Statements included herein under "Item 8. Financial Statements and Supplementary Data."

<i>In millions</i>	Year Ended December 31,		
	2018	2017	2016
NET SALES:			
Paperboard Mills	\$ 1,076.5	\$ 399.7	\$ 394.7
Americas Paperboard Packaging	4,093.9	3,243.6	3,193.1
Europe Paperboard Packaging	695.5	593.1	569.9
Corporate/Other/Eliminations ^(a)	157.1	167.3	140.4
Total	\$ 6,023.0	\$ 4,403.7	\$ 4,298.1
INCOME (LOSS) FROM OPERATIONS:			
Paperboard Mills ^(b)	\$ 30.6	\$ (35.0)	\$ (3.7)
Americas Paperboard Packaging	420.1	358.2	409.0
Europe Paperboard Packaging	46.1	37.3	25.4
Corporate and Other ^(c)	(38.6)	(32.6)	(23.3)
Total	\$ 458.2	\$ 327.9	\$ 407.4

^(a) Includes revenue from contracts with customers for the Australia and Pacific Rim operating segments, which is not material.

^(b) Includes the Augusta, Georgia mill outage in 2018 and accelerated depreciation related to shutdown of the Santa Clara mill in 2017.

^(c) Includes expenses related to business combinations, gain on sale of assets and shutdown and other special charges.

2018 COMPARED WITH 2017

Paperboard Mills - Net sales increased due to the NACP Combination and increased selling prices, partially offset by lower open market volume of CRB and SUS as the Company internalized more paperboard due to the closure of the Santa Clara Mill in the fourth quarter of 2017. During 2018, the Company announced a series of price increases related to its CRB, SUS and SBS open market paperboard.

Income from Operations increased due to the NACP Combination, the impact of the 2017 maintenance cold outage in West Monroe, LA, productivity improvements and the higher selling prices, partially offset by the Augusta, Georgia mill outage, and higher inflation. Inflation increased primarily for chemicals, freight and labor and benefits, partially offset by lower secondary fiber and energy costs.

Americas Paperboard Packaging - Net sales increased due to the NACP Combination, the 2017 Acquisitions and the 2018 Acquisitions, higher selling prices and new product introductions, partially offset by lower volume for beverage and certain consumer products. The higher selling prices are inflationary pass throughs related to announced paperboard price increases.

Income from Operations increased due to the NACP Combination, the 2017 Acquisitions and the 2018 Acquisitions, the higher selling prices and cost savings through continuous improvement programs, partially offset by higher inflation, primarily for freight, labor and benefits and external board.

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Europe Paperboard Packaging - Net Sales increased due to the Norgraft acquisition and NACP Combination, favorable foreign currency exchange rates, increased volumes for beverage, consumer and convenience products and higher selling prices. The higher selling prices are related to board inflationary pass throughs.

Income from Operations increased due to the same factors increasing Net Sales as well as, continuous improvement and other cost savings programs, partially offset by higher inflation, primarily external paperboard.

2017 COMPARED WITH 2016

Paperboard Mills - Net sales increased due to higher selling prices and favorable foreign currency exchange rates. Volume was flat for the year as increased CRB tons were offset by decreased CUK tons, due to internalization of tons related to the acquisitions.

Loss from Operations increased due to higher inflation, primarily secondary fiber(\$46.5 million) and the accelerated depreciation of\$16.3 million related to the shutdown of the Santa Clara mill, partially offset by productivity improvements and the higher selling prices. During 2017 in West Monroe, LA, there was an approximate \$14 million impact related to the second quarter maintenance cold outage and an approximate \$18 million impact related to the first quarter planned downtime taken to upgrade a paper machine. During 2016, there was an approximate \$15 million impact related to downtime taken in the second quarter to upgrade a paper machine in West Monroe, LA.

Americas Paperboard Packaging - Sales increased primarily due to the 2017 Acquisitions and the 2016 Acquisitions, higher beverage volumes and new product introductions, partially offset by lower selling prices and lower volume for certain consumer products.

Income from Operations decreased due to higher inflation and the lower selling prices, partially offset by the acquisitions and cost savings through continuous improvement programs.

Europe Paperboard Packaging - Sales increased primarily due to the Norgraft acquisition and higher volume, primarily for convenience and beverage products, partially offset by unfavorable foreign currency exchange rates and lower pricing.

Income from Operations increased as a result of improved operating performance due to capital investments, other cost savings programs, and the higher volume, partially offset by the lower selling prices, higher inflation and unfavorable foreign currency exchange rates.

FINANCIAL CONDITION, LIQUIDITY AND CAPITAL RESOURCES

The Company broadly defines liquidity as its ability to generate sufficient funds from both internal and external sources to meet its obligations and commitments. In addition, liquidity includes the ability to obtain appropriate debt and equity financing and to convert into cash those assets that are no longer required to meet existing strategic and financial objectives. Therefore, liquidity cannot be considered separately from capital resources that consist of current or potentially available funds for use in achieving long-range business objectives and meeting debt service commitments.

Cash Flows

<i>In millions</i>	Years Ended December 31,	
	2018	2017
Net Cash Used in Operating Activities	\$ (373.8)	\$ (192.5)
Net Cash Provided by Investing Activities	\$ 689.1	\$ 268.1
Net Cash Used In Financing Activities	\$ (310.7)	\$ (69.8)

Effective January 1, 2018, the Company adopted ASU No. 2016-15, *Statement of Cash Flows (Topic 230); Classification of Certain Cash Receipts and Cash Payments*, which required the Company to classify consideration received for beneficial interest obtained for transferring trade receivables as investing activities instead of operating activities. The retrospective impact on the Company's consolidated statement of cash flows for 2017 was a \$708.7 million decrease to cash provided by operating activities and a corresponding increase to cash provided by investing activities.

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Net cash used in operating activities in 2018 totaled \$373.8 million, compared to \$192.5 million in 2017. The increase was due to an increase in receivables sold during the period and higher inventory. Pension contributions in 2018 were \$5.8 million. Pension contributions in 2017 were \$119.1 million including an additional \$75 million contribution made in the fourth quarter to the Company's U.S. defined benefit plan. This additional contribution will allow the Company to begin the process of settling pension liabilities through lump sum payments and the purchase of annuities.

Net cash provided by investing activities in 2018 totaled \$689.1 million, compared to \$268.1 million in 2017. Current year activities consisted primarily of capital spending of \$395.2 million and \$89.4 million for the 2018 Acquisitions, net of cash acquired. The Company also received cash from the sale of assets of \$49.4 million and \$7.9 million, in 2018 and 2017, respectively. In the prior year, capital spending was \$260.1 million and the Company paid \$189.4 million, net of cash acquired, for the 2017 Acquisitions. Net cash receipts related to the accounts receivable securitization and sale programs were \$1,131.2 million and \$708.7 million in 2018 and 2017, respectively.

Net cash used in financing activities in 2018 totaled \$310.7 million, compared to \$69.8 million used in financing activities in 2017. Current year activities include net borrowings under revolving credit facilities of \$89.4 million, primarily for the 2018 Acquisitions, pension contributions of \$5.8 million, and payments on debt of \$152.4 million. The Company also paid dividends of \$93.1 million and distributions to the GPIL Partner of \$17.9 million, repurchased \$119.1 million of its common stock, and withheld \$4.3 million of restricted stock units to satisfy tax withholding payments related to the payout of restricted stock units. In the prior year, the Company had net borrowings under revolving credit facilities of \$112.1 million, primarily for the 2017 Acquisitions, pension contributions of \$119.1 million, and payments on debt of \$25.0 million. The Company also paid dividends of \$93.4 million, repurchased \$62.1 million of its common stock, and withheld \$10.2 million of restricted stock units to satisfy tax withholding payments related to the payout of restricted stock units.

Liquidity and Capital Resources

The Company's liquidity needs arise primarily from debt service on its indebtedness, the funding of its capital expenditures, ongoing operating costs, working capital, share repurchases and dividend payments. Principal and interest payments under the term loan facilities and the revolving credit facilities, together with principal and interest payments on the Company's 4.75% Senior Notes due 2021, 4.875% Senior Notes due 2022 and 4.125% Senior Notes due 2024 (the "Notes"), represent liquidity requirements for the Company. Based upon current levels of operations, anticipated cost savings and expectations as to future growth, the Company believes that cash generated from operations and investing activities, together with amounts available under its revolving credit facilities and other available financing sources, will be adequate to permit the Company to meet its debt service obligations, necessary capital expenditure program requirements and ongoing operating costs and working capital needs, although no assurance can be given in this regard. The Company's future financial and operating performance, ability to service or refinance its debt and ability to comply with the covenants and restrictions contained in its debt agreements (see "Covenant Restrictions" below) will be subject to future economic conditions, including conditions in the credit markets, and to financial, business and other factors, many of which are beyond the Company's control, and will be substantially dependent on the selling prices and demand for the Company's products, raw material and energy costs, and the Company's ability to successfully implement its overall business and profitability strategies.

As of December 31, 2018, the Company had approximately \$168 million of NOLs for U.S. federal income tax purposes. These NOLs generally may be used by the Company to offset taxable income earned in subsequent taxable years.

Accounts receivable are stated at the amount owed by the customer, net of an allowance for estimated uncollectible accounts, returns and allowances, and cash discounts. The allowance for doubtful accounts is estimated based on historical experience, current economic conditions and the creditworthiness of customers. Receivables are charged to the allowance when determined to be no longer collectible.

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The Company has entered into agreements to sell, on a revolving basis, certain trade accounts receivable to third party financial institutions. Transfers under these agreements meet the requirements to be accounted for as sales in accordance with the *Transfers and Servicing* topic of the Financial Accounting Standards Board ("FASB") Accounting Standards Codification (the "Codification"). The loss on sale is not material and is included in Other Expense, Net line item on the Consolidated Statement of Operations. The following table summarizes the activity under these programs as of December 31, 2018 and 2017, respectively:

<i>In millions</i>	Year Ended December 31,	
	2018	2017
Receivables Sold and Derecognized	\$ 3,824.5	\$ 1,846.8
Proceeds Collected on Behalf of Financial Institutions	3,645.9	1,639.0
Net Proceeds (Paid to) Received From Financial Institutions	(19.6)	134.1
Deferred Purchase Price ^(a)	66.9	101.7
Pledged Receivables	43.0	—

^(a) Included in Other Current Assets and represents a beneficial interest in the receivables sold to the financial institutions, which is a Level 3 fair value measure.

The Company has also entered into various factoring and supply chain financing arrangements which also qualify for sale accounting in accordance with the *Transfers and Servicing* topic of the FASB Codification. For the years ended December 31, 2018 and 2017, the Company sold receivables of approximately \$119 million and \$64 million, respectively, related to these factoring arrangements.

Receivables sold under all programs subject to continuing involvement, which consist principally of collection services, were approximately \$602 million and \$583 million as of December 31, 2018 and 2017, respectively.

Covenant Restrictions

Covenants contained in the Amended and Restated Credit Agreement, the Term Loan Credit Agreement (collectively, the "Credit Agreement") and the Indentures may, among other things, limit the ability to incur additional indebtedness, restrict the ability of the Company to dispose of assets, incur guarantee obligations, prepay other indebtedness, repurchase shares, pay dividends and make other restricted payments, create liens, make equity or debt investments, make acquisitions, modify terms of the indentures under which the Notes are issued, engage in mergers or consolidations, change the business conducted by the Company and its subsidiaries, and engage in certain transactions with affiliates. Such restrictions, together with disruptions in the credit markets, could limit the Company's ability to respond to changing market conditions, fund its capital spending program, provide for unexpected capital investments or take advantage of business opportunities.

Under the terms of the Credit Agreement, the Company must comply with a maximum Consolidated Total Leverage Ratio covenant and a minimum Consolidated Interest Expense Ratio covenant. The Third Amended and Restated Credit Agreement, which contains the definitions of these covenants, was filed as an exhibit to the Company's Form 8-K filed on January 2, 2018.

The Credit Agreement requires that the Company maintain a maximum Consolidated Total Leverage Ratio of less than 4.25 to 1.00. At December 31, 2018, the Company was in compliance with such covenant and the ratio was 2.74 to 1.00.

The Company must also comply with a minimum Consolidated Interest Expense Ratio of 3.00 to 1.00. At December 31, 2018, the Company was in compliance with such covenant and the ratio was 8.55 to 1.00.

As of December 31, 2018, the Company's credit was rated BB+ by Standard & Poor's and Ba1 by Moody's Investor Services. Standard & Poor's and Moody's Investor Services' ratings on the Company included a stable outlook.

Capital Investment

The Company's capital investments in 2018 were \$409.2 million (\$395.2 million was paid), compared to \$264.5 million (\$260.1 million was paid) in 2017. During 2018, the Company had capital spending of \$365.2 million for improving process capabilities, \$27.6 million for capital spares and \$16.4 million for manufacturing packaging machinery.

Environmental Matters

Some of the Company's current and former facilities are the subject of environmental investigations and remediations resulting from historical operations and the release of hazardous substances or other constituents. Some current and former facilities have a history of industrial usage for which investigation and remediation obligations may be imposed in the future or for which indemnification claims may be asserted against the Company. Also, closures or sales of facilities may necessitate further investigation and may result in remediation at those facilities. The Company has established reserves for those facilities or issues where liability is probable and the costs are reasonably estimable.

For further discussion of the Company's environmental matters, see Note 13 in the Notes to Consolidated Financial Statements included herein under "Item 8., Financial Statements and Supplementary Data."

Contractual Obligations and Commitments

A summary of our contractual obligations and commitments as of December 31, 2018 is as follows:

<i>In millions</i>	Payments Due by Period				
	Total	Less than 1 Year	1-3 Years	3-5 Years	More than 5 Years
Debt Obligations	\$ 2,844.8	\$ 48.2	\$ 546.0	\$ 1,946.0	\$ 304.6
Operating Leases	239.5	61.8	87.5	53.3	36.9
Capital Leases	198.7	10.3	20.9	20.3	147.2
Interest Payable	598.3	143.6	256.8	145.2	52.7
Purchase Obligations ^(a)	343.4	83.4	68.8	59.8	131.4
Total Contractual Obligations ^(b)	\$ 4,224.7	\$ 347.3	\$ 980.0	\$ 2,224.6	\$ 672.8

^(a) Purchase obligations primarily consist of commitments related to pine pulpwood, wood chips, and wood processing and handling.

^(b) Certain amounts included in this table are based on management's estimates and assumptions about these obligations. Because these estimates and assumptions are necessarily subjective, the obligations the Company will actually pay in the future periods may vary from those reflected in the table.

International Operations

For 2018, before intercompany eliminations, net sales from operations outside of the U.S. represented approximately 20% of the Company's net sales. The Company's revenues from export sales fluctuate with changes in foreign currency exchange rates. At December 31, 2018, approximately 15% of the Company's total assets were denominated in currencies other than the U.S. dollar. The Company has significant operations in countries that use the euro, British pound sterling, the Australian dollar, the Canadian dollar, the Mexico peso or the Japanese yen as their functional currencies. The effect of changes in the U.S. dollar exchange rate against these currencies produced a net currency translation adjustment loss of \$24.5 million, which was recorded in Other Comprehensive Income (Loss) for the year ended December 31, 2018. The magnitude and direction of this adjustment in the future depends on the relationship of the U.S. dollar to other currencies. The Company pursues a currency hedging program in order to reduce the impact of foreign currency exchange fluctuations on financial results. See "Financial Instruments" below.

The functional currency of the Company's international subsidiaries is the local currency for the country in which the subsidiaries own their primary assets. The translation of the applicable currencies into U.S. dollars is performed for balance sheet accounts using current exchange rates in effect at the balance sheet date and for revenue and expense accounts using a weighted average exchange rate during the period. Any related translation adjustments are recorded directly to Shareholders' Equity. Gains and losses on foreign currency transactions are included in Other Expense, Net for the period in which the exchange rate changes.

Financial Instruments

The Company pursues a currency hedging program which utilizes derivatives to reduce the impact of foreign currency exchange fluctuations on its consolidated financial results. Under this program, the Company has entered into forward exchange contracts in the normal course of business to hedge certain foreign currency denominated transactions. Realized and unrealized gains and losses on these forward contracts are included in the measurement of the basis of the related foreign currency transaction when recorded. The Company also pursues a hedging program that utilizes derivatives designed to manage risks associated with future variability in cash flows and price risk related to future energy cost increases. Under this program, the Company has entered into natural gas swap contracts to hedge a portion of its forecasted natural gas usage for 2019. Realized gains and losses on these contracts are included in the financial results concurrently with the recognition of the commodity consumed. In addition, the Company uses interest rate swaps to manage interest rate risks on future interest payments caused by interest rate changes on its variable rate term loan facility. The Company does not hold or issue financial instruments for trading purposes. See “Item 7A., Quantitative and Qualitative Disclosure About Market Risk.”

CRITICAL ACCOUNTING POLICIES

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of net sales and expenses during the reporting period. Actual results could differ from these estimates, and changes in these estimates are recorded when known. The critical accounting policies used by management in the preparation of the Company’s consolidated financial statements are those that are important both to the presentation of the Company’s financial condition and results of operations and require significant judgments by management with regard to estimates used. The critical judgments by management relate to pension benefits, retained insurable risks, future cash flows associated with impairment testing for goodwill and long-lived assets, and deferred income taxes.

• **Pension Benefits**

The Company sponsors defined benefit pension plans (the “Plans”) for eligible employees in North America and certain international locations. The funding policy for the U.S. qualified defined benefit plans is to, at a minimum, contribute assets as required by the Internal Revenue Code Section 412. Nonqualified defined benefit U.S. plans providing benefits in excess of limitations imposed by the U.S. income tax code are not funded.

The Company’s pension expense for defined benefit pension plans was \$3.3 million in 2018 compared with pension income of \$5.5 million in 2017. Pension expense is calculated based upon a number of actuarial assumptions applied to each of the defined benefit plans. The weighted average expected long-term rate of return on pension fund assets used to calculate pension expense was 4.86% and 5.79% in 2018 and 2017, respectively. The expected long-term rate of return on pension assets was determined based on several factors, including historical rates of return, input from our pension investment consultants and projected long-term returns of broad equity and bond indices. The Company evaluates its long-term rate of return assumptions annually and adjusts them as necessary.

The Company determined pension expense using both the fair value of assets and a calculated value that averages gains and losses over a period of years. Investment gains or losses represent the difference between the expected and actual return on assets. As of December 31, 2018, the net actuarial loss was \$297.3 million. These net losses may increase future pension expense if not offset by (i) actual investment returns that exceed the assumed investment returns, or (ii) other factors, including reduced pension liabilities arising from higher discount rates used to calculate pension obligations, or (iii) other actuarial gains, including whether such accumulated actuarial losses at each measurement date exceed the “corridor” determined under the *Compensation — Retirement Benefits* topic of the FASB Codification. For the largest plan, the actuarial loss is amortized over the average remaining life expectancy period of employees expected to receive benefits.

The discount rate used to determine the present value of future pension obligations at December 31, 2018 was based on a yield curve constructed from a portfolio of high-quality corporate debt securities with maturities ranging from 1 year to 30 years. Each year’s expected future benefit payments were discounted to their present value at the spot yield curve rate thereby generating the overall discount rate for the Company’s pension obligations. The weighted average discount rate used to determine the pension obligations was 4.14% and 3.49% in 2018 and 2017, respectively.

The Company's pension expense is estimated to be approximately \$15 million in 2019. The estimate is based on a weighted average expected long-term rate of return of 3.96%, a weighted average discount rate of 4.14% and other assumptions. Pension expense beyond 2019 will depend on future investment performance, the Company's contribution to the plans, changes in discount rates and other factors related to covered employees in the plans. Beginning in 2016, the Company changed its methodology of calculating the service and interest cost components of pension expense from using a yield curve aggregate approach to using individual spot rates along the yield curve.

If the discount rate assumptions for the Company's U.S. plans were reduced by 0.25%, pension expense would increase by approximately \$1 million and the December 31, 2018 projected benefit obligation would increase approximately \$28 million.

The fair value of assets in the Company's plans was \$1,186.5 million at December 31, 2018 and \$1,340.7 million at December 31, 2017. The projected benefit obligations exceed the fair value of plan assets by \$58.7 million and \$26.4 million as of December 31, 2018 and 2017, respectively. The accumulated benefit obligation ("ABO") exceeded plan assets by \$53.7 million at the end of 2018. At the end of 2017, the ABO exceeded the fair value of plan assets by \$18.7 million.

• ***Retained Insurable Risks***

The Company is self-insured for certain losses relating to workers' compensation claims and employee medical and dental benefits. Provisions for expected losses are recorded based on the Company's estimates, on an undiscounted basis, of the aggregate liabilities for known claims and estimated claims incurred but not reported. The Company has purchased stop-loss coverage or insurance with deductibles in order to limit its exposure to significant claims. The Company also has an extensive safety program in place to minimize its exposure to workers' compensation claims. Self-insured losses are accrued based upon estimates of the aggregate uninsured claims incurred using certain actuarial assumptions, loss development factors followed in the insurance industry and historical experience.

• ***Goodwill***

The Company evaluates goodwill for potential impairment annually as of October 1, as well as whenever events or changes in circumstances suggest that the fair value of a reporting unit may no longer exceed its carrying amount. Potential impairment of goodwill is measured at the reporting unit level by comparing the reporting unit's carrying amount, including goodwill, to the estimated fair value of the reporting unit. As of October 1, 2018, the Company had seven reporting units, five of which had goodwill.

Periodically, the Company may perform a qualitative impairment analysis of goodwill associated with each of its reporting units to determine if it is more likely than not that the carrying value of a reporting unit exceeded its fair value. If the results of the qualitative analysis of any of the reporting units is inconclusive or other facts or circumstances necessitate further analysis, the Company will perform a quantitative analysis for those reporting units.

The quantitative analysis involves calculating the fair value of each reporting unit by utilizing a discounted cash flow analysis based on the Company's forecasts, discounted using a weighted average cost of capital and market indicators of terminal year cash flows based upon a multiple of earnings before interest, taxes, depreciation and amortization ("EBITDA").

In determining fair value, management relies on and considers a number of factors, including but not limited to, operating results, business plans, economic projections, forecasts including anticipated future cash flows, and market data and analysis, including market capitalization. Fair value determinations are sensitive to changes in the factors described above. There are inherent uncertainties related to these factors and judgments in applying them to the analysis of potential goodwill impairment.

The variability of the assumptions that management uses to perform the goodwill impairment test depends on a number of conditions, including uncertainty about future events and cash flows. Accordingly, the Company's accounting estimates may materially change from period to period due to changing market factors. If the Company had used other assumptions and estimates or if different conditions occur in future periods, future operating results could be materially impacted.

The assumptions used in the goodwill impairment testing process could be adversely impacted by certain of the risks discussed in "Item 1A., Risk Factors" and thus could result in future goodwill impairment charges.

The Company performed its annual goodwill impairment tests as of October 1, 2018 and concluded that goodwill was not impaired.

• *Recovery of Long-Lived Assets*

The Company reviews long-lived assets (including property, plant and equipment and intangible assets) for impairment whenever events or changes in circumstances indicate that the carrying amount of such long-lived assets may not be fully recoverable by undiscounted cash flows. Measurement of the impairment loss, if any, is based on the fair value of the asset, which is determined by an income, cost or market approach. The Company evaluates the recovery of its long-lived assets by analyzing operating results and considering significant events or changes in the business environment that may have triggered impairment.

• *Deferred Income Taxes and Potential Assessments*

According to the *Income Taxes* topic of the FASB Codification, a valuation allowance is required to be established or maintained when, based on currently available information and other factors, it is more likely than not that all or a portion of a deferred tax asset will not be realized. The FASB Codification provides important factors in determining whether a deferred tax asset will be realized, including whether there has been sufficient taxable income in recent years and whether sufficient income can reasonably be expected in future years in order to utilize the deferred tax asset. The Company has evaluated the need to maintain a valuation allowance for deferred tax assets based on its assessment of whether it is more likely than not that deferred tax benefits would be realized through the generation of future taxable income. Appropriate consideration was given to all available evidence, both positive and negative, in assessing the need for a valuation allowance. In determining whether a valuation allowance is required, many factors are considered, including the specific taxing jurisdiction, the carryforward period, reversals of existing taxable temporary differences, cumulative pretax book earnings, income tax strategies and forecasted earnings for the entities in each jurisdiction.

As of December 31, 2018, the Company has recorded a valuation allowance of \$36.3 million against its net deferred tax assets in certain foreign jurisdictions and against domestic deferred tax assets related to certain federal tax credit carryforwards, certain state net operating loss carryforwards and certain state tax credit carryforwards. As of December 31, 2017, a total valuation allowance of \$51.5 million was recorded.

As of December 31, 2018, the Company has only provided for deferred U.S. income taxes attributable to future withholding tax expense related to the Company's equity investment in the joint venture, Rengo Riverwood Packaging, Ltd. The Company has not provided for deferred U.S. income taxes on approximately \$41 million of its undistributed earnings in international subsidiaries because of the Company's intention to indefinitely reinvest these earnings outside the U.S. The Company's assertion remains unchanged, despite the deemed taxation of all post-1986 earnings and profits required by the Act. The determination of the amount of the unrecognized deferred U.S. income tax liability (primarily withholding tax in certain jurisdictions and some state tax) on the unremitted earnings or any other associated outside basis difference is not practicable because of the complexities associated with the calculation.

The Company records liabilities for potential assessments. The accruals relate to uncertain tax positions in a variety of taxing jurisdictions and are based on what management believes will be the most likely outcome of these positions. These liabilities may be affected by changing interpretations of laws, rulings by tax authorities, or the expiration of the statute of limitations.

NEW ACCOUNTING STANDARDS

For a discussion of recent accounting pronouncements impacting the Company, see Note 1 in the Notes to Consolidated Financial Statements included herein under "Item 8., Financial Statements and Supplementary Data."

BUSINESS OUTLOOK

Total capital investment for 2019 is expected to be approximately \$320 million and is expected to relate principally to the Company's process capability improvements (approximately \$270 million), acquiring capital spares (approximately \$40 million), and producing packaging machinery (approximately \$10 million).

The Company also expects the following in 2019, subject to finalization of purchase accounting for the Letica Foodservice acquisition:

- Depreciation and amortization expense between \$430 million and \$440 million, excluding approximately \$10 million of pension amortization.
- Interest expense of \$135 million to \$145 million, including approximately \$4 million to \$5 million of non-cash interest expense associated with amortization of debt issuance costs.
- Pension plan contributions of \$10 million to \$12 million.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURE ABOUT MARKET RISK

The Company does not trade or use derivative instruments with the objective of earning financial gains on interest or currency rates, nor does it use leveraged instruments or instruments where there are no underlying exposures identified.

Interest Rates

The Company is exposed to changes in interest rates, primarily as a result of its short-term and long-term debt, which include both fixed and floating rate debt. The Company uses interest rate swap agreements effectively to fix the LIBOR rate on certain variable rate borrowings. At December 31, 2018, the Company had active interest rate swap agreements with a notional amount of \$650 million with \$150 million expiring on January 1, 2019 and the remaining in 2020 and 2022.

The table below sets forth interest rate sensitivity information related to the Company's debt.

Long-Term Debt Principal Amount by Maturity-Average Interest Rate

<i>In millions</i>	Expected Maturity Date						Total	Fair Value
	2019	2020	2021	2022	2023	Thereafter		
Total Debt								
Fixed Rate	\$ —	\$ 1.1	\$ 425.5	\$ 250.6	\$ 0.6	\$ 304.6	\$ 982.4	\$ 963.7
Average Interest Rate	—%	1.14%	4.75%	4.86%	1.03%	4.08%		
Variable Rate	\$ 36.5	\$ 55.5	\$ 63.9	\$ 127.8	\$ 1,567.0	\$ —	\$ 1,850.7	\$ 1,798.8
	LIBOR + Spread	LIBOR + Spread	LIBOR + Spread	LIBOR + Spread	LIBOR + Spread			

Total Interest Rate Swaps-Notional Amount by Expiration-Average Swap Rate

<i>In millions</i>	Expected Maturity Date						Total
	2019	2020	2021	2022	2023	Thereafter	
Notional	\$ 150.0	\$ 300.0	\$ —	\$ 200.0	\$ —	\$ —	\$ 650.0
Average Pay Rate	2.03%	2.31%	—	2.87%	—	—	—
Average Receive Rate	LIBOR	LIBOR	—	LIBOR	—	—	—

Foreign Exchange Rates

The Company enters into forward exchange contracts to effectively hedge substantially all receivables resulting from transactions denominated in foreign currencies. The purpose of these forward exchange contracts is to protect the Company from the risk that the eventual functional currency cash flows resulting from the collection of these receivables will be adversely affected by changes in exchange rates. At December 31, 2018, multiple foreign currency forward exchange contracts existed, with maturities ranging up to fifteen months. Those forward currency exchange contracts outstanding at December 31, 2018, when aggregated and measured in U.S. dollars at December 31, 2018 exchange rates, had net notional amounts totaling \$62.2 million. The Company continuously monitors these forward exchange contracts and adjusts accordingly to minimize the exposure.

The Company also enters into forward exchange contracts to hedge certain other anticipated foreign currency transactions. The purpose of these contracts is to protect the Company from the risk that the eventual functional currency cash flows resulting from anticipated foreign currency transactions will be adversely affected by changes in exchange rates.

During the years ended December 31, 2018 and 2017, there were no amounts reclassified to earnings in connection with forecasted transactions that were no longer considered probable of occurring and there was no amount of ineffectiveness related to changes in the fair value of foreign currency forward contracts. Additionally, there were no amounts excluded from the measure of effectiveness during the years ended December 31, 2018 and 2017.

**Foreign Exchange Rates Contractual Amount by Expected
Maturity-Average Contractual Exchange Rate**

<i>In millions</i>	December 31, 2018	
	Contract Amount	Fair Value
FORWARD EXCHANGE AGREEMENTS:		
Receive \$US/Pay Yen	\$ 16.9	\$ (0.4)
Weighted average contractual exchange rate	110.72	
Receive \$US/Pay Euro	\$ 34.7	\$ (0.1)
Weighted average contractual exchange rate	1.16	

Natural Gas Contracts

The Company has hedged a portion of its expected natural gas usage for 2019. The carrying amount and fair value of the natural gas swap contracts is a net liability of \$0.2 million as of December 31, 2018. Such contracts are designated as cash flow hedges and are accounted for by deferring the quarterly change in fair value of the outstanding contracts in Accumulated Other Comprehensive (Loss) Income in Shareholders' Equity. The resulting gain or loss is reclassified into Cost of Sales concurrently with the recognition of the commodity consumed. The ineffective portion of the swap contracts change in fair value, if any, would be recognized immediately in earnings.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

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GRAPHIC PACKAGING HOLDING COMPANY
CONSOLIDATED STATEMENTS OF OPERATIONS

<i>In millions, except per share amounts</i>	Year Ended December 31,		
	2018	2017	2016
Net Sales	\$ 6,023.0	\$ 4,403.7	\$ 4,298.1
Cost of Sales	5,077.0	3,696.1	3,497.1
Selling, General and Administrative	465.7	345.6	353.4
Other Expense, Net	7.2	3.0	3.1
Business Combinations, Gain on Sale of Assets and Shutdown and Other Special Charges, Net	14.9	31.1	37.1
Income from Operations	458.2	327.9	407.4
Nonoperating Pension and Postretirement Benefit Income (Expense)	14.9	14.8	(11.4)
Interest Expense, Net	(123.7)	(89.7)	(76.6)
Loss on Modification or Extinguishment of Debt	(1.9)	—	—
Income before Income Taxes and Equity Income of Unconsolidated Entity	347.5	253.0	319.4
Income Tax (Expense) Benefit	(54.7)	45.5	(93.2)
Income before Equity Income of Unconsolidated Entity	292.8	298.5	226.2
Equity Income of Unconsolidated Entity	1.2	1.7	1.8
Net Income	\$ 294.0	\$ 300.2	\$ 228.0
Net Income Attributable to Noncontrolling Interests	(72.9)	—	—
Net Income Attributable Graphic Packaging Holding Company	\$ 221.1	\$ 300.2	\$ 228.0
Net Income Per Share Attributable to Graphic Packaging Holding Company — Basic	\$ 0.71	\$ 0.97	\$ 0.71
Net Income Per Share Attributable to Graphic Packaging Holding Company— Diluted	\$ 0.71	\$ 0.96	\$ 0.71

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

GRAPHIC PACKAGING HOLDING COMPANY
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)

<i>In millions</i>	Year Ended December 31,								
	2018				2017				2016
	Graphic Packaging Holding Company	Noncontrolling Interest	Redeemable Noncontrolling Interest	Total	Graphic Packaging Holding Company				
Net Income	\$ 221.1	\$ 56.3	\$ 16.6	\$ 294.0	\$ 300.2	\$ 228.0			
Other Comprehensive Income (Loss), Net of Tax:									
Derivative Instruments	(1.0)	(0.2)	(0.1)	(1.3)	(4.9)	13.0			
Pension and Postretirement Benefit Plans	(19.4)	(4.7)	(1.4)	(25.5)	8.8	4.0			
Currency Translation Adjustment	(18.7)	(4.5)	(1.3)	(24.5)	44.9	(58.9)			
Total Other Comprehensive (Loss) Income, Net of Tax	(39.1)	(9.4)	(2.8)	(51.3)	48.8	(41.9)			
Total Comprehensive Income	\$ 182.0	\$ 46.9	\$ 13.8	\$ 242.7	\$ 349.0	\$ 186.1			

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

**GRAPHIC PACKAGING HOLDING COMPANY
CONSOLIDATED BALANCE SHEETS**

<i>In millions, except share and per share amounts</i>	December 31,	
	2018	2017
ASSETS		
Current Assets:		
Cash and Cash Equivalents	\$ 70.5	\$ 67.4
Receivables, Net	572.9	321.1
Inventories, Net	1,014.4	634.0
Other Current Assets	106.0	147.4
Total Current Assets	1,763.8	1,169.9
Property, Plant and Equipment, Net	3,239.7	1,867.2
Goodwill	1,460.6	1,323.0
Intangible Assets, Net	523.8	436.5
Other Assets	71.3	66.4
Total Assets	\$ 7,059.2	\$ 4,863.0
LIABILITIES		
Current Liabilities:		
Short-Term Debt and Current Portion of Long-Term Debt	\$ 52.0	\$ 61.3
Accounts Payable	711.6	516.5
Compensation and Employee Benefits	154.4	113.4
Interest Payable	13.6	14.9
Other Accrued Liabilities	240.7	145.3
Total Current Liabilities	1,172.3	851.4
Long-Term Debt	2,905.1	2,213.2
Deferred Income Tax Liabilities	462.2	321.8
Accrued Pension and Postretirement Benefits	107.5	80.0
Other Noncurrent Liabilities	117.8	104.7
Commitments and Contingencies (Note 12)		
Redeemable Noncontrolling Interest (Note 14)	275.8	—
SHAREHOLDERS' EQUITY		
Preferred Stock, par value \$.01 per share; 100,000,000 shares authorized; no shares issued or outstanding	—	—
Common Stock, par value \$.01 per share; 1,000,000,000 shares authorized; 299,891,585 and 309,715,624 shares issued and outstanding at December 31, 2018 and December 31, 2017, respectively	3.0	3.1
Capital in Excess of Par Value	1,944.4	1,683.6
Retained Earnings (Accumulated Deficit)	10.0	(56.0)
Accumulated Other Comprehensive Loss	(377.9)	(338.8)
Total Graphic Packaging Holding Company Shareholders' Equity	1,579.5	1,291.9
Noncontrolling Interest	439.0	—
Total Equity	2,018.5	1,291.9
Total Liabilities and Shareholders' Equity	\$ 7,059.2	\$ 4,863.0

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

**GRAPHIC PACKAGING HOLDING COMPANY
CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY**

<i>In millions, except share amounts</i>	Common Stock		Capital in Excess of Par Value	(Accumulated Deficit) Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Noncontrolling Interests	Total Equity
	Shares	Amount					
Balances at December 31, 2015	324,688,717	\$ 3.2	\$ 1,771.0	\$ (326.8)	\$ (345.7)	\$ —	\$ 1,101.7
Net Income	—	—	—	228.0	—	—	228.0
Other Comprehensive Income (Loss), Net of Tax:							
Derivative Instruments	—	—	—	—	13.0	—	13.0
Pension and Postretirement Benefit Plans	—	—	—	—	4.0	—	4.0
Currency Translation Adjustment	—	—	—	—	(58.9)	—	(58.9)
Repurchase of Common Stock ^(a)	(13,202,425)	(0.1)	(71.2)	(97.5)	—	—	(168.8)
Dividends Declared	—	—	—	(71.7)	—	—	(71.7)
Recognition of Stock-Based Compensation	—	—	9.2	—	—	—	9.2
Issuance of Shares for Stock-Based Awards	1,659,493	—	—	—	—	—	—
Balances at December 31, 2016	313,145,785	\$ 3.1	\$ 1,709.0	\$ (268.0)	\$ (387.6)	\$ —	\$ 1,056.5
Net Income	—	—	—	300.2	—	—	300.2
Other Comprehensive Income (Loss), Net of Tax:							
Derivative Instruments	—	—	—	—	(4.9)	—	(4.9)
Pension and Postretirement Benefit Plans	—	—	—	—	8.8	—	8.8
Currency Translation Adjustment	—	—	—	—	44.9	—	44.9
Repurchase of Common Stock	(4,462,263)	—	(24.2)	(34.2)	—	—	(58.4)
Dividends Declared	—	—	—	(93.1)	—	—	(93.1)
Pre-2017 Excess Tax Benefit related to Share-Based Payments	—	—	—	39.1	—	—	39.1
Recognition of Stock-Based Compensation	—	—	(1.2)	—	—	—	(1.2)
Issuance of Shares for Stock-Based Awards	1,032,102	—	—	—	—	—	—
Balances at December 31, 2017	309,715,624	\$ 3.1	\$ 1,683.6	\$ (56.0)	\$ (338.8)	\$ —	\$ 1,291.9
NACP Combination	—	—	308.4	—	—	424.0	732.4
Net Income	—	—	—	221.1	—	56.3	277.4
Reclassification to Redeemable Noncontrolling Interest for Share Repurchases	—	—	—	—	—	(12.5)	(12.5)
Distribution of Membership Interest	—	—	—	—	—	(19.4)	(19.4)
Other Comprehensive Income (Loss), Net of Tax:							
Derivative Instruments	—	—	—	—	(1.0)	(0.2)	(1.2)
Pension and Postretirement Benefit Plans	—	—	—	—	(19.4)	(4.7)	(24.1)
Currency Translation Adjustment	—	—	—	—	(18.7)	(4.5)	(23.2)
Repurchase of Common Stock ^(b)	(10,566,144)	(0.1)	(57.1)	(62.8)	—	—	(120.0)
Dividends Declared	—	—	—	(92.3)	—	—	(92.3)
Recognition of Stock-Based Compensation	—	—	9.5	—	—	—	9.5
Issuance of Shares for Stock-Based Awards	658,299	—	—	—	—	—	—
Balances at December 31, 2018	299,807,779	\$ 3.0	\$ 1,944.4	\$ 10.0	\$ (377.9)	\$ 439.0	\$ 2,018.5

^(a) Includes 388,000 shares repurchased but not settled as of December 31, 2016.

^(b) Includes 83,806 shares repurchased but not settled as of December 31, 2018.

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

**GRAPHIC PACKAGING HOLDING COMPANY
CONSOLIDATED STATEMENTS OF CASH FLOWS**

<i>In millions</i>	Year Ended December 31,		
	2018	2017	2016
CASH FLOWS FROM OPERATING ACTIVITIES:			
Net Income	\$ 294.0	\$ 300.2	\$ 228.0
Adjustments to Reconcile Net Income to Net Cash (Used in) Provided by Operating Activities:			
Depreciation and Amortization	430.6	330.3	299.3
Amortization of Deferred Debt Issuance Costs	4.4	5.1	4.8
Deferred Income Taxes	26.0	(54.0)	76.7
Amount of Postretirement Expense Less Than Funding	(4.7)	(127.1)	(31.3)
Gain on the Sale of Assets, net	(38.6)	(3.7)	—
Other, Net	35.3	2.0	25.4
Changes in Operating Assets and Liabilities, Net of Acquisitions (See Note 3)	(1,120.8)	(645.3)	(528.9)
Net Cash (Used in) Provided by Operating Activities	(373.8)	(192.5)	74.0
CASH FLOWS FROM INVESTING ACTIVITIES:			
Capital Spending	(378.8)	(240.9)	(278.6)
Packaging Machinery Spending	(16.4)	(19.2)	(16.0)
Acquisition of Businesses, Net of Cash Acquired	(89.4)	(189.4)	(332.7)
Proceeds Received from Sale of Assets, Net of Selling Costs	49.4	7.9	—
Beneficial Interest on Sold Receivables	1,476.7	806.1	592.6
Beneficial Interest Obtained in Exchange for Proceeds	(345.5)	(97.4)	(25.2)
Other, Net	(6.9)	1.0	(5.2)
Net Cash Provided by (Used in) Investing Activities	689.1	268.1	(65.1)
CASH FLOWS FROM FINANCING ACTIVITIES:			
Repurchase of Common Stock	(119.1)	(62.1)	(164.9)
Payments on Debt	(152.4)	(25.0)	(25.0)
Proceeds from Issuance of Debt	—	—	300.0
Borrowings under Revolving Credit Facilities	1,876.9	1,202.9	1,200.0
Payments on Revolving Credit Facilities	(1,787.5)	(1,090.8)	(1,235.8)
Debt Issuance Costs	(7.9)	—	(5.3)
Repurchase of Common Stock related to Share-Based Payments	(4.3)	(10.2)	(11.3)
Dividends and Distributions Paid to GPIP Partner	(111.0)	(93.4)	(64.4)
Other, Net	(5.4)	8.8	3.6
Net Cash Used In Financing Activities	(310.7)	(69.8)	(3.1)
EFFECT OF EXCHANGE RATE CHANGES ON CASH	(1.5)	2.5	(1.6)
Net Increase in Cash and Cash Equivalents	3.1	8.3	4.2
Cash and Cash Equivalents at Beginning of Year	67.4	59.1	54.9
CASH AND CASH EQUIVALENTS AT END OF YEAR	\$ 70.5	\$ 67.4	\$ 59.1
Non-cash Investing Activities:			
Beneficial Interest Obtained in Exchange for Trade Receivables	\$ 1,025.7	\$ 734.7	\$ 523.7
Non-cash Investment in NACP Combination	1,111.2	—	—
Non-cash Investing Activities	\$ 2,136.9	\$ 734.7	\$ 523.7
Non-cash Financing Activities:			
Non-cash Financing of NACP Combination	\$ 660.0	\$ —	\$ —
Non-Cash Financing Activities	\$ 660.0	\$ —	\$ —

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

**GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

NOTE 1. NATURE OF BUSINESS AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Nature of Business

Graphic Packaging Holding Company (“GPHC” and, together with its subsidiaries, the “Company”) is committed to providing consumer packaging that makes a world of difference. The Company is a leading provider of paper-based packaging solutions for a wide variety of products to food, beverage, foodservice and other consumer products companies. The Company operates on a global basis, is one of the largest producers of folding cartons in the United States (“U.S.”) and holds leading market positions in coated unbleached kraft paperboard (“CUK”), coated-recycled paperboard (“CRB”) and solid bleached sulfate paperboard (“SBS”).

The Company’s customers include many of the world’s most widely recognized companies and brands with prominent market positions in beverage, food, foodservice, and other consumer products. The Company strives to provide its customers with packaging solutions designed to deliver marketing and performance benefits at a competitive cost by capitalizing on its low-cost paperboard mills and converting facilities, its proprietary carton and packaging designs, and its commitment to quality and service.

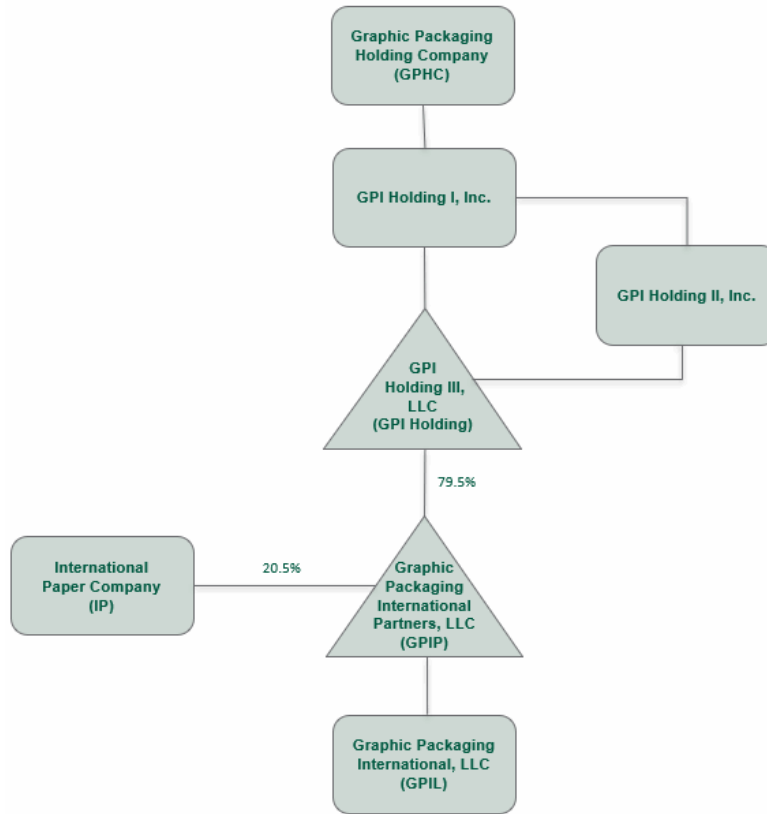
On January 1, 2018, GPHC, a Delaware corporation, International Paper Company, a New York corporation (“IP”), Graphic Packaging International Partners, LLC, a Delaware limited liability company formerly known as Gazelle Newco LLC and a wholly owned subsidiary of the Company (“GPIP”), and Graphic Packaging International, LLC, a Delaware limited liability company formerly known as Graphic Packaging International, Inc. and a subsidiary of GPIP (“GPIL”), completed a series of transactions pursuant to an agreement dated October 23, 2017, among the foregoing parties (the “Transaction Agreement”). Pursuant to the Transaction Agreement (i) a wholly owned subsidiary of the Company transferred its ownership interest in GPIL to GPIP; (ii) IP transferred its North America Consumer Packaging (“NACP”) business to GPIP, which was then subsequently transferred to GPIL; (iii) GPIP issued membership interests to IP, and IP was admitted as a member of GPIP; and (iv) GPIL assumed certain indebtedness of IP (the “NACP Combination”).

GPI Holding III, LLC, an indirect wholly-owned subsidiary of the Company (“GPI Holding”), is the managing member of GPIP.

At closing of the NACP Combination, GPIP issued 309,715,624 common units or 79.5% of the membership interests in GPIP to GPI Holding and 79,911,591 common units or 20.5% of the membership interests in GPIP to IP. Subject to certain restrictions, the common units held by IP are exchangeable into shares of common stock of GPHC or cash.

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

The following diagram illustrates the organization of the Company immediately subsequent to the transactions described above (not including subsidiaries of GPIL):



GPHC conducts no significant business and has no independent assets or operations other than its indirect ownership of GPIL's membership interest.

Basis of Presentation and Principles of Consolidation

The Company's Consolidated Financial Statements include all subsidiaries in which the Company has the ability to exercise direct or indirect control over operating and financial policies. Intercompany transactions and balances are eliminated in consolidation. Certain reclassifications have been made to prior year amounts to conform to current year presentation.

The Company, through its subsidiary, GPIL, holds a 50% ownership interest in a joint venture called Rengo Riverwood Packaging, Ltd. (in Japan) which is accounted for using the equity method.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States ("U.S. GAAP") requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of net sales and expenses during the reporting periods. Actual results could differ from these estimates, and changes in these estimates are recorded when known. Estimates are used in accounting for, among other things, pension benefits, retained insurable risks, slow-moving and obsolete inventory, allowance for doubtful accounts, useful lives for depreciation and amortization, impairment testing of goodwill and long-term assets, fair values related to acquisition accounting, fair value of derivative financial instruments, share based compensation, deferred income tax assets and potential income tax assessments, and loss contingencies.

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

Cash and Cash Equivalents

Cash and cash equivalents include time deposits, certificates of deposit and other marketable securities with original maturities of three months or less.

Accounts Receivable and Allowances

Accounts receivable are stated at the amount owed by the customer, net of an allowance for estimated uncollectible accounts, returns and allowances, and cash discounts. The allowance for doubtful accounts is estimated based on historical experience, current economic conditions and the credit worthiness of customers. Receivables are charged to the allowance when determined to be no longer collectible.

The Company has entered into agreements to sell, on a revolving basis, certain trade accounts receivable to third party financial institutions. Transfers under these agreements meet the requirements to be accounted for as sales in accordance with the *Transfers and Servicing* topic of the Financial Accounting Standards Board ("FASB") Accounting Standards Codification (the "Codification"). The loss on sale is not material and is included in Other Expense, Net line item on the Consolidated Statement of Operations. The following table summarizes the activity under these programs as of December 31, 2018 and 2017, respectively:

<i>In millions</i>	Year Ended December 31,	
	2018	2017
Receivables Sold and Derecognized	\$ 3,824.5	\$ 1,846.8
Proceeds Collected on Behalf of Financial Institutions	3,645.9	1,639.0
Net Proceeds (Paid to) Received From Financial Institutions	(19.6)	134.1
Deferred Purchase Price ^(a)	66.9	101.7
Pledged Receivables	43.0	—

^(a) Included in Other Current Assets and represents a beneficial interest in the receivables sold to the financial institutions, which is a Level 3 fair value measure.

The Company has also entered into various factoring and supply chain financing arrangements which also qualify for sale accounting in accordance with the *Transfers and Servicing* topic of the FASB Codification. For the years ended December 31, 2018 and 2017, the Company sold receivables of approximately \$119 million and \$64 million respectively, related to these factoring arrangements.

Receivables sold under all programs subject to continuing involvement, which consists principally of collection services, were approximately \$602 million and \$583 million as of December 31, 2018 and 2017, respectively.

Concentration of Credit Risk

The Company's cash, cash equivalents, and accounts receivable are potentially subject to concentration of credit risk. Cash and cash equivalents are placed with financial institutions that management believes are of high credit quality. Accounts receivable are derived from revenue earned from customers located in the U.S. and internationally and generally do not require collateral. As of and for the years ended December 31, 2018 and 2017, no customer accounted for more than 10% of net sales.

Inventories

Inventories are stated at the lower of cost and net realizable value with cost determined based on standard (which approximates actual), average or actual cost. Work in progress and finished goods inventories are valued at the cost of raw material consumed plus direct manufacturing costs (such as labor, utilities and supplies) as incurred and an applicable portion of manufacturing overhead. Inventories are stated net of an allowance for slow-moving and obsolete inventory.

Property, Plant and Equipment

Property, plant and equipment are recorded at cost. Betterments, renewals and extraordinary repairs that extend the life of the asset are capitalized; other repairs and maintenance charges are expensed as incurred. The Company's cost and related accumulated depreciation applicable to assets retired or sold are removed from the accounts and the gain or loss on disposition is included in income from operations.

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

Interest is capitalized on assets under construction for one year or longer with an estimated spending of \$1.0 million or more. The capitalized interest is recorded as part of the asset to which it relates and is amortized over the asset's estimated useful life. Capitalized interest was \$2.8 million, \$1.2 million and \$1.3 million for the years ended December 31, 2018, 2017 and 2016, respectively.

The Company assesses its long-lived assets, including certain identifiable intangibles, for impairment whenever events or circumstances indicate that the carrying value of an asset may not be recoverable. To analyze recoverability, the Company projects future cash flows, undiscounted and before interest, over the remaining life of such assets. If these projected cash flows are less than the carrying amount, an impairment would be recognized, resulting in a write-down of assets with a corresponding charge to earnings. The impairment loss is measured based upon the difference between the carrying amount and the fair value of the assets. The Company assesses the appropriateness of the useful life of its long-lived assets periodically.

Depreciation and Amortization

Depreciation is computed using the straight-line method based on the following estimated useful lives of the related assets:

Buildings	40 years
Land improvements	15 years
Machinery and equipment	3 to 40 years
Furniture and fixtures	10 years
Automobiles, trucks and tractors	3 to 5 years

Depreciation expense, including the depreciation expense of assets under capital leases, for 2018, 2017 and 2016 was \$360.6 million, \$268.5 million and \$240.0 million, respectively.

Intangible assets with a determinable life are amortized on a straight-line or accelerated basis over their useful lives. The amortization expense for each intangible asset is recorded in the Consolidated Statements of Operations according to the nature of that asset.

Goodwill is the Company's only intangible asset not subject to amortization. The following table displays the intangible assets that continue to be subject to amortization and accumulated amortization expense as of December 31, 2018 and 2017:

<i>In millions</i>	December 31, 2018			December 31, 2017		
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Amortizable Intangible Assets:						
Customer Relationships	\$ 937.3	\$ (442.7)	\$ 494.6	\$ 786.9	\$ (377.2)	\$ 409.7
Patents, Trademarks, Licenses, and Leases	133.7	(104.5)	29.2	130.2	(103.4)	26.8
Total	\$ 1,071.0	\$ (547.2)	\$ 523.8	\$ 917.1	\$ (480.6)	\$ 436.5

The Company recorded amortization expense for the years ended December 31, 2018, 2017 and 2016 of \$70.0 million, \$61.8 million and \$59.3 million, respectively. The Company expects amortization expense for the next five consecutive years to be as follows: \$68 million, \$65 million, \$56 million, \$53 million, and \$51 million.

Goodwill

The Company tests goodwill for impairment annually as of October 1, as well as whenever events or changes in circumstances suggest that the estimated fair value of a reporting unit may no longer exceed its carrying amount.

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

The Company tests goodwill for impairment at the reporting unit level, which is an operating segment or a level below an operating segment, which is referred to as a component. A component of an operating segment is a reporting unit if the component constitutes a business for which discrete financial information is available and management regularly reviews the operating results of that component. However, two or more components of an operating segment are aggregated and deemed a single reporting unit if the components have similar economic characteristics.

Potential goodwill impairment is measured at the reporting unit level by comparing the reporting unit's carrying amount (including goodwill), to the fair value of the reporting unit. When performing the quantitative analysis, the estimated fair value of each reporting unit is determined by utilizing a discounted cash flow analysis based on the Company's forecasts, discounted using a weighted average cost of capital and market indicators of terminal year cash flows based upon a multiple of EBITDA. If the carrying amount of a reporting unit exceeds its estimated fair value, goodwill is considered potentially impaired. In determining fair value, management relies on and considers a number of factors, including but not limited to, operating results, business plans, economic projections, forecasts including future cash flows, and market data and analysis, including market capitalization. The assumptions used are based on what a hypothetical market participant would use in estimating fair value. Fair value determinations are sensitive to changes in the factors described above. There are inherent uncertainties related to these factors and judgments in applying them to the analysis of goodwill impairment.

Periodically, the Company may perform a qualitative impairment analysis of goodwill associated with each of its reporting units to determine if it is more likely than not that the carrying value of a reporting unit exceeded its fair value. As a result of its testing of goodwill as of October 1, 2018, the Company concluded goodwill was not impaired.

The following is a rollforward of goodwill by reportable segment:

<i>In millions</i>	Paperboard Mills	Americas Paperboard Packaging	Europe Paperboard Packaging	Corporate/Other ^(a)	Total
Balance at December 31, 2016	\$ 408.5	\$ 789.4	\$ 49.0	\$ 13.4	\$ 1,260.3
Acquisition of Businesses	—	51.4	6.3	(2.3)	55.4
Reallocation of Goodwill	—	(4.0)	—	4.0	—
Foreign Currency Effects	—	2.2	4.2	0.9	7.3
Balance at December 31, 2017	\$ 408.5	\$ 839.0	\$ 59.5	\$ 16.0	\$ 1,323.0
Acquisition of Businesses	98.3	43.1	(0.1)	—	141.3
Foreign Currency Effects	—	(0.3)	(2.2)	(1.2)	(3.7)
Balance at December 31, 2018	\$ 506.8	\$ 881.8	\$ 57.2	\$ 14.8	\$ 1,460.6

^(a) Includes Australia operating segment.

Retained Insurable Risks

It is the Company's policy to self-insure or fund a portion of certain expected losses related to group health benefits and workers' compensation claims. Provisions for expected losses are recorded based on the Company's estimates, on an undiscounted basis, of the aggregate liabilities for known claims and estimated claims incurred but not reported.

Asset Retirement Obligations

Asset retirement obligations are accounted for in accordance with the provisions of the *Asset Retirement and Environmental Obligations* topic of the FASB Codification. A liability and asset are recorded equal to the present value of the estimated costs associated with the retirement of long-lived assets where a legal or contractual obligation exists and the liability can be reasonably estimated. The liability is accreted over time and the asset is depreciated over the remaining life of the asset. Upon settlement of the liability, the Company will recognize a gain or loss for any difference between the settlement amount and the liability recorded. Asset retirement obligations with indeterminate settlement dates are not recorded until such time that a reasonable estimate may be made.

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

International Currency

The functional currency of the international subsidiaries is the local currency for the country in which the subsidiaries own their primary assets. The translation of the applicable currencies into U.S. dollars is performed for balance sheet accounts using current exchange rates in effect at the balance sheet date and for revenue and expense accounts using an average exchange rate during the period. Any related translation adjustments are recorded directly to a separate component of Shareholders' Equity, unless there is a sale or substantially complete liquidation of the underlying foreign investments.

The Company pursues a currency hedging program which utilizes derivatives to reduce the impact of foreign currency exchange fluctuations on its consolidated financial results. Under this program, the Company has entered into forward exchange contracts in the normal course of business to hedge certain foreign currency denominated transactions. Realized and unrealized gains and losses on these forward contracts are included in the measurement of the basis of the related foreign currency transaction when recorded.

Revenue Recognition

The Company has two primary activities, manufacturing and converting paperboard, from which it generates revenue from contracts with customers, and revenue is disaggregated primarily by geography and type of activity as further explained in "Note 15-Business Segment and Geographic Area Information." All reportable segments and the Australia and Pacific Rim operating segments recognize revenue under the same method, allocate transaction price using similar methods, and have similar economic factors impacting the uncertainty of revenue and related cash flows.

Revenue is recognized on the Company's annual and multi-year supply contracts when the Company satisfies the performance obligation by transferring control over the product or service to a customer, which is generally based on shipping terms and passage of title under the point-in-time method of recognition. For the years ended December 31, 2018, 2017 and 2016, the Company recognized \$6,005.5 million, \$4,383.0 million and \$4,280.1 million, respectively, of revenue from contracts with customers.

The transaction price allocated to each performance obligation consists of the stand-alone selling price, estimates of rebates and other sales or contract renewal incentives, and cash discounts and sales returns ("Variable Consideration") and excludes sales tax. Estimates are made for Variable Consideration based on contract terms and historical experience of actual results and are applied to the performance obligations as they are satisfied. Purchases by the Company's principal customers are manufactured and shipped with minimal lead time, therefore performance obligations are generally satisfied shortly after manufacturing and shipment. The Company uses standard payment terms that are consistent with industry practice.

The Company's contract assets consist primarily of contract renewal incentive payments to customers which are amortized over the period in which performance obligations related to the contract renewal are satisfied. As of December 31, 2018 and 2017, contract assets were \$19.6 million and \$11.7 million, respectively. The Company's contract liabilities consist principally of rebates, and as of December 31, 2018 and 2017 were \$42.5 million and \$28.6 million, respectively.

The Company did not have a material amount relating to backlog orders at December 31, 2018 or 2017.

Shipping and Handling

The Company includes shipping and handling costs in Cost of Sales.

Research and Development

Research and development costs, which relate primarily to the development and design of new packaging machines and products and are recorded as a component of Selling, General and Administrative expenses, are expensed as incurred. Expenses for the years ended December 31, 2018, 2017 and 2016 were \$8.7 million, \$14.4 million and \$14.9 million, respectively.

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

Business Combinations, Gain on Sale of Assets and Shutdown and Other Special Charges, Net

The following table summarizes the transactions recorded in Business Combinations, Gain on Sale of Assets and Shutdown and Other Special Charges, Net in the Consolidated Statements of Operations for the year ended December 31:

<i>In millions</i>	2018	2017	2016
Charges Associated with Business Combinations	\$ 46.8	\$ 16.2	\$ 21.2
Shutdown and Other Special Charges	6.7	18.6	15.9
Gain on Sale of Assets	(38.6)	(3.7)	—
Total	\$ 14.9	\$ 31.1	\$ 37.1

2018

On September 30, 2018, the Company acquired substantially all the assets of the foodservice business of Letica Corporation, a subsidiary of RPC Group PLC ("Letica Foodservice"), a producer of paperboard-based cold and hot cups and cartons. The acquisition included two facilities located in Clarksville, Tennessee and Pittston, Pennsylvania. Letica Foodservice is included in the Americas Paperboard Packaging reportable segment.

On August 31, 2018, the Company sold its previously closed coated recycled paperboard mill site in Santa Clara, California, resulting in a gain on sale of assets of \$37.1 million.

On June 12, 2018, the Company acquired substantially all the assets of PFP, LLC and its related entity, PFP Dallas Converting, LLC (collectively, "PFP"), a converter focused on the production of paperboard based air filter frames. The acquisition included two facilities located in Lebanon, Tennessee and Lancaster, Texas. PFP is included in the Americas Paperboard Packaging reportable segment.

On January 1, 2018, the Company completed the NACP Combination. The NACP business produces SBS and paper-based foodservice products. The NACP business included two SBS mills located in Augusta, Georgia and Texarkana, Texas (included in Paperboard Mills reportable segment), three converting facilities in the U.S. (included in Americas Paperboard Packaging reportable segment) and one in the United Kingdom ("U.K.") (included in the Europe Paperboard Packaging reportable segment).

2017

On December 1, 2017, the Company acquired the assets of Seydaco Packaging Corp. and its affiliates, National Carton and Coating Co., and Groupe Ecco Boites Pliantes Ltée (collectively, "Seydaco"), a folding carton producer focused on the foodservice, food, personal care, and household goods markets. The acquisition included three folding carton facilities located in Mississauga, Ontario, St.-Hyacinthe, Québec, and Xenia, Ohio.

On December 1, 2017, the Company closed its coated recycled paperboard mill in Santa Clara, California. This decision was made as a result of a thorough assessment of the facility's manufacturing capabilities and associated costs in the context of the Company's overall mill operating capabilities and cost structure. The financial impact is reflected in Shutdown and Other Special Charges in the table above.

On October 4, 2017, the Company acquired Norgraft Packaging, S.A., ("Norgraft"), a leading folding carton producer in Spain focused on the food and household goods markets. The acquisition included two folding carton facilities located in Miliña and Requejada, Spain.

On July 10, 2017, the Company acquired substantially all the assets of Carton Craft Corporation and its affiliate, Lithocraft, Inc (collectively, "Carton Craft"). The acquisition included two folding carton facilities located in New Albany, Indiana, focused on the production of paperboard based air filter frames and folding cartons.

The Seydaco, Norgraft, and Carton Craft transactions are referred to collectively as the "2017 Acquisitions." Seydaco and Carton Craft are included in the Americas Paperboard Packaging Segment. Norgraft is included in the Europe Paperboard Packaging Segment.

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

In October 2017, the Company completed the sale of its Renton, WA facility which was classified as Asset Held for Sale on December 31, 2016. The financial impact is reflected in Gain on Sale of Assets, Net in the table above.

2016

On April 29, 2016, the Company acquired Colorpak Limited ("Colorpak"), a leading folding carton supplier in Australia and New Zealand. Colorpak operated three folding carton facilities that convert paperboard into folding cartons for the food, beverage and consumer product markets. The folding carton facilities are located in Melbourne, Australia, Sydney, Australia and Auckland, New Zealand.

On March 31, 2016, the Company acquired substantially all of the assets of Metro Packaging & Imaging, Inc. ("Metro"), a single folding carton facility located in Wayne, New Jersey.

On February 16, 2016, the Company acquired Walter G. Anderson, Inc., ("WG Anderson") a folding carton manufacturer with a focus on store branded food and consumer product markets. WG Anderson operated two sheet-fed folding carton facilities located in Hamel, Minnesota and Newton, Iowa.

On January 5, 2016, the Company acquired G-Box, S.A. de C.V., ("G-Box"). The acquisition included two folding carton facilities located in Monterrey, Mexico and Tijuana, Mexico that service the food, beverage and consumer product markets.

Charges associated with all acquisitions are included in Net Charges Associated with Business Combinations in the table above. For more information regarding these acquisitions see Note 4 - Business Combinations.

Capital Allocation Plan

On January 10, 2017, the Company's board of directors authorized an additional share repurchase program to allow the Company to repurchase up to \$250 million of the Company's issued and outstanding shares of common stock through open market purchases, privately negotiated transactions and Rule 10b5-1 plans (the "2017 share repurchase program"). The original \$250 million share repurchase program was authorized on February 4, 2015 (the "2015 share repurchase program").

The following presents the Company's share repurchases for the years ended December 31, 2018, 2017, and 2016:

<i>Amount repurchased in millions</i>	Amount Repurchased	Number of Shares Repurchased	Average Price
2018	\$ 120.0	10,566,144	\$ 11.35
2017	\$ 58.4	4,462,263 ^(a)	\$ 13.08
2016	\$ 168.8	13,202,425	\$ 12.77

^(a) Includes 1,440,697 shares repurchased under the 2015 share repurchase program, thereby completing that program.

At December 31, 2018, the Company had approximately \$90 million remaining under the 2017 share repurchase program.

During 2018 and 2017, GPHC paid cash dividends of \$93.1 million and \$93.4 million, respectively.

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

Adoption of New Accounting Standards

Effective January 1, 2018, the Company adopted Accounting Standards Update ("ASU") No. 2017-09, *Compensation - Stock Compensation (Topic 718); Scope of Modification Accounting*. The amendments in this ASU provide guidance that clarifies when changes to the terms or conditions of a share-based payment award must be accounted for as modifications. If the value, vesting conditions or classification of the award changes, modification accounting will apply. The adoption of this standard did not have a material impact on the Company's financial position, results of operations and cash flows.

Effective January 1, 2018, the Company adopted ASU No. 2017-07, *Compensation - Retirement Benefits (Topic 715); Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost*. The amendments in this ASU require the service cost component of net periodic benefit cost be reported in the same income statement line or lines as other compensation costs for employees. The other components of net periodic benefit cost are required to be reported separately from service costs and outside a subtotal of income from operations. Only the service cost component is eligible for capitalization. The adoption of this ASU was applied retrospectively for the reclassification of net periodic benefit expense, excluding service costs, in the Consolidated Statement of Operations. The adoption of this ASU did not have a material impact on the Company's financial position, results of operations and cash flows.

Effective January 1, 2018, the Company adopted ASU No. 2017-01, *Business Combinations (Topic 805); Clarifying the Definition of a Business*. The amendments in this ASU provide guidance in evaluating whether transactions should be accounted for as acquisitions (or disposals) of assets or businesses. The definition of a business affects many areas of accounting including acquisitions, disposals, goodwill and consolidation. This ASU was adopted prospectively and did not have a material impact on the Company's financial position, results of operations and cash flows.

Effective January 1, 2018, the Company adopted ASU No. 2016-15, *Statement of Cash Flows (Topic 230); Classification of Certain Cash Receipts and Cash Payments*. The amendments in this ASU provide guidance on how certain cash receipts and payments should be presented in the statement of cash flows and was applied retrospectively. This ASU requires the Company to classify consideration received for beneficial interest obtained for selling trade receivables as investing instead of operating activities. The retrospective impact on the Company's consolidated statement of cash flows for 2018, 2017 and 2016 was a \$1,131.2 million, \$708.7 million and \$567.4 million decrease to cash provided by operating activities and a corresponding increase to cash provided by investing activities, respectively.

Effective January 1, 2018, the Company adopted ASU No. 2014-09, *Revenue from Contracts with Customers (Topic 606)*, using the modified retrospective approach. Adoption of ASU No. 2014-09 requires that an entity recognize revenue to depict the transfer of goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. The Company considered whether the adoption may require acceleration of revenue for products produced by the Company without an alternative use and when the Company would have a legally enforceable right of payment. The Company has determined that it does not have an enforceable right of payment for products produced but not yet shipped and recognizes all revenue under the point in time method. The adoption of ASU No. 2014-09 did not have a material impact on the Company's financial position, results of operations and cash flows.

Accounting Standards Not Yet Adopted

In August 2017, the FASB issued ASU No. 2017-12, *Derivatives and Hedging (Topic 815); Targeted Improvements to Accounting for Hedging Activities*. The amendments in this ASU better align the risk management activities and financial reporting for these hedging relationships through changes to both the designation and measurement guidance for qualifying hedging relationships and presentation of hedge results. The guidance is effective for fiscal years beginning after December 15, 2018, and interim periods within those fiscal years. The Company does not expect the adoption of this standard to have a material impact on the Company's financial position, results of operations and cash flows.

In January 2017, the FASB issued ASU No. 2017-04, *Intangibles - Goodwill and Other (Topic 350); Simplifying the Test for Goodwill Impairment* which simplifies how an entity is required to test goodwill for impairment by eliminating Step 2 of the goodwill impairment model. Step 2 measures a goodwill impairment loss by comparing the implied value of a reporting unit's goodwill with the carrying amount of that goodwill. An entity would recognize an impairment charge for the amount by which the carrying amount of a reporting unit exceeds its fair value; however, the loss recognized is limited to the amount of goodwill allocated to that reporting unit. The guidance is effective for fiscal years beginning after December 15, 2019. Early adoption is permitted for any impairment tests performed after January 1, 2017.

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

In February 2016, the FASB issued ASU No. 2016-02, *Leases (Topic 842)*. The amendments in this ASU require an entity to recognize a right-of-use asset and lease liability for all leases with terms of more than 12 months. Recognition, measurement and presentation of expenses will depend on classification as a finance or operating lease. The amendments also require certain quantitative and qualitative disclosures about leasing arrangements. The amendments are effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. Early adoption is permitted. The updated guidance allows a modified retrospective adoption, which the Company plans to adopt. The Company has substantially completed the data gathering and software configuration and testing for a significant majority of the Company's lease portfolio, including service agreements with embedded leases. The Company continues to perform routine testing and analysis of data inputs and reporting requirements. The adoption of this standard is expected to have a material impact on the Company's financial position, but currently is not expected to have a material impact on the results of operations and cash flows.

In August 2018, the FASB issued ASU No. 2018-13, *Fair Value Measurement (Topic 820): Disclosure Framework - Changes to the Disclosure Requirements for Fair Value Measurement*. This amendment modifies the disclosure requirements on fair value measurements. The guidance is effective for fiscal years ending after December 15, 2019, and interim periods within those fiscal years. Early adoption is permitted. The Company does not expect the adoption to have a material impact on the Company's financial position, results of operations and cash flows.

In August 2018, the FASB issued ASU No. 2018-14, *Compensation - Retirement Benefits - Defined Benefit Plans - General (Subtopic 715-20); Disclosure Framework - Changes to the Disclosure Requirements for Defined Benefit Plans*. This amendment modifies the disclosure requirements for employers that sponsor defined benefit pension or other postretirement plans. Disclosures that are no longer considered cost-beneficial are removed, specific requirements of disclosures are clarified, and disclosure requirements identified as relevant are added. The guidance is effective for fiscal years ending after December 15, 2020. The Company does not expect the adoption to have a material impact on the Company's financial position, results of operations and cash flows.

NOTE 2. SUPPLEMENTAL BALANCE SHEET DATA

The following tables provide disclosure related to the components of certain line items included in our consolidated balance sheets.

Receivables, Net:

<i>In millions</i>	2018	2017
Trade	\$ 475.9	\$ 279.2
Less: Allowance	(10.4)	(7.2)
	465.5	272.0
Other	107.4	49.1
Total	\$ 572.9	\$ 321.1

Inventories, Net by major class:

<i>In millions</i>	2018	2017
Finished Goods	\$ 426.9	\$ 240.5
Work in Progress	102.2	74.1
Raw Materials	319.9	229.4
Supplies	165.4	90.0
Total	\$ 1,014.4	\$ 634.0

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

Other Current Assets:

<i>In millions</i>	2018	2017
Deferred Purchase Price	\$ 66.9	\$ 101.7
Prepaid Assets	28.6	28.6
Assets Held for Sale	—	10.2
Contract Assets, current portion	9.8	5.7
Fair Value of Derivatives, current portion	0.7	1.2
Total	\$ 106.0	\$ 147.4

Property, Plant and Equipment, Net:

<i>In millions</i>	2018	2017
Property, Plant and Equipment, at Cost:		
Land and Improvements	\$ 134.1	\$ 106.2
Buildings ^(a)	608.5	431.9
Machinery and Equipment ^(b)	5,716.2	4,384.5
Construction-in-Progress	201.2	151.0
	6,660.0	5,073.6
Less: Accumulated Depreciation ^{(a) (b)}	(3,420.3)	(3,206.4)
Total	\$ 3,239.7	\$ 1,867.2

^(a) Includes gross assets under financing obligation of \$95.5 million and related accumulated depreciation of \$0.4 million as of December 31, 2018.

^(b) Includes gross assets under capital lease of \$39.6 million and related accumulated depreciation of \$10.0 million as of December 31, 2018 and gross assets under capital lease of \$39.7 million and related accumulated depreciation of \$7.4 million as of December 31, 2017.

Other Assets:

<i>In millions</i>	2018	2017
Deferred Debt Issuance Costs, Net of Amortization of \$12.5 million and \$10.9 million for 2018 and 2017, respectively	\$ 6.4	\$ 2.9
Deferred Income Tax Assets	8.2	6.8
Pension Assets	19.0	20.4
Contract Assets, noncurrent portion	9.8	6.0
Fair Value of Derivatives, noncurrent portion	0.1	—
Other	27.8	30.3
Total	\$ 71.3	\$ 66.4

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

Other Accrued Liabilities:

<i>In millions</i>	2018	2017
Dividends Payable	\$ 22.5	\$ 23.3
Deferred Revenue	14.0	11.6
Accrued Customer Rebates	30.2	15.5
Fair Value of Derivatives, current portion	1.3	1.2
Other Accrued Taxes	44.4	29.8
Accrued Payables	30.3	25.7
Liabilities Payable to a Financial Institution	62.6	—
Other	35.4	38.2
Total	\$ 240.7	\$ 145.3

Other Noncurrent Liabilities:

<i>In millions</i>	2018	2017
Deferred Revenue	\$ 5.2	\$ 6.6
Multi-employer Plans	32.4	29.0
Workers Compensation Reserve	9.9	10.9
Fair Value of Derivatives, noncurrent portion	2.1	—
Accrued Build-to-Suit Obligation	—	35.8
Unfavorable Supply Agreement	31.2	—
Other	37.0	22.4
Total	\$ 117.8	\$ 104.7

NOTE 3. SUPPLEMENTAL CASH FLOW INFORMATION

Cash Flow Provided by (Used In) Operations Due to Changes in Operating Assets and Liabilities, net of acquisitions:

<i>In millions</i>	2018	2017	2016
Receivables, Net	\$ (1,158.1)	\$ (658.8)	\$ (541.9)
Inventories, Net	(82.0)	(6.5)	10.5
Other Current Assets	0.3	0.8	(1.2)
Other Assets	(1.0)	(32.8)	8.5
Accounts Payable	76.2	27.0	4.3
Compensation and Employee Benefits	26.9	3.5	(21.7)
Income Taxes	0.6	2.3	1.7
Interest Payable	(4.1)	(1.7)	5.0
Other Accrued Liabilities	11.8	6.7	12.8
Other Noncurrent Liabilities	8.6	14.2	(6.9)
Total	\$ (1,120.8)	\$ (645.3)	\$ (528.9)

Cash paid for interest and cash paid, net of refunds, for income taxes was as follows:

<i>In millions</i>	2018	2017	2016
Interest	\$ 121.3	\$ 81.8	\$ 64.9
Income Taxes	\$ 25.8	\$ 15.9	\$ 14.5

NOTE 4. BUSINESS COMBINATIONS

On January 1, 2018, the Company completed the NACP Combination. The NACP business produces SBS and paper-based foodservice products. The NACP business included two SBS mills located in Augusta, Georgia and Texarkana, Texas, three converting facilities in the U.S. and one in the U.K.

Total consideration for the NACP Combination, including debt assumed of \$660 million, was \$1.8 billion. Management believes that the purchase price attributable to goodwill represents the benefits expected, as the acquisition was made to continue to expand the Company's product offering, integrate paperboard from the Company's mills and to further optimize the Company's supply chain footprint.

In conjunction with the NACP Combination, the Company executed a Tax Receivable Agreement ("TRA") with IP. Pursuant to elections under Section 754 of the Internal Revenue Code, the Company expects to obtain an increase with respect to the tax basis in the assets of GPIP and certain of its subsidiaries when IP exchanges or redeems any of its membership interests. The Company generally expects to treat redemptions or exchanges of membership interests by IP as direct purchases of membership interests for U.S. federal income tax purposes. Increases in tax basis may reduce the amounts that we would otherwise pay in the future to various tax authorities. The TRA provides for the payment by the Company to IP of 50% of the amount of any tax benefits projected to be realized by the Company upon IP's exchange of the membership interests into GPHC common stock.

On September 30, 2018, the Company completed the Letica Foodservice acquisition. The acquisition included two facilities in Clarksville, Tennessee and Pittston, Pennsylvania, focused on the production of paperboard-based cold and hot cups and cartons. The Company paid approximately \$95 million using existing cash and borrowings under its revolving credit facility.

On June 12, 2018, the Company completed the PFP acquisition. The Company paid approximately \$34 million using existing cash and borrowings under its revolving credit facility. The acquisition included two manufacturing facilities in Lebanon, Tennessee and Lancaster, Texas, focused on the production of paperboard-based air filter frames.

The Company expects that goodwill related to the NACP Combination will not be deductible for tax purposes. The Company expects that goodwill related to the Letica Foodservice and the PFP acquisitions will be deductible for tax purposes.

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

The acquisition accounting for the NACP Combination and PFP Acquisition is complete. Acquisition accounting for Letica Foodservice is preliminary based on the estimated fair values of all assets and liabilities as of the acquisition date. The Acquisition accounting for Letica is subject to adjustments in subsequent periods once the third party valuations are finalized and the Company has completed its review of the fair values of all assets acquired and liabilities assumed, including, but not limited to, tangible and intangible assets, fair value of contracts, and final tax adjustments. The acquisition accounting for the NACP Combination, PFP and the Letica Foodservice acquisitions is as follows:

<i>In millions</i>	Amounts Recognized as of Acquisition Date	Measurement Period Adjustments	Amounts Recognized as of Acquisition Dates (as adjusted)
Purchase Price ^(a)	\$ 1,241.7	\$ (40.9)	\$ 1,200.8
Assumed Debt ^(b)	660.0	—	660.0
Total Purchase Consideration	\$ 1,901.7	\$ (40.9)	\$ 1,860.8
Receivables, Net	145.3	—	145.3
Inventories, Net	314.2	0.8	315.0
Other Current Assets	20.9	(9.2)	11.7
Property, Plant and Equipment, Net	1,242.6	32.0	1,274.6
Intangible Assets, Net ^(c)	136.6	13.5	150.1
Other Assets	6.0	(6.0)	—
Total Assets Acquired	1,865.6	31.1	1,896.7
Accounts Payable	112.6	—	112.6
Compensation and Employee Benefits	21.0	(5.7)	15.3
Current Liabilities	16.3	(0.1)	16.2
Other Noncurrent Liabilities	41.3	(1.7)	39.6
Total Liabilities Assumed	191.2	(7.5)	183.7
Net Assets Acquired	1,674.4	38.6	1,713.0
Goodwill	227.3	(79.5)	147.8
Total Estimated Fair Value of Net Assets Acquired	\$ 1,901.7	\$ (40.9)	\$ 1,860.8

^(a) Includes a \$123.5 million adjustment for discounting the purchase price for lack of marketability of the membership interests issued for the NACP Combination and measurement period adjustments of \$40.5 million, related to working capital true-ups, offset by pension settlements.

^(b) Assumed Debt was valued at fair market value based on quoted market prices (Level 2 inputs) obtained from independent pricing services.

^(c) Intangible Assets, Net consists of customer relationships which are generally amortized using either a straight-lined method, when the amortization pattern is not reliably determinable, or an accelerated method, generally over approximately 20 years. The value of customer relationships was determined using a discounted cash flow model, which includes an approximate 5% attrition rate. Beyond the twenty-year life, the present value of cash flows were not meaningful.

During the fourth quarter of 2018, the Company recorded an approximate \$15 million adjustment, reducing depreciation expense and a \$35 million adjustment to record an unfavorable contract, both to reflect final valuation adjustments for the NACP Combination.

During the fourth quarter of 2018, the Company paid an additional \$0.4 million related to the working capital true-up of PFP.

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

The following unaudited pro forma consolidated results of operations data assumes that the NACP Combination occurred as of the beginning of the period presented. This pro forma data is based on historical information and does not necessarily reflect the actual results that would have occurred, nor is it indicative of future results of operations.

<i>In millions, except per share data</i>	Year Ended December 31,
	2017
Net Sales	\$ 5,912.5
Net Income Attributable to Graphic Packaging Holding Company	367.7
Income Per Share — Basic	1.18
Income Per Share — Diluted	1.18

Net Sales and Income from Operations from the NACP Combination was \$1,407.1 million and \$134.7 million, respectively, for the year ended December 31, 2018.

Total Assets increased as a result of the NACP Combination for the Paperboard Mills and Americas Paperboard Packaging reportable segments by approximately \$1.5 billion and \$0.6 billion, respectively, as compared to December 31, 2017.

In connection with the NACP Combination, the Company entered into agreements with IP for transition services, fiber procurement fees and corrugated products and ink supply. Payments to IP for the year ended December 31, 2018 under these agreements were \$22.0 million, \$15.9 million (related to pass through wood purchases of approximately \$194 million) and \$28.5 million, respectively. In addition, approximately \$5.7 million of payments were made for purchases unrelated to these agreements.

During 2018, Net Sales and Loss from Operations from the Leticia Foodservice and PFP acquisitions were \$42.4 million and \$1.4 million, respectively.

As disclosed in "Note 1 - General Information," in 2017, the Company acquired Seydaco, Norgraft, and Carton Craft, which are referred to collectively as the "2017 Acquisitions." Seydaco and Carton Craft are included in the Americas Paperboard Packaging Segment. Norgraft is included in the Europe Paperboard Packaging Segment. The Company paid approximately \$189 million, net of cash acquired, for the 2017 Acquisitions using existing cash and borrowings under its revolving line of credit, and assumed debt of approximately \$14 million. During the second quarter of 2018, the Company made valuation adjustments of \$0.5 million for Carton Craft, which was recorded to goodwill. For the nine months ended September 30, 2018, the Company paid an additional \$2.4 million related to the working capital true-up and recorded valuation adjustments of \$7.3 million for Seydaco, which in aggregate was recorded to goodwill.

NOTE 5. DEBT

Short-Term Debt is comprised of the following:

<i>In millions</i>	2018	2017
Short Term Borrowings	\$ 11.7	\$ 9.1
Current Portion of Capital Lease Obligations	3.8	2.2
Current Portion of Long-Term Debt	36.5	50.0
Total	\$ 52.0	\$ 61.3

Short-term borrowings are principally at the Company's international subsidiaries. The weighted average interest rate on short-term borrowings as of December 31, 2018 and 2017 was 8.4% and 6.1%, respectively.

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

Long-Term Debt is comprised of the following:

<i>In millions</i>	2018	2017
Senior Notes with interest payable semi-annually at 4.125%, effective rate of 4.18%, payable in 2024	\$ 300.0	\$ 300.0
Senior Notes with interest payable semi-annually at 4.875%, effective rate of 4.92%, payable in 2022	250.0	250.0
Senior Notes with interest payable semi-annually at 4.75%, effective rate of 4.77%, payable in 2021	425.0	425.0
Senior Secured Term Loan Facilities with interest payable at various dates at floating rates (3.89% at December 31, 2018) payable through 2023	1,432.6	925.0
Senior Secured Revolving Credit Facilities with interest payable at floating rates (3.63% at December 31, 2018) payable in 2023	399.0	319.0
Capital Lease and Financing Obligations	122.9	30.0
Other	26.5	28.9
Total Long-Term Debt	2,956.0	2,277.9
Less: Current Portion	40.3	52.2
	2,915.7	2,225.7
Less: Unamortized Deferred Debt Issuance Costs	10.6	12.5
Total	\$ 2,905.1	\$ 2,213.2

Long-Term Debt maturities (excluding capital leases) are as follows:

<i>In millions</i>	
2019	\$ 36.5
2020	56.6
2021	489.4
2022	378.4
2023	1,567.6
After 2023	304.6
Total	\$ 2,833.1

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

Credit Facilities

The following describes the Senior Secured Term Loan and Revolving Credit Facilities:

Date	Document ^(a)	Provision	Expiration ^(b)
March 2012	Amended and Restated Credit Agreement	<ul style="list-style-type: none"> •\$1.0 billion revolving credit facility •\$1.0 billion amortizing term loan facility •LIBOR plus variable spread (between 175 basis points and 275 basis points) depending on consolidated total leverage ratio 	
December 2012	Amendment No. 1 to Credit Agreement	<ul style="list-style-type: none"> •\$300 million incremental term loan 	
September 2013	Amendment No. 2 to Credit Agreement	<ul style="list-style-type: none"> •Added €75 million (approximately \$100 million) revolving credit facility for borrowings in Euro and Pound Sterling and a ¥2.5 billion (approximately \$25 million) revolving credit facility for borrowings in Yen. LIBOR plus variable spread (between 150 basis points and 250 basis points) depending on consolidated total leverage ratio 	
June 2014	Amendment No. 3 to Credit Agreement	<ul style="list-style-type: none"> •Increased revolving credit facility under which borrowings can be made in Euros or Sterling by €63 million (approximately \$86 million) 	
October 2014	Second Amended and Restated Credit Agreement	<ul style="list-style-type: none"> •Increased the domestic revolving credit facility by \$250 million and reduced the term loan by approximately \$169 million. LIBOR plus variable spread (between 125 basis points and 225 basis points) depending on consolidated total leverage ratio 	
January 2018	Third Amended and Restated Credit Agreement	<ul style="list-style-type: none"> •Increased the domestic revolving credit facility by \$200 million to \$1,450 million and reduced the term loan by approximately \$125 million to \$800 million. LIBOR plus variable spread (between 125 basis points and 200 basis points) depending on consolidated total leverage ratio •Assumed the term loan indebtedness as part of the NACP Combination in an aggregate amount of \$660.0 million 	January 2023

^(a) The Company's obligations under the Credit Agreement are secured by substantially all of the Company's domestic assets.

^(b) Expiration date is amended to most recent expiration of January 2023.

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

In addition to the Amended and Restated Credit Agreement, on January 1, 2018 the Company assumed the term loan indebtedness previously incurred by IP (the "Term Loan Credit Agreement") in an aggregate amount of \$660 million, repayable pursuant to the same amortization schedule (expressed as a percentage of the principal amount thereof) as the Term Loan A under the Amended and Restated Credit Agreement and has the same maturity date of January 1, 2023. The applicable margin interest rate pricing grid, covenants and other terms are substantially equivalent to those contained in the Amended and Restated Credit Agreement. The Term Loan Credit Agreement is secured by a lien and security interest in substantially all of the assets of GPIL on a pari passu basis with the liens and security interests securing the Amended and Restated Credit Agreement pursuant to the terms of a customary intercreditor agreement among the parties. The Amended and Restated Credit Agreement and Term Loan Credit Agreement are collectively referred to as the "Credit Agreement."

At December 31, 2018, the Company and its U.S. and international subsidiaries had the following commitments, amounts outstanding and amounts available under revolving credit facilities:

<i>In millions</i>	Total Commitments	Total Outstanding	Total Available
Senior Secured Domestic Revolving Credit Facility ^(a)	\$ 1,450.0	\$ 329.0	\$ 1,098.3
Senior Secured International Revolving Credit Facilities	180.8	70.0	110.8
Other International Facilities	65.4	38.3	27.1
Total	\$ 1,696.2	\$ 437.3	\$ 1,236.2

^(a) In accordance with its debt agreements, the Company's availability under its Revolving Credit Facility has been reduced by the amount of standby letters of credit issued of \$22.7 million as of December 31, 2018. These letters of credit are primarily used as security against its self-insurance obligations and workers' compensation obligations. These letters of credit expire throughout 2019 unless extended.

The Credit Agreement is guaranteed by GPIP and certain domestic subsidiaries, and the 4.75% Senior Notes due 2021, 4.875% Senior Notes due 2022 and 4.125% Senior Notes due 2024 are guaranteed by GPHC. For additional information on the financial statements of GPIP, see "Note 17 - Guarantor Consolidating Financial Statements" of the Notes to the Consolidated Financial Statements of GPIL in its Annual Report on Form 10-K for the year ended December 31, 2018 filed with the Securities and Exchange Commission.

The Credit Agreement and the indentures governing the 4.75% Senior Notes due 2021, 4.875% Senior Notes due 2022 and 4.125% Senior Notes due 2024 (the "Indentures") limit the Company's ability to incur additional indebtedness. Additional covenants contained in the Credit Agreement and the Indentures may, among other things, restrict the ability of the Company to dispose of assets, incur guarantee obligations, prepay other indebtedness, repurchase stock, pay dividends and make other restricted payments, create liens, make equity or debt investments, make acquisitions, modify terms of the Indenture, engage in mergers or consolidations, change the business conducted by the Company and its subsidiaries, and engage in certain transactions with affiliates. Such restrictions could limit the Company's ability to respond to changing market conditions, fund its capital spending program, provide for unexpected capital investments or take advantage of business opportunities.

As of December 31, 2018, the Company was in compliance with the covenants in the Amended and Restated Credit Agreement, the Term Loan Credit Agreement and the Indentures.

NOTE 6. STOCK INCENTIVE PLANS

The Company has one active equity compensation plan from which new grants may be made, the Graphic Packaging Holding Company 2014 Omnibus Stock and Incentive Compensation Plan (the "2014 Plan"). Under the 2014 Plan, the Company may grant stock options, stock appreciation rights, restricted stock, restricted stock units ("RSUs") and other types of stock-based and cash awards. Awards under the 2014 Plan generally vest and expire in accordance with terms established at the time of grant. Shares issued pursuant to awards under the 2014 Plan are from the Company's authorized but unissued shares. Compensation costs are recognized on a straight-line basis over the requisite service period of the award.

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

Stock Awards, Restricted Stock and Restricted Stock Units

Under the 2014 Plan, all RSUs generally vest and become payable in three years from date of grant. RSUs granted to employees contain some combination of service, performance and market objectives based on various financial targets and relative total shareholder return that must be met for the shares to vest. Stock awards granted to non-employee directors as part of their compensation for service on the Board are unrestricted on the grant date.

Data concerning RSUs and stock awards granted in the years ended December 31:

	2018		2017		2016
RSUs — Employees	1,543,410		1,547,049		1,891,335
Weighted-average grant date fair value	\$ 14.79	\$	13.35	\$	11.20
Stock Awards — Board of Directors	51,226		65,520		59,880
Weighted-average grant date fair value	\$ 15.03	\$	13.43	\$	13.36

A summary of the changes in the number of unvested RSUs from December 31, 2015 to December 31, 2018 is presented below:

	Shares	Weighted Average Grant Date Fair Value
Outstanding — December 31, 2015	5,439,588	\$ 10.22
Granted	1,891,335	11.20
Released	(2,596,292)	7.29
Forfeited	(66,956)	12.74
Outstanding — December 31, 2016	4,667,675	\$ 12.21
Granted	1,547,049	13.35
Released	(1,720,327)	10.05
Forfeited	(622,463)	13.13
Outstanding — December 31, 2017	3,871,934	\$ 13.10
Granted	1,543,410	14.79
Released	(744,757)	14.90
Forfeited	(210,553)	13.49
Outstanding — December 31, 2018	4,460,034	\$ 13.27

The initial value of the RSUs is based on the market value of the Company's common stock on the date of grant. The 2018 grants were valued using a Monte Carlo simulation as the total shareholder return contains a market condition. RSUs are recorded in Stockholders' Equity. The unrecognized expense at December 31, 2018 is approximately \$27 million and is expected to be recognized over a weighted average period of 2 years.

The value of stock awards granted to the Company's directors are based on the market value of the Company's common stock on the date of grant. These awards are unrestricted on the date of grant.

During 2018, 2017, and 2016, \$13.8 million, \$8.9 million and \$20.2 million, respectively, were charged to compensation expense for stock incentive plans.

During 2018, 2017, and 2016, RSUs with an aggregate fair value of \$13.7 million, \$23.2 million and \$32.0 million, respectively, vested and were paid out. The RSUs vested and paid out in 2018 were granted primarily during 2015.

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

NOTE 7. PENSIONS AND OTHER POSTRETIREMENT BENEFITS

DEFINED BENEFIT PLANS

The Company maintains both defined benefit pension plans and postretirement health care plans that provide medical and life insurance coverage to eligible salaried and hourly retired employees in North America and their dependents. The Company maintains international defined benefit pension plans which are both noncontributory and contributory and are funded in accordance with applicable local laws. Pension or termination benefits are based primarily on years of service and the employees' compensation.

Currently, the North American plans are closed to newly-hired employees except as noted below. Effective July 1, 2011, the North American plans were frozen for most salaried and non-union hourly employees and replaced with a defined contribution plan. During 2015, the remaining union plans were closed to newly-hired employees. Also in 2015, the Company assumed defined benefit pension and postretirement benefit plans in the Cascades acquisition. These plans are closed to newly-hired employees. In 2016, the Company assumed a defined benefit plan in the WG Anderson acquisition, which was frozen for all participants on December 31, 2016.

During the fourth quarter of 2017, the Company made an additional \$75 million contribution to its U.S. defined benefit plan. Since this plan is closed and mostly frozen, the Company has hedged a significant portion of the liabilities. This additional contribution will allow the Company to begin the process of settling these liabilities.

During 2018, the Company began the process of terminating its largest U.S. pension plan. This included freezing the plan as of December 31 and spinning off the active participants to the plan established as part of the NACP Combination. This plan is open for union and non-union hourly employees of locations that were part of the NACP Combination. During 2019, the Company expects to offer a lump-sum benefit payout option to certain plan participants prior to completing the purchase of group annuity contracts that will transfer the pension benefit obligation to an insurance company. The expected benefit obligation associated with the termination is approximately \$800 million.

In the fourth quarter of 2017, the Company also made an additional contribution of \$6.8 million to its U.K. defined benefit plan and will continue de-risking that plan.

Pension and Postretirement Expense

The pension and postretirement expenses related to the Company's plans consisted of the following:

<i>In millions</i>	Pension Benefits			Postretirement Benefits		
	Year Ended December 31,					
	2018	2017	2016	2018	2017	2016
Components of Net Periodic Cost:						
Service Cost	\$ 17.3	\$ 8.2	\$ 10.0	\$ 0.6	\$ 0.8	\$ 0.8
Interest Cost	41.8	42.6	43.8	1.2	1.3	1.3
Expected Return on Plan Assets	(63.6)	(64.1)	(61.3)	—	—	—
Amortization:						
Prior Service Cost (Credit)	0.4	0.5	0.8	(0.3)	(0.3)	(0.2)
Actuarial Loss (Gain)	5.9	6.5	27.3	(1.8)	(2.1)	(2.1)
Net Curtailment/Settlement Loss	1.0	—	1.0	—	—	—
Other	0.5	0.8	0.8	—	—	—
Net Periodic (Benefit) Cost	\$ 3.3	\$ (5.5)	\$ 22.4	\$ (0.3)	\$ (0.3)	\$ (0.2)

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

Certain assumptions used in determining the pension and postretirement expenses were as follows:

	Pension Benefits			Postretirement Benefits		
	Year Ended December 31,					
	2018	2017	2016	2018	2017	2016
Weighted Average Assumptions:						
Discount Rate	3.49%	4.01%	4.41%	3.64%	4.10%	4.29%
Rate of Increase in Future Compensation Levels	2.09%	1.45%	1.49%	—	—	—
Expected Long-Term Rate of Return on Plan Assets	4.86%	5.79%	5.90%	—	—	—
Initial Health Care Cost Trend Rate	—	—	—	9.00%	7.45%	7.80%
Ultimate Health Care Cost Trend Rate	—	—	—	4.50%	4.50%	4.50%
Ultimate Year	—	—	—	2027	2024	2024

For the largest plan, the actuarial loss is amortized over the average remaining life expectancy period of employees expected to receive benefits.

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

Funded Status

The following table sets forth the funded status of the Company's pension and postretirement plans as of December 31:

<i>In millions</i>	Pension Benefits		Postretirement Benefits	
	2018	2017	2018	2017
Change in Benefit Obligation:				
Benefit Obligation at Beginning of Year	\$ 1,367.1	\$ 1,279.0	\$ 37.3	\$ 40.6
Service Cost	17.3	8.2	0.6	0.8
Interest Cost	41.8	42.6	1.2	1.3
Actuarial Loss (Gain)	(101.9)	76.4	(3.0)	(3.4)
Foreign Currency Exchange	(14.8)	22.9	(0.2)	0.1
Settlement/Curtailment (Gain)	—	(0.2)	—	—
Benefits Paid	(65.4)	(62.7)	(1.9)	(2.2)
Acquisition	—	—	—	—
Other	1.1	0.9	0.1	0.1
Benefit Obligation at End of Year	\$ 1,245.2	\$ 1,367.1	\$ 34.1	\$ 37.3
Change in Plan Assets:				
Fair Value of Plan Assets at Beginning of Year	\$ 1,340.7	\$ 1,115.6	\$ —	\$ —
Actual Return on Plan Assets	(79.6)	147.1	—	—
Employer Contributions	5.8	119.1	1.9	2.2
Foreign Currency Exchange	(15.0)	21.6	—	—
Benefits Paid	(65.4)	(62.7)	(1.9)	(2.2)
Acquisition	—	—	—	—
Settlements	—	—	—	—
Other	—	—	—	—
Fair Value of Plan Assets at End of Year	\$ 1,186.5	\$ 1,340.7	\$ —	\$ —
Plan Assets Less than Projected Benefit Obligation	\$ (58.7)	\$ (26.4)	\$ (34.1)	\$ (37.3)
Amounts Recognized in the Consolidated Balance Sheets Consist of:				
Pension Assets	\$ 19.0	\$ 20.4	\$ —	\$ —
Accrued Pension and Postretirement Benefits Liability — Current	\$ (1.8)	\$ (1.7)	\$ (2.5)	\$ (2.4)
Accrued Pension and Postretirement Benefits Liability — Noncurrent	\$ (75.9)	\$ (45.1)	\$ (31.6)	\$ (34.9)
Accumulated Other Comprehensive Income:				
Net Actuarial Loss (Gain)	\$ 297.3	\$ 267.1	\$ (1.6)	\$ (20.1)
Prior Service Cost (Credit)	\$ 3.6	\$ 0.7	\$ (20.2)	\$ (0.8)
Weighted Average Calculations:				
Discount Rate	4.14%	3.49%	4.29%	3.64%
Rates of Increase in Future Compensation Levels	2.37%	2.09%	—	—
Initial Health Care Cost Trend Rate	—	—	9.00%	9.00%
Ultimate Health Care Cost Trend Rate	—	—	4.50%	4.50%
Ultimate Year	—	—	2027	2027

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

The Company determined pension expense using both the fair value of assets and a calculated value that averages gains and losses over a period of years. Investment gains or losses represent the difference between the expected and actual return on assets. As of December 31, 2018, the net actuarial loss was \$297.3 million. These net losses may increase future pension expense if not offset by (i) actual investment returns that exceed the assumed investment returns, or (ii) other factors, including reduced pension liabilities arising from higher discount rates used to calculate pension obligations, or (iii) other actuarial gains, including whether such accumulated actuarial losses at each measurement date exceed the “corridor” determined under the *Compensation — Retirement Benefits* topic of the FASB Codification. For the largest plan, the actuarial loss is amortized over the average remaining life expectancy period of employees expected to receive benefits.

The discount rate used to determine the present value of future pension obligations at December 31, 2018 was based on a yield curve constructed from a portfolio of high-quality corporate debt securities with maturities ranging from 1 year to 30 years. Each year’s expected future benefit payments were discounted to their present value at the spot yield curve rate thereby generating the overall discount rate for the Company’s pension obligations. The weighted average discount rate used to determine the pension obligations was 4.14% and 3.49% in 2018 and 2017, respectively.

Accumulated Benefit Obligation

The accumulated benefit obligation, (“ABO”), for all defined benefit pension plans was \$1,240.2 million and \$1,359.4 million at December 31, 2018 and 2017, respectively. There are three plans where the ABO and projected benefit obligation (“PBO”) exceed plan assets. The aggregate ABO, PBO and fair value of plan assets for these plans are \$1,047.2 million, \$1,052.2 million and \$977.3 million, respectively.

Employer Contributions

The Company made contributions of \$5.8 million and \$119.1 million to its pension plans during 2018 and 2017, respectively. The Company also made postretirement health care benefit payments of \$1.9 million and \$2.2 million during 2018 and 2017, respectively. For 2019, the Company expects to make contributions of approximately \$10 million to its pension plans and approximately \$2 million to its postretirement health care plans.

Pension Assets

The Company’s overall investment strategy is to achieve a mix of investments for long-term growth and near-term benefit payments through diversification of asset types, fund strategies and fund managers. Investment risk is measured on an on-going basis through annual liability measurements, periodic asset/liability studies, and quarterly investment portfolio reviews. The plans invest in the following major asset categories: cash, equity securities, fixed income securities, real estate and diversified growth funds. At December 31, 2018 and 2017, pension investments did not include any direct investments in the Company’s stock or the Company’s debt.

The weighted average allocation of plan assets and the target allocation by asset category is as follows:

	Target	2018	2017
Cash	—%	5.0%	2.4%
Equity Securities	8.4	8.1	11.2
Fixed Income Securities	86.4	79.5	82.7
Other Investments	5.2	7.4	3.7
Total	100.0%	100.0%	100.0%

The plans’ investment in equity securities primarily includes investments in U.S. and international companies of varying sizes and industries. The strategy of these investments is to 1) exceed the return of an appropriate benchmark for such equity classes and 2) through diversification, reduce volatility while enhancing long term real growth.

The plans’ investment in fixed income securities includes government bonds, investment grade bonds and non-investment grade bonds across a broad and diverse issuer base. The strategy of these investments is to provide income and stability and to diversify the fixed income exposure of the plan assets, thereby reducing volatility.

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

The Company's approach to developing the expected long-term rate of return on pension plan assets is based on fair values and combines an analysis of historical investment performance by asset class, the Company's investment guidelines and current and expected economic fundamentals.

In 2016, the Company implemented a de-risking or liability driven investment strategy for its U.S. pension plans. This strategy moved assets from return seeking (equities) to investments that mirror the underlying benefit obligations (fixed income). The allocation of equities and fixed income changed from 45% and 55% at December 31, 2016, to 10% and 90% at December 31, 2017.

The following tables set forth, by category and within the fair value hierarchy, the fair value of the Company's pension assets at December 31, 2018 and 2017:

Fair Value Measurements at December 31, 2018				
<i>In millions</i>	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Asset Category:				
Cash ^(a)	\$ 58.8	\$ 0.3	\$ 58.5	\$ —
Equity Securities:				
Domestic ^(a)	86.4	3.6	82.8	—
Foreign ^(a)	9.2	5.3	3.8	—
Fixed Income Securities ^(a)	980.1	15.0	962.3	2.8
Other Investments:				
Real estate	9.2	—	7.6	1.6
Diversified growth fund ^(b)	42.8	—	41.5	1.4
Total	\$ 1,186.5	\$ 24.2	\$ 1,156.5	\$ 5.8

Fair Value Measurements at December 31, 2017				
<i>In millions</i>	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Asset Category:				
Cash ^(a)	\$ 32.2	\$ 0.3	\$ 31.9	\$ —
Equity Securities:				
Domestic ^(a)	140.5	4.1	136.4	—
Foreign ^(a)	9.1	5.8	3.3	—
Fixed Income Securities ^(a)	1,108.6	16.1	1,092.5	—
Other Investments:				
Real estate	10.4	9.6	—	0.8
Diversified growth fund ^(b)	39.9	—	39.9	—
Total	\$ 1,340.7	\$ 35.9	\$ 1,304.0	\$ 0.8

^(a) The Level 2 investments are held in pooled funds and fair value is determined by net asset value, based on the underlying investments, as reported on the valuation date.

^(b) The fund invests in a combination of traditional investments (equities, bonds, and foreign exchange), seeking to achieve returns through active asset allocation over three to five-year horizon.

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

A reconciliation of fair value measurements of plan assets using significant unobservable inputs (Level 3) is as follows:

<i>In millions</i>	2018		2017	
Balance at January 1,	\$	0.8	\$	—
Transfers In		5.0		0.8
Return on Assets Held at December 31		—		—
Balance at December 31,	\$	5.8	\$	0.8

Postretirement Health Care Trend Rate Sensitivity

Assumed health care cost trend rates affect the amounts reported for postretirement health care benefit plans. A one-percentage-point change in assumed health care cost trend rates would have the following effects on 2018 data:

<i>In millions</i>	One Percentage Point			
	Increase		Decrease	
Health Care Cost Trend Rate Sensitivity:				
Effect on Total Interest and Service Cost Components	\$	0.1	\$	(0.1)
Effect on Year-End Postretirement Benefit Obligation	\$	1.9	\$	(1.7)

Estimated Future Benefit Payments

The following represents the Company's estimated future pension and postretirement health care benefit payments through the year 2028:

<i>In millions</i>	Pension Plans		Postretirement Health Care Benefits	
2019	\$	69.4	\$	2.4
2020		71.9		2.6
2021		74.6		2.6
2022		77.0		2.8
2023		79.1		2.8
2024—2028		416.3		12.6

Amounts in Accumulated Other Comprehensive Loss Expected to Be Recognized in Net Periodic Benefit Costs in 2019

During 2019, amounts recorded in Accumulated Other Comprehensive Loss expected to be recognized in Net Periodic Benefit Costs are as follows:

<i>In millions</i>	Pension Benefits		Postretirement Health Care Benefits	
Recognition of Prior Service Cost	\$	0.2	\$	(0.3)
Recognition of Actuarial Loss (Gain)		9.9		(2.1)

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

Multi-Employer Plans

Certain of the Company's employees participate in multi-employer plans that provide both pension and other postretirement health care benefits to employees under union-employer organization agreements. Expense related to ongoing participation in these plans for the years ended December 31, 2018 and 2017 was \$3.4 million and \$2.3 million, respectively.

Estimated liabilities have been established related to the partial or complete withdrawal from certain multi-employment benefit plans for facilities which have been closed. At December 31, 2018, and December 31, 2017, the Company has \$32.4 million and \$29.0 million, respectively, recorded in Other Noncurrent Liabilities for these withdrawal liabilities which represents the Company's best estimate of the expected withdrawal liability.

In December 2018, the Company submitted formal notification to withdraw from the PACE Industry Union-Management Pension Fund ("PIUMPF") and recorded a liability of \$4 million which includes an estimate of the Company's portion of the accumulated funding deficiency. This estimate is subject to future revisions.

The Company's remaining participation in multi-employer pension plans consists of contributions to three plans under the terms contained in collective bargaining agreements. The risks of participating in these multi-employer plans are different from single-employer plans in the following ways:

- a. Assets contributed to the multi-employers plan by one employer may be used to provide benefits to employees of other participating employers.
- b. If a participating employer stops contributing to the plan, the unfunded obligation of the plan may be borne by the remaining participating employers.
- c. If a company chooses to stop participating in a multi-employer plan, a company may be required to pay that plan an amount based on the underfunded status of the plan, referred to as the withdrawal liability.

The Company's participation in these plans for the year ended December 31, 2018, 2017 and 2016 is shown in the table below:

Multi-employer Pension Fund	EIN/Pension Plan Number	Pension Protection Act Zone Status		FIP/RP Status Implemented	Company Contributions (in millions)			Surcharge Imposed	Expiration Date of Bargaining Agreement
		2018	2017		2018	2017	2016		
Central States Southeast and Southwest Areas Pension Fund	36-6044243/001	Red	Red	Yes	\$ 0.1	\$ 0.1	\$ 0.1	Yes	7/31/2023
PIUMPF ^(a)	11-6166763/001	Red	Red	Yes	0.1	0.1	0.1	Yes	6/15/2022
Graphic Communications Conference of International Brotherhood of Teamster Pension Fund ^(a)	52-6118568/001	Red	Red	Yes	0.3	0.3	0.2	Yes	5/01/2019
Total					\$ 0.5	\$ 0.5	\$ 0.4		

^(a) In 2016, the WG Anderson acquisition included facilities with these plans.

The EIN Number column provides the Employer Identification Number (EIN). Unless otherwise noted, the most recent Pension Protection Act (PPA) zone status available in 2018 and 2017 is for the plan's year-end at December 31, 2017 and December 31, 2016, respectively. The zone status is based on information that the Company receives from the plan and is certified by the plan's actuary. Among other factors, plans in the red zone are generally less than 65 percent funded, plans in the yellow zone are less than 80 percent funded, and plans in the green zone are at least 80 percent funded. The "FIP/RP Status Implemented" column indicates plans for which a Financial Improvement Plan (FIP) or Rehabilitation Plan (RP) has been implemented. The Company's share of the contributions to these plans did not exceed 5% of total plan contributions for the most recent plan year.

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

DEFINED CONTRIBUTION PLANS

The Company provides defined contribution plans for certain eligible employees. The Company's contributions to the plans are based upon employee contributions, a percentage of eligible compensation, and the Company's annual operating results. Contributions to these plans for the years ended December 31, 2018, 2017 and 2016 were \$54.6 million, \$37.7 million and \$34.7 million, respectively. The increase of \$16.9 million from the prior year is due primarily to the NACP Combination.

NOTE 8. INCOME TAXES

The U.S. and international components of Income before Income Taxes and Equity Income of Unconsolidated Entity consisted of the following:

<i>In millions</i>	Year Ended December 31,		
	2018	2017	2016
U.S.	\$ 298.9	\$ 227.5	\$ 290.0
International	48.6	25.5	29.4
Income before Income Taxes and Equity Income of Unconsolidated Entity	\$ 347.5	\$ 253.0	\$ 319.4

The provisions for Income Tax Benefit (Expense) on Income before Income Taxes and Equity Income of Unconsolidated Entity consisted of the following:

<i>In millions</i>	Year Ended December 31,		
	2018	2017	2016
Current (Expense) Benefit:			
U.S.	\$ (13.0)	\$ 0.7	\$ (5.1)
International	(15.7)	(9.2)	(11.4)
Total Current	\$ (28.7)	\$ (8.5)	\$ (16.5)
Deferred (Expense) Benefit:			
U.S.	(31.6)	51.0	(78.8)
International	5.6	3.0	2.1
Total Deferred	\$ (26.0)	\$ 54.0	\$ (76.7)
Income Tax (Expense) Benefit	\$ (54.7)	\$ 45.5	\$ (93.2)

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

A reconciliation of Income Tax (Expense) Benefit on Income before Income Taxes and Equity Income of Unconsolidated Entity at the federal statutory rate of 21% compared with the Company's actual Income Tax (Expense) Benefit is as follows:

<i>In millions</i>	Year Ended December 31,					
	2018	Percent	2017	Percent	2016	Percent
Income Tax Expense at U.S. Statutory Rate	\$ (73.0)	21.0 %	\$ (88.5)	35.0 %	\$ (111.8)	35.0 %
U.S. State and Local Tax Expense	(11.7)	3.4	(8.7)	3.4	(10.0)	3.2
IRS Agreement	—	—	—	—	22.8	(7.2)
Permanent Items	(3.8)	1.1	(2.7)	1.0	(1.3)	0.5
U.S. Tax Reform	10.9	(3.1)	138.0	(54.5)	—	—
Change in Valuation Allowance due to Tax Reform	—	—	(2.0)	0.8	—	—
Change in Valuation Allowance	13.0	(3.7)	(3.5)	1.4	0.5	(0.2)
International Tax Rate Differences	(1.9)	0.5	3.2	(1.3)	1.8	(0.6)
Foreign Withholding Tax	(0.5)	0.1	(0.4)	0.2	(0.2)	0.1
Change in Tax Rates	1.9	(0.5)	(3.0)	1.2	0.2	(0.1)
U.S. Federal & State Tax Credits	0.3	(0.1)	10.2	(4.0)	3.5	(1.1)
Uncertain Tax Positions	(0.7)	0.2	(0.3)	0.1	1.2	(0.4)
Capital Loss Expiration	(2.7)	0.7	—	—	—	—
Domestic Minority Interest	13.7	(3.9)	—	—	—	—
Other	(0.2)	—	3.2	(1.3)	0.1	—
Income Tax Benefit (Expense)	\$ (54.7)	15.7 %	\$ 45.5	(18.0)%	\$ (93.2)	29.2 %

As a result of the NACP Combination, federal and state income taxes are not recorded with respect to consolidated domestic earnings attributable to the Company's minority interest partner, resulting in a difference between the effective tax rate and the statutory tax rate. In addition, during 2018, the Company finalized its accounting for the income tax impact of the Tax Cuts and Jobs Act (the "Act") resulting in a tax benefit of \$10.9 million primarily attributable to the one-time transition tax incurred on its 2017 U.S. federal income tax return. Finally, in 2018, the Company reduced its valuation allowance against certain deferred tax assets. Of the total reduction of \$13 million, approximately \$10 million was related to deferred tax assets for domestic and state income tax attributes that expired during the year and therefore did not have a meaningful impact on the overall effective tax rate. Of the remaining \$3 million reduction, approximately \$2 million was attributable to the release of the valuation allowance against the net deferred tax assets of the Company's wholly-owned subsidiary in France.

During 2017, the Company recognized a provisional net income tax benefit of \$136.0 million as a result of the effect of the enactment of the Act on December 22, 2017. The Act significantly reduced the U.S. federal corporate income tax rate which resulted in an income tax benefit of \$156.3 million as a result of the remeasurement of the Company's domestic net Deferred Tax Liabilities. In addition, the Act required companies to record a one-time transition tax impact based on foreign earnings & profits which resulted in additional tax expense in 2017 of \$20.5 million.

During the second quarter of 2016, the Company executed an agreement with the Internal Revenue Service related to certain elections made on its 2011 and 2012 tax returns. As a result of the agreement, the Company has amended its 2011 and 2012 U.S. federal and state income tax returns resulting in the utilization of previously expired net operating loss carryforwards. The Company recorded a discrete benefit during the second quarter of 2016 of \$22.4 million to reflect the federal and state impact of the amended returns as a reduction in its net long-term deferred tax liability.

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

The tax effects of differences that give rise to significant portions of the deferred income tax assets and deferred income tax liabilities as of December 31 were as follows:

<i>In millions</i>	2018	2017
Deferred Income Tax Assets:		
Compensation Based Accruals	\$ 2.9	\$ 16.5
Net Operating Loss Carryforwards	73.4	114.9
Postretirement Benefits	1.0	25.6
Tax Credits	30.8	17.6
Other	7.6	45.9
Valuation Allowance	(36.3)	(51.5)
Total Deferred Income Tax Assets	\$ 79.4	\$ 169.0
Deferred Income Tax Liabilities:		
Property, Plant and Equipment	(16.7)	(219.8)
Goodwill	(2.3)	(192.0)
Other Intangibles	(12.3)	(68.7)
Investment in Partnership	(502.1)	—
Other	—	(3.5)
Net Noncurrent Deferred Income Tax Liabilities	\$ (533.4)	\$ (484.0)
Net Deferred Income Tax Liability	\$ (454.0)	\$ (315.0)

The Company has total deferred income tax assets, excluding valuation allowance, of \$115.7 million and \$220.5 million as of December 31, 2018 and 2017, respectively. The Company has total deferred income tax liabilities of \$533.4 million and \$484.0 million as of December 31, 2018 and 2017, respectively.

During 2017, the Company executed a series of restructuring steps to facilitate the NACP combination. As a result of the restructuring steps, as of December 29, 2017, the Company's primary operating subsidiary, GPI, converted to a Delaware limited liability company and was wholly owned by GPIIP which was in turn wholly-owned by GPI Holding III, LLC, a limited liability company that is classified as a partnership for U.S. federal and state income tax purposes. GPI Holding III, LLC is a wholly-owned indirect subsidiary of GPHC. Because it controlled all interests of GPI, GPIIP and GPI Holding III, LLC as of December 31, 2017, the Company continued to disclose the tax effects of differences that give rise to deferred tax assets and deferred tax liabilities based on the assets and liabilities within the partnership. As a result of NACP combination, the Company currently owns a controlling interest in GPIIP, which is now treated as a partnership for U.S. federal and state income tax purposes, with IP holding a minority interest. As such, the Company records income tax on its share of income allocated to it by the partnership. Accordingly, domestic deferred tax assets and liabilities are no longer tracked based on the inside basis difference of assets and liabilities held within GPIIP. Instead, the Company's outside basis difference in its partnership investment is recorded as a deferred tax liability and disclosed above. The deferred tax liability primarily relates to differences between book and tax basis in property, plant and equipment and intangibles inside the partnership. Additionally, as a result of the NACP combination the Company's book basis in its investment in GPIIP increased resulting in an increase in its deferred tax liability of \$123.3 million that was recorded through additional paid-in capital.

According to the *Income Taxes* topic of the FASB Codification, a valuation allowance is required to be established or maintained when, based on currently available information and other factors, it is more likely than not that all or a portion of a deferred tax asset will not be realized. The FASB Codification provides important factors in determining whether a deferred tax asset will be realized, including whether there has been sufficient pretax income in recent years and whether sufficient income can reasonably be expected in future years in order to utilize the deferred tax asset. The Company has evaluated the need to maintain a valuation allowance for deferred tax assets based on its assessment of whether it is more likely than not that deferred tax assets will be realized through the generation of future taxable income. Appropriate consideration was given to all available evidence, both positive and negative, in assessing the need for a valuation allowance.

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

The Company reviewed its deferred income tax assets as of December 31, 2018 and 2017, respectively, and determined that it is more likely than not that a portion will not be realized. A valuation allowance of \$36.3 million and \$51.5 million at December 31, 2018 and 2017, respectively, is maintained on the deferred income tax assets for which the Company has determined that realization is not more likely than not. Of the total valuation allowance at December 31, 2018, \$26.1 million relates to net deferred tax assets in certain foreign jurisdictions, \$0.7 million relates to U.S. federal income tax credit carryforwards, \$5.0 million relates to tax credit carryforwards in certain states, and the remaining \$4.5 million relates to net operating losses in certain U.S. states. The need for a valuation allowance is made on a jurisdiction-by-jurisdiction basis. As of December 31, 2018, the Company concluded that due to cumulative pretax losses and the lack of sufficient future taxable income of the appropriate character, realization is less than more likely than not on the net deferred income tax assets related primarily to the Company's Brazil, China and Germany operations as well as the Company's previously discontinued Canadian operations.

The following table represents a summary of the valuation allowances against deferred tax assets as of and for the three years ended December 31, 2018, 2017, and 2016, respectively:

<i>In millions</i>	December 31,		
	2018	2017	2016
Balance Beginning of Period	\$ 51.5	\$ 45.5	\$ 44.8
Adjustments for (Income) and Expenses	(13.0)	5.5	1.2
(Deductions) Additions	(2.2)	0.5	(0.5)
Balance at End of Period	\$ 36.3	\$ 51.5	\$ 45.5

The U.S. federal net operating loss carryforwards expire as follows:

<i>In millions</i>	
2024	\$ —
2025	—
2026	41.5
2027	12.1
2028	114.6
2029	—
Total	\$ 168.2

U.S. state net operating loss carryforward amounts total \$231.2 million and expire in various years through 2038.

International net operating loss carryforward amounts total \$105.6 million, of which substantially all have no expiration date.

Tax Credit carryforwards total \$30.8 million which expire in various years from 2019 through 2037.

Uncertain Tax Positions

A reconciliation of the beginning and ending amount of unrecognized tax benefits is as follows:

<i>In millions</i>	2018	2017
Balance at January 1,	\$ 10.5	\$ 10.1
Additions for Tax Positions of Current Year	0.8	0.6
Additions for Tax Positions of Prior Years	5.2	0.7
Reductions for Tax Positions of Prior Years	(1.0)	(0.9)
Balance at December 31,	\$ 15.5	\$ 10.5

At December 31, 2018, \$15.5 million of the total gross unrecognized tax benefits, if recognized, would affect the annual effective income tax rate.

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

The Company recognizes potential accrued interest and penalties related to unrecognized tax benefits within its global operations in Income Tax Expense. The Company had an accrual for the payment of interest and penalties of \$0.1 million and \$0.1 million at December 31, 2018 and 2017, respectively.

The Company anticipates that \$1.6 million of the total unrecognized tax benefits at December 31, 2018 could change within the next 12 months.

The Company files income tax returns in the U.S. federal jurisdiction, and various states and foreign jurisdictions. With few exceptions, the Company is no longer subject to U.S. federal, state and local tax examinations for years before 2015.

As of December 31, 2018, the Company has only provided for deferred U.S. income taxes attributable to future withholding tax expense related to the Company's equity investment in the joint venture, Rengo Riverwood Packaging, Ltd. The Company has not provided for deferred U.S. income taxes on approximately \$41 million of its undistributed earnings in international subsidiaries because of the Company's intention to indefinitely reinvest these earnings outside the U.S. The Company's assertion remains unchanged, despite the deemed taxation of all post-1986 earnings and profits required by the Act. The determination of the amount of the unrecognized deferred U.S. income tax liability (primarily withholding tax in certain jurisdictions and some state tax) on the unremitted earnings or any other associated outside basis difference is not practicable because of the complexities associated with the calculation.

On December 22, 2017, the SEC issued Staff Accounting Bulletin No. 118 ("SAB 118") to address the application of GAAP in situations where a registrant does not have the necessary information available in reasonable detail to complete the accounting for the income tax effects of the Act. SAB 118 prescribes a one-year measurement period in which to gather all of the necessary information and finalize the income tax accounting associated with the Act. In accordance with SAB 118, the Company recorded provisional amounts in its 2017 financial statements for the effects of the Act. As of December 31, 2018, the Company has finalized its accounting for the tax effects of enactment of the Act.

The Company has elected to recognize global intangible low-taxed income ("GILTI") as period cost as incurred, therefore there are no deferred taxes recognized for basis differences that are expected to impact the amount of the GILTI inclusion upon reversal.

**NOTE 9. FINANCIAL INSTRUMENTS, DERIVATIVES AND HEDGING
ACTIVITIES**

The Company enters into derivative instruments for risk management purposes only, including derivatives designated as hedging instruments under the *Derivatives and Hedging* topic of the FASB Codification and those not designated as hedging instruments under this guidance. The Company uses interest rate swaps, natural gas swaps, and forward foreign exchange contracts. These derivative instruments are designated as cash flow hedges and, to the extent they are effective in offsetting the variability of the hedged cash flows, changes in the derivatives' fair value are not included in current earnings but are included in Accumulated Other Comprehensive Loss. These changes in fair value will subsequently be reclassified to earnings, contemporaneously with and offsetting changes in the related hedged exposure.

Interest Rate Risk

The Company uses interest rate swaps to manage interest rate risks on future interest payments caused by interest rate changes on its variable rate term loan facility. These changes in fair value will subsequently be reclassified into earnings as a component of Interest Expense, Net as interest is incurred on amounts outstanding under the term loan facility.

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

The following table summarizes the Company's current interest rate swap positions for each period presented as of December 31, 2018:

Start	End	<i>(In Millions)</i> Notional Amount	Weighted Average Interest Rate
04/03/2018	01/01/2019	\$150.0	2.03%
04/03/2018	01/01/2020	\$150.0	2.25%
04/03/2018	10/01/2020	\$150.0	2.36%
12/03/2018	01/01/2022	\$120.0	2.92%
12/03/2018	01/04/2022	\$80.0	2.79%

These derivative instruments are designated as cash flow hedges and, to the extent they are effective in offsetting the variability of the hedged cash flows, changes in the derivatives' fair value are not included in current earnings but are included in Accumulated Other Comprehensive Income (Loss). Ineffectiveness measured in the hedging relationship is recorded in earnings in the period it occurs. During 2018 and 2017, there were no amounts of ineffectiveness. During 2018 and 2017, there were no amounts excluded from the measure of effectiveness.

Commodity Risk

To manage risks associated with future variability in cash flows and price risk attributable to certain commodity purchases, the Company enters into natural gas swaps to hedge prices for a designated percentage of its expected natural gas usage. The Company has hedged a portion of its expected usage for 2019. Such contracts are designated as cash flow hedges. The contracts are carried at fair value with changes in fair value recognized in Accumulated Other Comprehensive Income (Loss), and the resulting gain or loss is reclassified into Cost of Sales concurrently with the recognition of the commodity purchased. The ineffective portion of the swap contract's change in fair value, if any, would be recognized immediately in earnings.

During 2018 and 2017, there were minimal amounts of ineffectiveness related to changes in the fair value of natural gas swap contracts. Additionally, there were no amounts excluded from the measure of effectiveness.

Foreign Currency Risk

The Company enters into forward foreign exchange contracts, designated as cash flow hedges, to manage risks associated with foreign currency transactions and future variability of cash flows arising from those transactions that may be adversely affected by changes in exchange rates. The contracts are carried at fair value with changes in fair value recognized in Accumulated Other Comprehensive Loss and gains/losses related to these contracts are recognized in Other Expense, Net or Net Sales, when appropriate.

At December 31, 2018 and 2017, multiple forward exchange contracts existed that expire on various dates throughout the following year. Those purchased forward exchange contracts outstanding at December 31, 2018 and 2017, when aggregated and measured in U.S. dollars at contractual rates at December 31, 2018 and 2017, had notional amounts totaling \$51.6 million and \$66.1 million, respectively.

No amounts were reclassified to earnings during 2018 and 2017 in connection with forecasted transactions that were no longer considered probable of occurring and there was no amount of ineffectiveness related to changes in the fair value of foreign currency forward contracts. Additionally, there were no amounts excluded from the measure of effectiveness during 2018 and 2017.

Derivatives not Designated as Hedges

The Company enters into forward foreign exchange contracts to effectively hedge substantially all of receivables resulting from transactions denominated in foreign currencies in order to manage risks associated with foreign currency transactions adversely affected by changes in exchange rates. At December 31, 2018 and 2017, multiple foreign currency forward exchange contracts existed, with maturities ranging up to fifteen months. Those foreign currency exchange contracts outstanding at December 31, 2018 and 2017, when aggregated and measured in U.S. dollars at exchange rates at December 31, 2018 and 2017, respectively, had net notional amounts totaling \$62.2 million and \$90.1 million. Unrealized gains and losses resulting from these contracts are recognized in Other Expense, Net and approximately offset corresponding recognized but unrealized gains and losses on these accounts receivable.

Foreign Currency Movement Effect

For the year ended December 31, 2018, 2017 and 2016, net currency exchange losses included in determining Income from Operations were \$1.6 million, \$3.1 million and \$4.8 million, respectively.

NOTE 10. FAIR VALUE MEASUREMENT

The Company follows the fair value guidance integrated into the *Fair Value Measurements and Disclosures* topic of the FASB Codification in regards to financial and nonfinancial assets and liabilities. Nonfinancial assets and nonfinancial liabilities include those measured at fair value in goodwill impairment testing, asset retirement obligations initially measured at fair value, and those assets and liabilities initially measured at fair value in a business combination.

The FASB's guidance defines fair value, establishes a framework for measuring fair value and expands the fair value disclosure requirements. The accounting guidance applies to accounting pronouncements that require or permit fair value measurements. It indicates, among other things, that a fair value measurement assumes that the transaction to sell an asset or transfer a liability occurs in the principal market for the asset or liability or, in the absence of a principal market, the most advantageous market for the asset or liability. The guidance defines fair value based upon an exit price model, whereby fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The guidance clarifies that fair value should be based on assumptions that market participants would use, including a consideration of non-performance risk.

Valuation Hierarchy

The *Fair Value Measurements and Disclosures* topic establishes a valuation hierarchy for disclosure of the inputs used to measure fair value. This hierarchy prioritizes the inputs into three broad levels as follows:

Level 1 inputs — quoted prices (unadjusted) in active markets for identical assets or liabilities.

Level 2 inputs — quoted prices for similar assets and liabilities in active markets or inputs that are observable for the asset or liability, either directly or indirectly through market corroboration, for substantially the full term of the financial instrument.

Level 3 inputs — unobservable inputs based on the Company's own assumptions used to measure assets and liabilities at fair value.

An asset or liability's classification within the hierarchy is determined based on the lowest level input that is significant to the fair value measurement.

The Company has determined that its financial assets and financial liabilities include derivative instruments which are carried at fair value and are valued using Level 2 inputs in the fair value hierarchy. The Company uses valuation techniques based on discounted cash flow analyses, which reflects the terms of the derivatives and uses observable market-based inputs, including forward rates and uses market price quotations obtained from independent derivatives brokers, corroborated with information obtained from independent pricing service providers.

Fair Value of Financial Instruments

As of December 31, 2018 and 2017, the Company had a gross derivative liability of \$3.4 million and \$1.2 million respectively, and a gross derivative asset of \$0.8 million and \$1.2 million respectively, related to interest rate, foreign currency and commodity contracts.

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

As of December 31, 2018, there has not been any significant impact to the fair value of the Company's derivative liabilities due to its own credit risk. Similarly, there has not been any significant adverse impact to the Company's derivative assets based on evaluation of the Company's counterparties' credit risks.

The fair values of the Company's other financial assets and liabilities at December 31, 2018 and 2017 approximately equal the carrying values reported on the Consolidated Balance Sheets except for Long-Term Debt. The fair value of the Company's Long-Term Debt (excluding capital leases and deferred financing fees) was \$2,762.5 million and \$2,299.1 million, as compared to the carrying amounts of \$2,833.1 million and \$2,247.9 million. The fair value of the Company's Long-Term Debt, including the Senior Notes, are based on quoted market prices (Level 2 inputs). Level 2 valuation techniques for Long-Term Debt are based on quotations obtained from independent pricing service providers.

Effect of Derivative Instruments

The pre-tax effect of derivative instruments in cash flow hedging relationships on the Company's Consolidated Statements of Operations for the year ended December 31, 2018 and 2017 is as follows:

<i>In millions</i>	Amount of Loss (Gain) Recognized in Accumulated Other Comprehensive Loss			Location in Statement of Operations (Effective Portion)	Amount of Loss (Gain) Recognized in Statement of Operations (Effective Portion)			Location in Statement of Operations (Ineffective Portion)	Amount of Loss (Gain) Recognized in Statement of Operations (Ineffective Portion)		
	Year Ended December 31,				Year Ended December 31,				Year Ended December 31,		
	2018	2017			2018	2017			2018	2017	
Commodity Contracts	\$ (0.7)	\$ 3.6	Cost of Sales	\$ (0.4)	\$ (1.2)	Cost of Sales	\$ —	\$ (0.1)			
Foreign Currency Contracts	(0.3)	3.1	Other Income, Net	0.7	(0.3)	Other Income, Net	—	—			
Interest Rate Swap Agreements	2.0	(1.0)	Interest Expense, Net	(0.9)	(0.6)	Interest Expense, Net	—	—			
Total	\$ 1.0	\$ 5.7		\$ (0.6)	\$ (2.1)		\$ —	\$ (0.1)			

The effect of derivative instruments not designated as hedging instruments on the Company's Consolidated Statements of Operations for the years ended December 31, 2018 and 2017 is as follows:

<i>In millions</i>		2018	2017
Foreign Currency Contracts	Other (Income) Expense, Net	\$ (5.6)	\$ 9.7

Accumulated Derivative Instruments Income (Loss)

The following is a rollforward of pre-tax Accumulated Derivative Instruments Income (Loss) which is included in the Company's Consolidated Balance Sheets and Consolidated Statements of Shareholders' Equity as of December 31:

<i>In millions</i>	2018	2017	2016
Balance at January 1	\$ (0.3)	\$ 7.5	\$ (13.5)
Reclassification to earnings	(0.6)	(2.1)	15.0
Current period change in fair value	(1.0)	(5.7)	6.0
Balance at December 31	\$ (1.9)	\$ (0.3)	\$ 7.5

At December 31, 2018, the Company expects to reclassify \$1.3 million of pre-tax losses in the next twelve months from Accumulated Other Comprehensive (Loss) Income to earnings, contemporaneously with and offsetting changes in the related hedged exposure. The actual amount that will be reclassified to future earnings may vary from this amount as a result of changes in market conditions.

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

NOTE 11. ACCUMULATED OTHER COMPREHENSIVE (LOSS) INCOME

The components of Accumulated Other Comprehensive (Loss) Income Attributable to Graphic Packaging Holding Company are as follows:

<i>In millions</i>	Year Ended December 31,								
	2018			2017			2016		
	Pretax Amount	Tax Effect	Net Amount ^(a)	Pretax Amount	Tax Effect	Net Amount	Pretax Amount	Tax Effect	Net Amount
Derivative Instruments (Loss) Gain	\$ (1.1)	\$ 0.1	\$ (1.0)	\$ (7.8)	\$ 2.9	\$ (4.9)	\$ 21.0	\$ (8.0)	\$ 13.0
Pension and Postretirement Benefit Plans	(24.8)	5.4	(19.4)	12.3	(3.5)	8.8	7.9	(3.9)	4.0
Currency Translation Adjustment	(18.7)	—	(18.7)	44.9	—	44.9	(58.9)	—	(58.9)
Other Comprehensive (Loss) Income	\$ (44.6)	\$ 5.5	\$ (39.1)	\$ 49.4	\$ (0.6)	\$ 48.8	\$ (30.0)	\$ (11.9)	\$ (41.9)

^(a) Amounts include impact of noncontrolling interest. See Note 18 - Changes in Accumulated Other Comprehensive (Loss) Income.

The balances of Accumulated Other Comprehensive Loss Attributable to Graphic Packaging Holding Company, net of applicable taxes are as follows:

<i>In millions</i>	December 31,	
	2018	2017
Accumulated Derivative Instruments Loss	\$ (11.3)	\$ (10.3)
Pension and Postretirement Benefit Plans	(246.1)	(226.7)
Currency Translation Adjustment	(120.5)	(101.8)
Accumulated Other Comprehensive Loss	\$ (377.9)	\$ (338.8)

NOTE 12. COMMITMENTS AND CONTINGENCIES

The Company leases certain warehouses, operating facilities, office space, data processing equipment and plant equipment under long-term, non-cancelable contracts that expire at various dates (some of these leases are subject to renewal options and contain escalation clauses). Future minimum lease payments under non-cancelable capital and operating leases (with initial or remaining lease terms in excess of one year) and the future minimum lease payments at December 31, 2018, are as follows:

<i>In millions</i>	Capital Leases and Financing Obligations ^(a)		Operating Leases
	\$	\$	
2019	10.3	61.8	
2020	10.4	49.8	
2021	10.5	37.7	
2022	10.1	30.0	
2023	10.2	23.3	
Thereafter	147.2	36.9	
Total Minimum Lease Payments	\$ 198.7	\$ 239.5	
Less: Amount Representing Interest	(75.8)		
Present Value of Net Minimum Leases	\$ 122.9		

^(a) The Company executed lease agreements accounted for as a financing obligation for a notional amount of approximately \$95 million in 2018. These lease agreements have an initial term of 20 years and two five year option renewals. Rental payments for 2019 are approximately \$7 million, with yearly escalations of approximately 2% thereafter.

Total rental expense was approximately \$61 million, \$38 million, and \$35 million for the years ended December 31, 2018, 2017 and 2016, respectively.

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

The Company has entered into other long-term contracts principally for the purchase of fiber and chip processing. The minimum purchase commitments extend beyond 2023. At December 31, 2018, total commitments under these contracts were as follows:

<i>In millions</i>	
2019	\$ 83.4
2020	38.6
2021	30.2
2022	30.0
2023	29.8
Thereafter	131.4
Total	\$ 343.4

NOTE 13. ENVIRONMENTAL AND LEGAL MATTERS

Environmental Matters

The Company is subject to a broad range of foreign, federal, state and local environmental, health and safety laws and regulations, including those governing discharges to air, soil and water, the management, treatment and disposal of hazardous substances, solid waste and hazardous wastes, the investigation and remediation of contamination resulting from historical site operations and releases of hazardous substances, and the health and safety of employees. Compliance initiatives could result in significant costs, which could negatively impact the Company's consolidated financial position, results of operations or cash flows. Any failure to comply with environmental or health and safety laws and regulations or any permits and authorizations required thereunder could subject the Company to fines, corrective action or other sanctions.

Some of the Company's current and former facilities are the subject of environmental investigations and remediations resulting from historic operations and the release of hazardous substances or other constituents. Some current and former facilities have a history of industrial usage for which investigation and remediation obligations may be imposed in the future or for which indemnification claims may be asserted against the Company. Also, closures or sales of facilities may necessitate investigation and may result in remediation activities at those facilities.

The Company has established reserves for those facilities or issues where a liability is probable and the costs are reasonably estimable. The Company believes that the amounts accrued for its loss contingencies, and the reasonably possible loss beyond the amounts accrued, are not material to the Company's consolidated financial position, results of operations or cash flows. The Company cannot estimate with certainty other future compliance, investigation or remediation costs. Some costs relating to historic usage that the Company considers to be reasonably possible of resulting in liability are not quantifiable at this time. The Company will continue to monitor environmental issues at each of its facilities, as well as regulatory developments, and will revise its accruals, estimates and disclosures relating to past, present and future operations, as additional information is obtained.

Legal Matters

The Company is a party to a number of lawsuits arising in the ordinary conduct of its business. Although the timing and outcome of these lawsuits cannot be predicted with certainty, the Company does not believe that disposition of these lawsuits will have a material adverse effect on the Company's consolidated financial position, results of operations or cash flows.

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

NOTE 14. REDEEMABLE NONCONTROLLING INTEREST

As disclosed in "Note 1 - Nature of Business and Summary of Significant Accounting Policies," on January 1, 2018, the Company combined its business with IP's NACP business. Under the terms of the Transaction Agreement, GPIIP issued 79,911,591 common units. In connection with the closing, the Company, GPIIP, GPI Holding and IP entered into an Exchange Agreement ("Exchange Agreement"), which subject to certain restrictions, the common units held by IP are exchangeable into common stock of the Company or cash, upon the second anniversary of the NACP combination unless certain other events occur before that time. GPHC also has the ability to call such common units exercisable starting on the same date. Upon an election of an exchange, GPHC may choose to satisfy the exchange using shares of its common stock, cash, or a combination thereof. Also, under the Exchange Agreement, the Company may not issue shares of common stock in exchange for more than 61,633,409 common units without first obtaining GPHC shareholder approval.

In the fourth quarter of 2018, the Company repurchased and retired 10,566,144 shares of outstanding common stock. As a result, the number of shares that could be issued in connection with an exchange or redemption of common units held by IP before shareholder approval would be required to decrease and 1,701,834 common units were allocated from equity and are reflected as Redeemable Noncontrolling Interest on the Consolidated Balance Sheets and Consolidated Statement of Shareholders' Equity.

At December 31, 2018, the redeemable noncontrolling interest was determined as follows:

In millions

Balance at December 31, 2017	\$	—
Issuance of Redeemable Noncontrolling Interest at January 1, 2018		255.2
Reclassification to Redeemable Noncontrolling Interest for Share Repurchases		12.5
Net Income Attributable to Redeemable Noncontrolling Interest		16.6
Other Comprehensive Loss, Net of Tax		(2.8)
Distributions of Membership Interest		(5.7)
Balance at December 31, 2018	\$	275.8

Redeemable noncontrolling interest is recorded at the greater of carrying amount or redemption value at the end of each period. The redemption value is determined by the closing stock price of the Company.

NOTE 15. BUSINESS SEGMENT AND GEOGRAPHIC AREA INFORMATION

On January 1, 2018, the Company aggregated the three converting plants from the NACP Combination with America's Converting operating segment into one reportable segment. The Company has three reportable segments as follows:

Paperboard Mills includes the eight North American paperboard mills which produce primarily CUK, CRB, and SBS, which is consumed internally to produce paperboard packaging for the Americas and Europe Packaging segments. The remaining paperboard is sold externally to a wide variety of paperboard packaging converters and brokers. The Paperboard Mills segment Net Sales represent the sale of paperboard only to external customers. The effect of intercompany transfers to the paperboard packaging segments has been eliminated from the Paperboard Mills segment to reflect the economics of the integration of these segments.

Americas Paperboard Packaging includes paperboard packaging, primarily folding cartons, sold primarily to Consumer Packaged Goods ("CPG") companies, and cups, lids and food containers sold primarily to foodservice companies and quick-service restaurants ("QSR"), all serving the food, beverage, and consumer product markets in the Americas.

Europe Paperboard Packaging includes paperboard packaging, primarily folding cartons, sold primarily to CPG companies serving the food, beverage and consumer product markets in Europe.

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

The Company allocates certain mill and corporate costs to the reportable segments to appropriately represent the economics of these segments. The Corporate and Other caption includes the Pacific Rim and Australia operating segments and unallocated corporate and one-time costs.

These segments are evaluated by the chief operating decision maker based primarily on Income from Operations as adjusted for depreciation and amortization. The accounting policies of the reportable segments are the same as those described above in Note 1 - Nature of Business and Summary of Significant Accounting Policies.

The Company did not have any one customer who accounted for 10% or more of the Company's net sales during 2018, 2017 or 2016.

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

Business segment information is as follows:

<i>In millions</i>	Year Ended December 31,		
	2018	2017	2016
NET SALES:			
Paperboard Mills	\$ 1,076.5	\$ 399.7	\$ 394.7
Americas Paperboard Packaging	4,093.9	3,243.6	3,193.1
Europe Paperboard Packaging	695.5	593.1	569.9
Corporate/Other/Eliminations ^(a)	157.1	167.3	140.4
Total	\$ 6,023.0	\$ 4,403.7	\$ 4,298.1
INCOME (LOSS) FROM OPERATIONS:			
Paperboard Mills ^(b)	\$ 30.6	\$ (35.0)	\$ (3.7)
Americas Paperboard Packaging	420.1	358.2	409.0
Europe Paperboard Packaging	46.1	37.3	25.4
Corporate and Other ^(c)	(38.6)	(32.6)	(23.3)
Total	\$ 458.2	\$ 327.9	\$ 407.4
CAPITAL EXPENDITURES:			
Paperboard Mills	\$ 240.1	\$ 111.4	\$ 184.2
Americas Paperboard Packaging	104.3	98.8	45.9
Europe Paperboard Packaging	19.5	17.3	37.1
Corporate and Other	31.3	32.6	27.4
Total	\$ 395.2	\$ 260.1	\$ 294.6
DEPRECIATION AND AMORTIZATION:			
Paperboard Mills	\$ 197.5	\$ 143.7	\$ 120.3
Americas Paperboard Packaging	165.4	125.3	124.7
Europe Paperboard Packaging	48.9	42.1	41.1
Corporate and Other	18.8	19.2	13.2
Total	\$ 430.6	\$ 330.3	\$ 299.3

^(a) Includes revenue from contracts with customers for the Australia and Pacific Rim operating segments, which is not material.

^(b) Includes Augusta, Georgia mill outage in 2018 and accelerated depreciation related to shutdown of the Santa Clara mill in 2017.

^(c) Includes expenses related to business combinations, gain on sale of assets and shutdown and other special charges.

<i>In millions</i>	December 31,		
	2018	2017	2016
ASSETS AT DECEMBER 31:			
Paperboard Mills	\$ 3,005.6	\$ 1,487.0	\$ 1,496.1
Americas Paperboard Packaging	3,143.6	2,478.7	2,419.8
Europe Paperboard Packaging	603.4	607.1	491.9
Corporate and Other	306.6	290.2	195.6
Total	\$ 7,059.2	\$ 4,863.0	\$ 4,603.4

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

Business geographic area information is as follows:

<i>In millions</i>	Year Ended December 31,		
	2018	2017	2016
NET SALES:			
Americas ^(a)	\$ 5,170.4	\$ 3,643.3	\$ 3,601.7
Europe	695.5	593.1	569.9
Asia Pacific	217.8	215.7	198.1
Corporate and Other	(60.7)	(48.4)	(71.6)
Total	\$ 6,023.0	\$ 4,403.7	\$ 4,298.1

<i>In millions</i>			
	2018	2017	2016
ASSETS AT DECEMBER 31:			
Americas ^(a)	\$ 6,260.1	\$ 4,046.4	\$ 3,923.2
Europe	603.4	607.1	491.9
Asia Pacific	195.7	209.5	188.3
Total	\$ 7,059.2	\$ 4,863.0	\$ 4,603.4

^(a) Includes North America and Brazil.

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

NOTE 16. QUARTERLY FINANCIAL INFORMATION
(UNAUDITED)

Results of operations for the four quarters of 2018 and 2017 are shown below.

<i>In millions, except per share amounts</i>	2018				
	First	Second	Third	Fourth	Total
Statement of Operations Data:					
Net Sales	\$ 1,476.0	\$ 1,509.3	\$ 1,530.0	\$ 1,507.7	\$ 6,023.0
Gross Profit	222.5	235.9	256.5	231.1	946.0
Business Combinations, (Gain) on Sale of Assets and Shutdown and Other Special Charges, Net	26.3	8.6	(27.4)	7.4	14.9
Income from Operations	74.0	110.3	166.4	107.5	458.2
Net Income	42.7	66.0	122.0	63.3	294.0
Net Income Attributable to Graphic Packaging Holding Company	29.9	49.4	94.3	47.5	221.1
Net Income Per Share Attributable to Graphic Packaging Holding Company — Basic ^(a)	\$ 0.10	\$ 0.16	\$ 0.30	\$ 0.16	\$ 0.71
Net Income Per Share Attributable to Graphic Packaging Holding Company — Diluted	\$ 0.10	\$ 0.16	\$ 0.30	\$ 0.15	\$ 0.71

^(a) Does not cross foot due to rounding

<i>In millions, except per share amounts</i>	2017				
	First	Second	Third	Fourth	Total
Statement of Operations Data:					
Net Sales	\$ 1,061.5	\$ 1,094.7	\$ 1,137.6	\$ 1,109.9	\$ 4,403.7
Gross Profit	175.0	176.9	191.6	176.0	719.5
Business Combinations and Shutdown and Other Special Charges, Net	8.6	6.1	3.6	12.8	31.1
Income from Operations	71.6	83.8	91.4	81.1	327.9
Net Income	37.0	42.0	47.3	173.9	300.2
Net Income Per Share — Basic	\$ 0.12	\$ 0.14	\$ 0.15	\$ 0.56	\$ 0.97
Net Income Per Share — Diluted ^(a)	\$ 0.12	\$ 0.14	\$ 0.15	\$ 0.56	\$ 0.96

^(a) Does not cross foot due to rounding

NOTE 17. EARNINGS PER SHARE

<i>In millions, except per share data</i>	Year Ended December 31,		
	2018	2017	2016
Net Income Attributable to Graphic Packaging Holding Company	\$ 221.1	\$ 300.2	\$ 228.0
Weighted Average Shares:			
Basic	309.5	311.1	320.9
Dilutive effect of RSUs	0.6	0.8	0.6
Diluted	310.1	311.9	321.5
Earnings Per Share — Basic	\$ 0.71	\$ 0.97	\$ 0.71
Earnings Per Share — Diluted	\$ 0.71	\$ 0.96	\$ 0.71

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

NOTE 18. CHANGES IN ACCUMULATED OTHER COMPREHENSIVE (LOSS) INCOME

The following represents changes in Accumulated Other Comprehensive (Loss) Income attributable to Graphic Packaging Holding Company by component for the year ended December 31, 2018 ^(a):

<i>In millions</i>	Derivatives Instruments	Pension and Postretirement Benefit Plans	Currency Translation Adjustments	Total
Balance at December 31, 2017	\$ (10.3)	\$ (226.7)	\$ (101.8)	\$ (338.8)
Other Comprehensive Loss before Reclassifications	(0.8)	(28.8)	(24.5)	(54.1)
Amounts Reclassified from Accumulated Other Comprehensive (Loss) Income ^(b)	(0.5)	3.3	—	2.8
Net Current-period Other Comprehensive Loss	(1.3)	(25.5)	(24.5)	(51.3)
Less:				
Net Current-period Other Comprehensive Income Attributable to Noncontrolling Interest ^(c)	0.3	6.1	5.8	12.2
Balance at December 31, 2018	\$ (11.3)	\$ (246.1)	\$ (120.5)	\$ (377.9)

^(a) All amounts are net-of-tax.

^(b) See following table for details about these reclassifications.

^(c) Includes amounts related to redeemable noncontrolling interest which are separately classified outside of permanent equity in the mezzanine section of the Consolidated Balance Sheets.

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

The following represents reclassifications out of Accumulated Other Comprehensive (Loss) Income for the year ended December 31, 2018:

<i>In millions</i>		
Details about Accumulated Other Comprehensive Income Components	Amount Reclassified from Accumulated Other Comprehensive Income (Loss)	Affected Line Item in the Statement Where Net Income is Presented
Derivatives Instruments:		
Commodity Contracts	\$ (0.4)	Cost of Sales
Foreign Currency Contracts	0.7	Other Expense, Net
Interest Rate Swap Agreements	(0.9)	Interest Expense, Net
	<u>(0.6)</u>	Total before Tax
	0.1	Tax Expense
	<u>\$ (0.5)</u>	Net of Tax
Amortization of Defined Benefit Pension Plans:		
Prior Service Costs	\$ 0.4 ^(a)	
Actuarial Losses	5.9 ^(a)	
	<u>6.3</u>	Total before Tax
	<u>(1.3)</u>	Tax Benefit
	<u>\$ 5.0</u>	Net of Tax
Amortization of Postretirement Benefit Plans:		
Prior Service Credits	\$ (0.3) ^(a)	
Actuarial Gains	(1.8) ^(a)	
	<u>(2.1)</u>	Total before Tax
	0.4	Tax Expense
	<u>\$ (1.7)</u>	Net of Tax
Total Reclassifications for the Period	<u>\$ 2.8</u>	

^(a) These accumulated other comprehensive income components are included in the computation of net periodic pension cost (see Note 7 — Pensions and Other Postretirement Benefits).

GRAPHIC PACKAGING HOLDING COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of Graphic Packaging Holding Company

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Graphic Packaging Holding Company (the Company) as of December 31, 2018 and 2017, the related consolidated statements of operations, comprehensive income (loss), shareholders' equity and cash flows for each of the three years in the period ended December 31, 2018, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2018 and 2017, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2018, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2018, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated February 12, 2019 expressed an adverse opinion thereon.

Basis for Opinion

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

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

/s/ Ernst & Young LLP

We have served as the Company's auditor since 2008.

Atlanta, Georgia
February 12, 2019

Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of Graphic Packaging Holding Company

Opinion on Internal Control over Financial Reporting

We have audited Graphic Packaging Holding Company's internal control over financial reporting as of December 31, 2018, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, because of the effect of the material weakness described below on the achievement of the objectives of the control criteria, Graphic Packaging Holding Company (the Company) has not maintained effective internal control over financial reporting as of December 31, 2018, based on the COSO criteria.

A material weakness is a deficiency, or combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the company's annual or interim financial statements will not be prevented or detected on a timely basis. The following material weakness has been identified and included in management's assessment. Management has identified a material weakness in controls related to the company's accounting for business combinations.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of Graphic Packaging Holding Company as of December 31, 2018 and 2017, the related consolidated statements of operations, comprehensive income (loss), shareholders' equity and cash flows for each of the three years in the period ended December 31, 2018, and the related notes. This material weakness was considered in determining the nature, timing and extent of audit tests applied in our audit of the 2018 consolidated financial statements, and this report does not affect our report dated February 12, 2019, which expressed an unqualified opinion thereon.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ Ernst & Young LLP

Atlanta, Georgia
February 12, 2019

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

The Company's management has established disclosure controls and procedures designed to ensure that information required to be disclosed by the Company in the reports that it files or submits under the Securities Exchange Act of 1934, as amended (the "Exchange Act") is recorded, processed, summarized and reported within time periods specified in the Securities and Exchange Commission rules and forms. Such disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by the Company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the Company's management to allow timely decisions regarding required disclosure.

Based on management's evaluation as of the end of the period covered by this Annual Report on Form 10-K, the Company's Chief Executive Officer and Chief Financial Officer have concluded that the Company's disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) promulgated under the Exchange Act) were not effective as of the end of the period covered by this Annual Report on Form 10-K due to the material weakness in internal control over financial reporting described below.

Management's Report on Internal Control Over Financial Reporting

The Company's management is responsible for establishing and maintaining adequate internal control over financial reporting for the Company, as such term is defined in Exchange Act Rule 13a-15(f). 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. Internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the Company's assets; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of the financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures are being made only with proper authorizations; and (iii) 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. The Company's management did not include in its assessment the internal controls of the NACP business and 2018 Acquisitions, which are included in the Company's results for the year ended December 31, 2018. As of December 31, 2018, the NACP business and 2018 Acquisitions total assets represent 28.8% of the Company's consolidated total assets. Net Sales attributable to the NACP business and 2018 Acquisitions represented 24.1% of the Company's consolidated Net Sales for the twelve months ended December 31, 2018.

The Company's management, under the supervision of and with the participation of the President and Chief Executive Officer and the Chief Financial Officer, assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2018 based on criteria for effective control over financial reporting described in *Internal Control - Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework). Based on this assessment the Company's management concluded that its internal control over financial reporting was not effective as of December 31, 2018 because of a material weakness in the design and operating effectiveness of management review controls related to the accounting for business combinations, including insufficient documentation to evidence effective management review controls over the accounting and estimates related to the highly complex NACP Combination. This material weakness in our internal control over financial reporting did not result in a material misstatement in the Company's audited financial statements for the year ended December 31, 2018.

Management is addressing the material weakness identified and is designing additional processes and controls to ensure that control deficiencies contributing to the material weakness are remediated. The remediation plan includes identifying and documenting risk assessments for acquisitions, developing and maintaining additional documentation over the review of business combination controls, enhancing internal review and validation of purchase accounting, including estimates, enhancing management review over procedures performed by third party specialists, and the use of additional resources, as required.

An adverse opinion on the effectiveness of the Company's internal control over financial reporting as of December 31, 2018 has been issued by Ernst & Young LLP, an independent registered public accounting firm, as stated in their report which appears herein.

Changes in Internal Control Over Financial Reporting

None.

Subsequent Remediation Efforts

The remediation activities described above were commenced immediately upon recognition of the material weakness in internal controls related to the accounting for business combinations.

ITEM 9B. *OTHER INFORMATION*

None.

PART III

ITEM 10. *DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE*

Pursuant to Instruction G(3) to Form 10-K, the information relating to Directors of the Registrant, compliance with Section 16(a) of the Exchange Act, compliance with the Company's Code of Ethics, and certain other information required by Item 10 is incorporated by reference to the Registrant's definitive Proxy Statement for the 2019 Annual Meeting of Stockholders, which is to be filed pursuant to Regulation 14A within 120 days after the end of the Registrant's fiscal year ended December 31, 2018.

ITEM 11. *EXECUTIVE COMPENSATION*

Pursuant to Instruction G(3) to Form 10-K, the information required by Item 11 is incorporated by reference to the Registrant's definitive Proxy Statement for the 2019 Annual Meeting of Stockholders, which is to be filed pursuant to Regulation 14A within 120 days after the end of the Registrant's fiscal year ended December 31, 2018.

ITEM 12. *SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS*

Pursuant to Instruction G(3) to Form 10-K, the information required by Item 12 is incorporated by reference to the Registrant's definitive Proxy Statement for the 2019 Annual Meeting of Stockholders, which is to be filed pursuant to Regulation 14A within 120 days after the end of the Registrant's fiscal year ended December 31, 2018.

ITEM 13. *CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE*

Pursuant to Instruction G(3) to Form 10-K, the information required by Item 13 is incorporated by reference to the Registrant's definitive Proxy Statement for the 2019 Annual Meeting of Stockholders, which is to be filed pursuant to Regulation 14A within 120 days after the end of the Registrant's fiscal year ended December 31, 2018.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

Pursuant to Instruction G(3) to Form 10-K, the information required by Item 14 is incorporated by reference to the Registrant's definitive Proxy Statement for the 2019 Annual Meeting of Stockholders, which is to be filed pursuant to Regulation 14A within 120 days after the end of the Registrant's fiscal year ended December 31, 2018.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

- a. Financial statements, financial statement schedule and exhibits filed as part of this report:
1. Consolidated Statements of Operations for each of the three years in the period ended December 31, 2018

Consolidated Statements of Comprehensive Income for each of the three years in the period ended December 31, 2018

Consolidated Balance Sheets as of December 31, 2018 and 2017

Consolidated Statements of Shareholders' Equity for each of the three years in the period ended December 31, 2018

Consolidated Statements of Cash Flows for each of the three years in the period ended December 31, 2018

Notes to Consolidated Financial Statements

Reports of Independent Registered Public Accounting Firm
 2. All schedules are omitted as the information required is either included elsewhere in the consolidated financial statements herein or is not applicable.
 3. Exhibits to Annual Report on Form 10-K for Year Ended December 31, 2018.

Exhibit Number	Description
2.1	Transaction Agreement dated October 23, 2017, by and among International Paper Company, Graphic Packaging Holding Company, Gazelle Newco LLC and Graphic Packaging International, Inc. Filed as Exhibit 2.1 to the Registrant's Current Report on Form 8-K filed on October 24, 2017 and incorporated herein by reference.
3.1	Restated Certificate of Incorporation of New Giant Corporation. Filed as Exhibit 3.1 to Graphic Packaging Holding Company's Current Report on Form 8-K filed on March 10, 2008 and incorporated herein by reference.
3.2	Bylaws of Graphic Packaging Holding Company, as amended on May 20, 2015. Filed as Exhibit 3.1 to Graphic Packaging Holding Company's Current Report on Form 8-K filed on May 27, 2015 and incorporated herein by reference.
3.3	Certificate of Formation of Graphic Packaging International, LLC. Filed as Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed on January 1, 2018 and incorporated herein by reference.
3.4	Amended and Restated Limited Liability Company Operating Agreement of Graphic Packaging International, LLC. Filed as Exhibit 3.2 to the Registrant's Current Report on Form 8-K filed on January 1, 2018 and incorporated herein by reference.
3.5	Amended and Restated Limited Liability Company Agreement dated as of January 1, 2018 by and among Graphic Packaging Holding Company, Graphic Packaging International Partners, LLC (formerly known as Gazelle Newco LLC), GPI Holding III, LLC, and International Paper Company. Filed as Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on January 1, 2018 and incorporated herein by reference.
4.1	Indenture, dated as of September 29, 2010, among Graphic Packaging International, Inc. and Graphic Packaging Holding Company, Graphic Packaging Corporation and the other Note Guarantors party thereto, as Note Guarantors, and U.S. Bank National Association, as Trustee. Filed as Exhibit 4.1 to Graphic Packaging Holding Company's Current Report on Form 8-K filed on September 29, 2010 and incorporated herein by reference.

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- 4.2 [Supplemental Indenture, dated as of April 2, 2013, among Graphic Packaging International, Inc., the guarantors named therein and U.S. Bank National Association, as Trustee, relating to the 4.75% Senior Notes due 2021 of Graphic Packaging International, Inc. Filed as Exhibit 4.1 to Graphic Packaging Holding Company's Current Report on Form 8-K filed on April 2, 2013 and incorporated herein by reference.](#)
- 4.3 [Indenture dated as of November 6, 2014, by and among Graphic Packaging International, Inc., the guarantors named therein and U.S. Bank National Association, as trustee. Filed as Exhibit 4.1 to the Registrant's Current Report on Form 8-K filed on November 6, 2014 and incorporated herein by reference.](#)
- 4.4 [First Supplemental Indenture dated as of November 6, 2014 by and among Graphic Packaging International, Inc. the guarantors named therein and U.S. Bank National Association, as trustee. Filed as Exhibit 4.2 to the Registrant's Current Report on Form 8-K filed on November 6, 2014 and incorporated herein by reference.](#)
- 4.5 [Second Supplemental Indenture dated as of August 11, 2016 by and among Graphic Packaging International Inc., Graphic Packaging Holding Company, the other guarantors named therein and U.S. Bank National Association as trustee. Filed as Exhibit 4.2 to the Registrant's Current Report on Form 8-K filed on August 11, 2016 and incorporated herein by reference.](#)
- 4.6 [Supplemental Indenture among Graphic Packaging International, Inc., Graphic Packaging Holding Company, the other guarantors party thereto and U.S. Bank National Association, as Trustee, with respect to the 4.75% Senior Notes due 2021. Filed as Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on October 24, 2017 and incorporated herein by reference.](#)
- 4.7 [Supplemental Indenture among Graphic Packaging International, Inc., Graphic Packaging Holding Company, the other guarantors party thereto and U.S. Bank National Association, as Trustee, with respect to the 4.875% Senior Notes due 2022. Filed as Exhibit 10.2 to the Registrant's Current Report on Form 8-K filed on October 24, 2017 and incorporated herein by reference.](#)
- 4.8 [Supplemental Indenture among Graphic Packaging International, Inc., Graphic Packaging Holding Company, the other guarantors party thereto and U.S. Bank National Association, as Trustee, with respect to the 4.125% Senior Notes due 2024. Filed as Exhibit 10.3 to the Registrant's Current Report on Form 8-K filed on October 24, 2017 and incorporated herein by reference.](#)
- 10.1* [GPI U.S. Consolidated Pension Plan Master Document as amended and restated, effective January 1, 2017. Filed as exhibit 10.1 to the Registrant's Annual Report on Form 10-K filed on February 8, 2017 and incorporated herein by reference.](#)
- 10.2* [Second Amendment to the GPI Savings Plan as amended and restated, effective January 1, 2015. Filed as Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q filed on April 28, 2016 and incorporated herein by reference.](#)
- 10.3* [Third Amendment to the GPI Savings Plan as amended and restated, effective January 1, 2015. Filed as Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q filed on April 28, 2016 and incorporated herein by reference.](#)
- 10.4* [Employment Agreement, dated as of July 22, 2013 by and among Graphic Packaging International, Inc., the Registrant and Carla J. Chaney. Filed as Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on July 23, 2013 and incorporated herein by reference.](#)
- 10.5* [Employment Agreement, dated as of October 26, 2009, by and among Graphic Packaging International, Inc., the Registrant and Alan Nichols. Filed as Exhibit 10.7 to the Registrant's Current Report on Form 8-K filed on January 22, 2010 and incorporated herein by reference.](#)
- 10.6* [Fourth Amendment to the GPI Savings Plan as amended and restated, effective January 1, 2015. Filed as Exhibit 10.3 to the Registrant's Quarterly Report on Form 10-Q filed on April 28, 2016 and incorporated herein by reference.](#)
- 10.7* [Amended and Restated Employment Agreement dated as of November 19, 2015 by and among Graphic Packaging International, Inc., the Registrant and Michael P. Doss. Filed as Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on November 19, 2015 and incorporated herein by reference.](#)
- 10.8* [Graphic Packaging Excess Benefit Plan, as amended and restated, effective as of January 1, 2009. Filed as Exhibit 10.22 to Registrant's Annual Report on Form 10-K filed on February 23, 2010 and incorporated herein by reference.](#)
- 10.9* [Graphic Packaging Supplemental Retirement Plan, as amended and restated, effective as of January 1, 2009. Filed as Exhibit 10.23 to Registrant's Annual Report on Form 10-K filed on February 23, 2010 and incorporated herein by reference.](#)

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- 10.10* [Graphic Packaging Holding Company 2014 Omnibus Stock and Incentive Compensation Plan effective as of May 21, 2014. Filed as Appendix A to the Registrant's Definitive Proxy Statement on Schedule 14A filed on April 10, 2014 and incorporated herein by reference.](#)
- 10.11* [Graphic Packaging International, Inc. Management Incentive Plan, as amended and restated as of December 5, 2016.](#)
- 10.12 [Master Services Agreement dated November 29, 2007 by and between Graphic Packaging International, Inc. and Perot Systems Corporation. Filed as Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on December 5, 2007 and incorporate herein by reference.](#)
- 10.13* [Graphic Packaging International, Inc. Supplemental Plan for Participants in the Riverwood International Employees Retirement Plan, as amended and restated, effective as of January 1, 2009. Filed as Exhibit 10.36 to the Registrant's Annual Report on Form 10-K filed on February 23, 2010 and incorporated herein by reference.](#)
- 10.14* [Riverwood International Change in Control Supplemental Retirement Plan, as amended and restated, effective as of January 1, 2008. Filed as Exhibit 10.37 to Graphic Packaging Holding Company's Annual Report on Form 10-K filed on February 23, 2010 and incorporated herein by reference.](#)
- 10.15 [Amended and Restated Form of Indemnification Agreement for Directors. Filed as Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q filed on November 4, 2010 and incorporated herein by reference.](#)
- 10.16* [Graphic Packaging International, Inc. Non-Qualified Deferred Compensation Plan filed as Exhibit 10.44 to the Registrant's Annual Report on Form 10-K filed on February 23, 2012 and incorporated herein by reference.](#)
- 10.17* [First Amendment to the Graphic Packaging International, Inc. Supplemental Plan for Participants in the Riverwood International Employees Retirement Plan. Filed as Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on May 24, 2012 and incorporated herein by reference.](#)
- 10.18* [Employment Agreement dated as of April 1, 2012 by and among Graphic Packaging International, Inc., Graphic Packaging Holding Company and Stephen Scherger. Filed as Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on April 5, 2012 and incorporated herein by reference.](#)
- 10.19 [First Amendment to Master Services Agreement dated as of September 22, 2008 by and between Graphic Packaging International, Inc. and Perot Systems Corporation and incorporated herein by reference.](#)
- 10.20 [Second Amendment to Master Services Agreement effective as of August 1, 2012 by and between Graphic Packaging International, Inc. and Dell Marketing L.P. \(as assignee of Perot Systems Corporation\) and incorporated herein by reference.](#)
- 10.21* [Fifth Amendment to the GPI Savings Plan as amended and restated, effective January 1, 2015. Filed as exhibit 10.24 to the Registrant's Annual Report on Form 10-K filed on February 8, 2017 and incorporated herein by reference.](#)
- 10.22* [GPI Savings Plan, as amended and restated effective January 1, 2015. Filed as Exhibit 10.32 to the Registrant's Annual Report on Form 10-K filed on February 12, 2016 and incorporated herein by reference.](#)
- 10.23* [First Amendment to the GPI Savings Plan, effective January 1, 2015. Filed as Exhibit 10.33 to the Registrant's Annual Report on Form 10-K filed on February 12, 2016 and incorporated herein by reference.](#)
- 10.24* [First Amendment to the Graphic Packaging International, Inc. Non-Qualified Deferred Compensation Plan, effective January 31, 2012. Filed as Exhibit 10.34 to the Registrant's Annual Report on Form 10-K filed on February 12, 2016 and incorporated herein by reference.](#)
- 10.25* [Second Amendment to the Graphic Packaging International, Inc. Non-Qualified Deferred Compensation Plan, executed on December 30, 2013. Filed as Exhibit 10.35 to the Registrant's Annual Report on Form 10-K filed on February 12, 2016 and incorporated herein by reference.](#)
- 10.26* [Third Amendment to the Graphic Packaging International, Inc. Non-Qualified Deferred Compensation Plan, effective June 23, 2014. Filed as Exhibit 10.36 to the Registrant's Annual Report on Form 10-K filed on February 12, 2016 and incorporated herein by reference.](#)
- 10.27* [Fourth Amendment to the Graphic Packaging International Inc. Non-Qualified Deferred Compensation Plan, effective January 1, 2016. Filed as Exhibit 10.37 to the Registrant's Annual Report on Form 10-K filed on February 12, 2016 and incorporated herein by reference.](#)
- 10.28* [Amended and Restated Employment Agreement among the Registrant, Graphic Packaging International, Inc. and Joseph P. Yost effective September 1, 2015. Filed as Exhibit 10.38 to the Registrant's Annual Report on Form 10-K filed on February 12, 2016 and incorporated herein by reference.](#)
- 10.29* [Graphic Packaging International, Inc. Executive Severance Plan dated as of February 25, 2014. Filed as Exhibit 10.39 to the Registrant's Annual Report on Form 10-K filed on February 12, 2016 and incorporated herein by reference.](#)

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- 10.30* [First Amendment to the Graphic Packaging Holding Company 2014 Omnibus Stock and Incentive Compensation Plan effective January 1, 2017. Filed as exhibit 10.33 to the Registrant's Annual Report on Form 10-K filed on February 8, 2017 and incorporated herein by reference.](#)
- 10.31 [Local Country Agreement - European Union Addendum effective as of November 1, 2016 to the Master Services Agreement between Graphic Packaging International, Inc. and Dell Marketing, L.P., as amended. Filed as Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-O filed on April 26, 2017 and incorporated herein by reference.](#)
- 10.32 [Third Amendment to Master Services Agreement dated as of November 1, 2016 between Graphic Packaging International, Inc. and Dell Marketing, L.P. Filed as Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q filed on April 26, 2017 and incorporated herein by reference.](#)
- 10.33 [Fourth Amendment to Master Services Agreement dated as of March 1, 2017 between Graphic Packaging International, Inc. and NTT DATA Services, LLC, as successor-in-interest to Dell Marketing, L.P. Filed as Exhibit 10.3 to the Registrant's Quarterly Report on Form 10-O filed on April 26, 2017 and incorporated herein by reference.](#)
- 10.34* [First Amendment to the GPI US Consolidated Pension Plan, dated as of May 19, 2017 and effective as of January 1, 2017. Filed as Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q filed on July 26, 2017 and incorporated herein by reference.](#)
- 10.35* [Sixth Amendment to the GPI Savings Plan, dated as of June 27, 2017 and effective as of January 1, 2015. Filed as Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q filed on July 26, 2017 and incorporated herein by reference.](#)
- 10.36* [Graphic Packaging International, Inc. Non-Qualified Deferred Compensation Plan, as amended and restated effective November 1, 2017. Filed as Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-O filed on October 25, 2017 and incorporated herein by reference.](#)
- 10.37 [Exchange Agreement dated as of January 1, 2018 by and among Graphic Packaging Holding Company, Graphic Packaging International Partners, LLC \(formerly known as Gazelle Newco LLC\), GPI Holding III, LLC and International Paper Company. Filed as Exhibit 10.2 to the Registrant's Current Report on Form 8-K filed on January 1, 2018 and incorporated herein by reference.](#)
- 10.38 [Governance Agreement dated as of January 1, 2018 by and among Graphic Packaging Holding Company, Graphic Packaging International Partners, LLC \(formerly known as Gazelle Newco LLC\), and International Paper Company. Filed as Exhibit 10.3 to the Registrant's Current Report on Form 8-K filed on January 1, 2018 and incorporated herein by reference.](#)
- 10.39 [Tax Receivable Agreement dated as of January 1, 2018 by and among Graphic Packaging Holding Company, Graphic Packaging International Partners, LLC \(formerly known as Gazelle Newco LLC\), GPI Holding III, LLC and International Paper Company. Filed as Exhibit 10.4 to the Registrant's Current Report on Form 8-K filed on January 1, 2018 and incorporated herein by reference.](#)
- 10.40 [Registration Rights Agreement dated as of January 1, 2018 by and between Graphic Packaging Holding Company and International Paper Company. Filed as Exhibit 10.5 to the Registrant's Current Report on Form 8-K filed on January 1, 2018 and incorporated herein by reference.](#)
- 10.41 [Restrictive Covenants Agreement dated as of January 1, 2018 by and between Graphic Packaging International Partners, LLC \(formerly known as Gazelle Newco LLC\) and International Paper Company. Filed as Exhibit 10.6 to the Registrant's Current Report on Form 8-K filed on January 1, 2018 and incorporated herein by reference.](#)
- 10.42 [Third Amended and Restated Credit Agreement dated as of January 1, 2018 by and among Graphic Packaging International, LLC and certain subsidiaries thereof as Borrowers, the lenders and agents named therein, and Bank of America, N.A., as Administrative Agent. Filed as Exhibit 10.7 to the Registrant's Current Report on Form 8-K filed on January 1, 2018 and incorporated herein by reference.](#)
- 10.43 [Amended and Restated Credit Agreement dated as of January 1, 2018 and effective as of January 8, 2018 by and among Graphic Packaging International, LLC, the lenders and agents named therein and Bank of America, N.A., as Administrative Agent. Filed as Exhibit 10.8 to the Registrant's Current Report on Form 8-K filed on January 1, 2018 and incorporated herein by reference.](#)
- 10.44* [First Amendment to the Amended and Restated Graphic Packaging International, Inc. Non-Qualified Deferred Compensation Plan effective January 1, 2018 and incorporated herein by reference.](#)
- 10.45* [Second Amendment to the GPI US Consolidated Pension Plan effective as of December 31, 2017 and incorporated herein by reference.](#)
- 10.46* [Third Amendment to the GPI US Consolidated Pension Plan effective as of January 1, 2018 and incorporated herein by reference.](#)

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10.47*	Seventh Amendment to the GPI Savings Plan effective as of January 1 2018 and incorporated herein by reference.
10.48*	Eighth Amendment to the GPI Savings Plan effective as of January 1, 2018 and incorporated herein by reference.
10.49*	Tenth Amendment to the GPI Savings Plan dated as of November 12, 2018.
10.50*	Fourth Amendment to the GPI US Consolidated Pension Plan dated as of December 20, 2018.
14.1	Code of Business Conduct and Ethics. Filed as Exhibit 14.1 to the Company's Annual Report on Form 10-K filed on March 8, 2011 and incorporated herein by reference.
21.1	List of Subsidiaries.
23.1	Consent of Independent Registered Public Accounting Firm.
24.1	Power of Attorney Incorporated by reference to the signature page of this Annual Report on Form 10-K.
31.1	Certification required by Rule 13a-14(a).
31.2	Certification required by Rule 13a-14(a).
32.1	Certification required by Section 1350 of Chapter 63 of Title 18 of the United States Code.
32.2	Certification required by Section 1350 of Chapter 63 of Title 18 of the United States Code.

* Executive compensation plan or agreement

SIGNATURES

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

GRAPHIC PACKAGING HOLDING COMPANY
(Registrant)

<u>/s/ Stephen R. Scherger</u> Stephen R. Scherger	Executive Vice President and Chief Financial Officer (Principal Financial Officer)	February 12, 2019
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Pursuant to the requirements of the Securities Exchange Act of 1934, this report on Form 10-K has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

<u>/s/ Michael P. Doss</u> Michael P. Doss	President and Chief Executive Officer (Principal Executive Officer)	February 12, 2019
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<u>/s/ Stephen R. Scherger</u> Stephen R. Scherger	Executive Vice President and Chief Financial Officer (Principal Financial Officer)	February 12, 2019
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<u>/s/ Deborah R. Frank</u> Deborah R. Frank	Senior Vice President and Chief Accounting Officer (Principal Accounting Officer)	February 12, 2019
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POWER OF ATTORNEY

Each of the directors of the Registrant whose signature appears below hereby appoints Stephen R. Scherger and Lauren S. Tashma, and each of them severally, as his or her attorney-in-fact to sign in his or her name and behalf, in any and all capacities stated below, and to file with the Securities and Exchange Commission any and all amendments to this report on Form 10-K, making such changes in this report on Form 10-K as appropriate, and generally to do all such things on their behalf in their capacities as directors and/or officers to enable the Registrant to comply with the provisions of the Securities Exchange Act of 1934, and all requirements of the Securities and Exchange Commission.

<u>Signatures</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Laurie Brlas</u> Laurie Brlas	Director	February 12, 2019
<u>/s/ David D. Campbell</u> David D. Campbell	Director	February 12, 2019
<u>/s/ Paul D. Carrico</u> Paul D. Carrico	Director	February 12, 2019
<u>/s/ Michael P. Doss</u> Michael P. Doss	Director, President and Chief Executive Officer	February 12, 2019
<u>/s/ Robert A. Hagemann</u> Robert A. Hagemann	Director	February 12, 2019
<u>/s/ Philip R. Martens</u> Philip R. Martens	Chairman of the Board	February 12, 2019
<u>/s/ Dean A. Scarborough</u> Dean A. Scarborough	Director	February 12, 2019
<u>/s/ Larry M. Venturelli</u> Larry M. Venturelli	Director	February 12, 2019
<u>/s/ Lynn A. Wentworth</u> Lynn A. Wentworth	Director	February 12, 2019



Management Incentive Plan

PLAN DOCUMENT

As Amended and Restated as of December 5, 2016



MANAGEMENT INCENTIVE PLAN

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I. PLAN PURPOSE:

The purpose of the Management Incentive Plan (the "Plan") is to offer a short-term incentive award opportunity for eligible global employees ("Participants") who make significant contributions to the growth and profitability of Graphic Packaging Holding Company (together with its subsidiaries, the "Company") and who demonstrate the performance that the Company desires to encourage. The Plan is designed to emphasize management's commitment to financial success and to a superior return on investment of its stockholders. Each "Plan Year" for the Plan is January 1st to December 31st.

II. ELIGIBILITY

Regular full-time and regular part-time salaried employees will be advised of their eligibility for the Plan based on their position. In addition, eligibility for participation in the Plan for a Plan Year will be subject to the following conditions:

1. Date of hire – A Participant must be employed by the Company on or before September 30 of the Plan Year in a Salaried, eligible position;
2. Active employment – A Participant must be an active employee on the date of the management incentive plan payout or if not active, terminated under a status that allows for payout;
3. Performance – Participants must maintain at least a "Meets Expectations" performance rating at the ending of the Plan Year to be eligible for payment of an award for that year, regardless of corporate performance. Sustained performance problems may result in permanent disqualification of participation in the Plan.

Company employees who work outside the United States or who are not paid on a U.S.-based payroll ("International Employees") are eligible to participate in the Plan to the extent permitted under rules and guidelines for such participation as are established by the Compensation and Benefits Committee.

III. FINANCIAL PERFORMANCE:

The amounts of any award payouts under the Plan are substantially financially-driven and will be based in large part on the results of the Company as a whole and/or any subsidiary,

affiliate or business unit of the Company, or a combination of these results. One or a combination of the following performance measures may be used to measure such results:

- Net earnings or net income (before or after taxes)
- Earnings per share
- Net sales growth
- Net operating profit
- Return measures (including, but not limited to, return on assets, capital, equity or sales)
- Cash flow (including, but not limited to, operating cash flow, free cash flow, and cash flow return on capital)
- Earnings before or after taxes, interest, depreciation and/or amortization
- Gross or operating margins
- Productivity ratios
- Share price (including, but not limited to, growth measures and total shareholder return)
- Expense targets
- Margins
- Operating efficiency
- Customer satisfaction
- Working capital targets
- Cost eliminations;
- Debt reduction;
- Employee engagement and cultural effectiveness; and
- Ratios combining any of the performance measures.

The performance measures may, without limitation, be based upon the attainment of specified levels of performance under one or more of the measures described above during the Plan Year, relative to performance in prior periods, relative to pre-established targets, or relative to the performance of other entities (or indices covering multiple entities).

Each Participant's incentive award opportunity for any given Plan Year is based on the specific corporate performance measures established during the annual operating plan approval process, and approved by the Company's Compensation and Benefits Committee for that Plan Year.

IV. AWARD DETERMINATION AND APPROVAL:

The Plan is specifically designed to create substantial incentive opportunity for the achievement of the Company's most important financial goals and for continued service and sustained effort through the date of payment of any award (the "Payment Date"). After the conclusion of a Plan Year, the President and Chief Executive Officer ("CEO") will make a recommendation to the Compensation and Benefits Committee of Graphic Packaging Holding Company regarding the payout under the Plan. This recommendation will be based upon the President and CEO's assessment of the degree to which the Company achieved the performance measures applicable to that Plan Year and the degree to which each Participant contributed to that achievement. The Compensation and Benefits Committee approves the percentage of target payout under the Plan and the award payout amounts for those officers designated as Executive Officers by the Board of Directors, except for the President and CEO. Separately, the Company's Compensation and Benefits Committee will make a recommendation to the full Board of Directors regarding the payout under the Plan for the President and CEO.

V. INDIVIDUAL AND TEAM PERFORMANCE FACTORS:

Award opportunities (before individual performance factors) range from 0% to 200% of an individual's target award. Individual and team performance factors can further adjust a Participant's award payout by up to 20%, either up or down. All adjustments to award payouts based on individual performance factors are reviewed and approved by the President and CEO.

VI. CURRENCY:

All financial results will be stated on a U.S. dollar reporting basis for purposes of determining actual performance against the applicable performance measures for any given Plan Year.

VII. PARTICIPATION LEVEL AND NEW PARTICIPANTS:

Participation level is defined as the “target” incentive award opportunity provided to Participants under the Plan. Each Participant's approved participation level is determined and communicated annually. The target incentive award opportunity is expressed as a percentage of a Participant's annual base salary as of December 31 of the applicable Plan Year. Participation level changes during the Plan Year will result in any awards earned being calculated on a prorated basis for the number of days assigned to each participation level during that Plan Year.

New Participants shall have any awards earned prorated by the number of days of participation in their first Plan Year, subject to eligibility guidelines.

VIII. REVISIONS TO PLAN:

Revisions to applicable performance goals and the resulting payout percentage for any given Plan Year may be considered to recognize circumstances beyond the control of Participants. Such revisions will be rare in practice and only respond to extraordinary and unforeseeable events. It is understood that revisions may adjust for positive windfalls as well as negative shortfalls. Revisions must be approved by the President and CEO of the Company, the Compensation and Benefits Committee of the Board of Directors and the full Board of Directors.

IX. FORM AND TIMING OF AWARDS:

All awards under the Plan will be paid in cash and in local currency. Awards will be subject to all applicable social insurance, income tax and other withholding requirements effective at the time of payment.

Awards paid to Participants in hyper-inflationary countries may be monetarily corrected to adjust for currency devaluation between the close of the plan year and the award payment date.

All awards will be paid between January 2 and March 15 of the calendar year following the close of each Plan Year.

X. EMPLOYEES ON LEAVE:

Award payouts for employees who, during the plan year, have been on a paid or unpaid leave of absence pursuant to the Family and Medical Leave Act ("FMLA"), the Company's workers' compensation program, the Company's short term disability policy, or any other type of leave will be prorated to exclude the time away from work.

XI. TERMINATION, DEATH, OR DISABILITY:

Awards for a given Plan Year will be paid only to Participants who are actually employed on the Payment Date. A Participant whose employment terminates, whether by resignation or by discharge, for any reason (or no reason) prior to the Payment Date for a Plan Year shall not earn or have any right to an award from the Plan for such Plan Year and shall not be deemed to have earned or become vested in any such award, except for Participants (i) who terminate employment due to death, disability, or retirement ("retirement" for this purpose means an employee whose age on the effective date of termination is at least 55 and whose combination of age and years of service on that date is equal to or greater than 65); or (ii) who are eligible for benefits under the Graphic Packaging International, Inc. Supplemental Unemployment Benefits Plan or the Graphic Packaging International, Inc. Executive Severance Plan, under Employment Agreements, and who sign and return (and do not revoke) a Release under that Plan ("Special Circumstance Participants"). Under this provision, Special Circumstance Participants may be paid a pro rata portion of any award earned based on their date of termination, and all such prorated payments, if any, will be made at the time and in the form received by all other Participants. Notwithstanding the foregoing, any Participant who is entitled to a payment in lieu of annual incentive compensation for the Plan Year upon termination of employment under an employment agreement or any similar arrangement with the Company shall not also be entitled to an award under the Plan for such year.

XII. OTHER PLAN DESIGN CONSIDERATIONS:

The Plan will be administered by the SVP-Human Resources. Each determination of financial performance or other action made or taken by the Compensation and Benefits Committee hereunder will be final and conclusive for all purposes and upon all persons.

No Participant shall have the right to anticipate, alienate, sell, transfer, assign, pledge, or encumber his or her right to receive any award payable under the Plan.

No Participant shall have any lien on any assets of the Company by reason of any award payable under the Plan.

The Company specifically reserves the right to amend, modify, or terminate the Plan at any time for any reason. Neither the Plan nor any award under the Plan shall create any employment contract or imply any relationship between the Company and any Participant, other than employment terminable by either party at will.

The terms of the Plan are governed by the laws of the State of Georgia without regard to conflict of laws principles.

The Company reserves the right for the President and Chief Executive Officer to recommend to the Compensation and Benefits Committee and Board of Directors of Graphic Packaging Holding Company that the Company increase, decrease, or eliminate any and all Plan awards, including but not limited to any individual award, if, in the exercise of his business judgment, such modifications would be in the best interest of the Company. The Board of Directors of Graphic Packaging Holding Company (with respect to an award to the President and Chief Executive Officer) and the Compensation and Benefits Committee (with respect to all other awards) shall have absolute discretion in determining whether or not to issue an award and in determining the amount of each award paid.

XIII. INTERNAL REVENUE CODE SECTION 409A:

The Plan is designed and intended to provide only for payments that are exempt from Section 409A of the Internal Revenue Code (the "Code") under the exception in Treasury Regulation Section 1.409A-1(b)(4) for certain short-term deferrals. Nevertheless, if any amount under the Plan is subject to 409A of the Code, the Plan shall be interpreted and administered so as not to cause the acceleration of (or the imposition of additional) taxes provide for in Section 409A of the Code.

XIV. CLAWBACKS:

Participants shall be required to forfeit or reimburse the Company with respect to any award paid under the Plan to the extent required by any clawback or recoupment policy of the Company now in effect or as may be adopted by the Company from time to time as required by Section 304 of the Sarbanes-Oxley Act of 2002, Section 954 of the Dodd-Frank Wall Street Reform and Consumer Protection Act, or as otherwise required by applicable law.

XV. EFFECTIVENESS OF AMENDMENT AND RESTATEMENT:

The Management Incentive Plan as amended and restated as set forth herein, shall be effective for the 2016 Plan year and thereafter until terminated or further amended by the Board of Directors of the Company.

* * * *

**10TH AMENDMENT TO THE
GPI SAVINGS PLAN
(As Amended and Restated Effective January 1, 2015)**

WHEREAS, Graphic Packaging International, LLC (the “Company”) maintains for the benefit of its employees the GPI Savings Plan (the “Plan”); and

WHEREAS, Section 13.1 of the Plan authorizes the Board of Directors of Graphic Packaging Holding Company (the “Board”) to amend the Plan at any time; and

WHEREAS, the Board has delegated to the Retirement Committee of Graphic Packaging International, LLC (the “Retirement Committee”) the responsibility to make certain amendments to the Plan; and

WHEREAS, the Company has acquired the assets (the “Transaction”) of Letica Corporation’s Maui Cup Division’s facilities in Pennsylvania and Tennessee (the “Target”); and

WHEREAS, in connection with the Transaction, employees of the Target became employees of the Company effective as of the closing date of the Transaction (the “Closing Date”); and

WHEREAS, the Retirement Committee deems it desirable to amend the Plan to recognize employees’ service with the Target for purposes of the Plan.

NOW, THEREFORE, BE IT RESOLVED, that, effective as of the Closing Date, the Plan is hereby amended as follows:

1. Subsection 1.101 of the Plan is amended by adding the following sentence to the end thereof:

“An Employee’s period of service with Letica Corporation’s Maui Cup Division, to the extent not otherwise counted hereunder, will be taken into account in determining his or her Year of Eligibility Service, provided that such Employee was employed by Letica Corporation’s Maui Cup Division as of the close of business on the date immediately preceding the closing date of the acquisition of the assets of Letica Corporation’s Maui Cup Division by the Controlling Company.”

2. Subsection 1.102(d) of the Plan is amended by adding the following sentence to the end thereof:

“An Employee’s periods of employment with Letica Corporation’s Maui Cup Division will be taken into account in determining his or her Years of Vesting Service, provided that such Employee was employed by Letica Corporation’s Maui Cup Division as of the close of business on the date immediately preceding the closing date of the acquisition of the assets of Letica Corporation’s Maui Cup Division by the Controlling Company.”

BE IT FURTHER RESOLVED, that the Retirement Committee has approved this 10th Amendment to the GPI Savings Plan this 12th day of November 2018.

GRAPHIC PACKAGING INTERNATIONAL, LLC
RETIREMENT COMMITTEE MEMBERS

/s/ Stephen R. Scherger

Stephen R. Scherger

/s/ Carla J. Chaney

Carla J. Chaney

/s/ Brad Ankerholz

Brad Ankerholz

/s/ Debbie Frank

Debbie Frank

/s/ Brian A. Wilson

Brian A. Wilson

**FOURTH AMENDMENT TO THE
GPI US CONSOLIDATED PENSION PLAN
(As Amended and Restated Effective January 1, 2017)**

WHEREAS, Graphic Packaging International, LLC (“GPI”) sponsors the GPI US Consolidated Pension Plan (the “Consolidated Plan”) and the 2018 US Graphic Packaging International Pension Plan (the “2018 Plan”); and

WHEREAS, Section 4.1 of the Master Document of the Consolidated Plan provides that GPI’s Board of Directors (the “Board”) has the authority to amend the Consolidated Plan at any time, and Section 4.4 of the Master Document provides that the Board has the authority to terminate the Consolidated Plan at any time; and

WHEREAS, Section 12.1 of the 2018 Plan provides that the Board has the authority to amend the 2018 Plan at any time; and

WHEREAS, certain participants in the Consolidated Plan are eligible to continue accruing benefits under the Consolidated Plan as of December 31, 2018 (the “Active Population”); and

WHEREAS, on July 31, 2018, the Board resolved that (i) the Consolidated Plan be terminated effective as of the close of business on December 31, 2018, (the “Termination”), and (ii) the portion of the Consolidated Plan that cover the Active Population be spun-off and merged into the 2018 Plan immediately prior to the Termination (the “Spinoff”); and

WHEREAS, it is anticipated that, as of December 31, 2018, the Consolidated Plan’s records for certain terminated participants in the Field Container Company, L.P. and Related Entities Pension Subplan of the Consolidated Plan will continue to be missing Social Security Numbers, first and middle names, dates of hire and termination, addresses, vesting service and benefit service (the “Participants Missing Identifying Data”); and

WHEREAS, on November 12, 2018, the Retirement Committee of Graphic Packaging International, LLC (the “Retirement Committee”) resolved that the portion of the Consolidated Plan that cover the Participants Missing Identifying Data be included in the Spinoff such that the Participants Missing Identifying Data will be spun-off and merged into the 2018 Plan immediately prior to the Termination; and

WHEREAS, in connection with the Spinoff and Termination, the Board has authorized the Retirement Committee to take any action it may deem helpful or necessary to effectuate the Spinoff and Termination, including, but not limited to, the approval and execution of amendments to the Consolidated Plan to (i) effectuate the Spinoff and Termination, (ii) provide for a limited lump-sum window to be offered in connection with the Termination; and (iii) make such other changes that the Retirement Committee may determine are helpful or necessary to effectuate the Termination, each subject to such specific details as shall be determined by the Retirement Committee; and

WHEREAS, the Retirement Committee deems it desirable to amend the Consolidated Plan to effectuate the Spinoff and Termination, to provide for a limited lump-sum window to be offered in connection with the Termination and to make certain additional changes in connection therewith.

NOW, THEREFORE, BE IT RESOLVED, that the Consolidated Plan be and hereby is amended as follows:

1. Effective as of the close of business on December 31, 2018, and immediately prior to the Termination, the portions of the Consolidated Plan that cover the Active Population and the Participants Missing Identifying Data be and hereby is spun-off and merged into the 2018 Plan.

2. Effective as of the close of business on December 31, 2018, and immediately following the Spinoff, the Consolidated Plan be and hereby is terminated, subject to the approval of the Consolidated Plan's termination by the Pension Benefit Guaranty Corporation (the "PBGC"). Following the approval of the Consolidated Plan's termination by the PBGC, the benefits of all participants and beneficiaries shall be satisfied in full through cash distributions to participants, payment to the PBGC, or the purchase of annuities under a group annuity contract, all as determined by the Retirement Committee in its discretion in accordance with applicable PBGC regulations.

3. Effective as of the termination of the Consolidated Plan, the rights of all participants and beneficiaries to benefits accrued as of the date of such termination, to the extent funded as of such date, shall be 100% vested and nonforfeitable.

4. Effective as of the close of business on December 31, 2018, Article 2 of the Core Document of the Graphic Packaging Retirement Subplan of the Consolidated Plan is amended by adding the following new Section 2.11 to the end thereof:

2.11 Special Commencement Right Upon Termination

Notwithstanding anything in (i) Section 2.3, or (ii) Article 5 or Article 6 of the applicable Appendix to the contrary, certain individuals may elect to commence their benefits with an Annuity Starting Date on the Final Distribution Date (as defined below), in accordance with this Section.

- (a) Definitions. For purposes of this Section, each of the following terms when capitalized has the respective meaning set forth below:
- (i) Eligible Individual. An "Eligible Individual" is a vested Member, the Beneficiary of a deceased vested Member or the alternate payee under a qualified domestic relations order as defined in Section 414(p) of the Code of a vested Member, who meets all of the requirements described in Subsections (A) through (C) below:

- (A) The Member, Beneficiary or alternate payee, as applicable, has not attained his or her Required Beginning Date on or before the Final Distribution Date;
 - (B) The Member, Beneficiary or alternate payee, as applicable, has not commenced his or her benefit as of an Annuity Starting Date prior to the Final Distribution Date; and
 - (C) No portion of the benefit of the Member, Beneficiary or alternate payee, as applicable, is subject to a qualified domestic relations order or other lien that is in effect or pending as of the Final Distribution Date and that would prohibit distribution of such benefit in the form of a single lump-sum payment.
- (ii) Final Distribution Date. The “Final Distribution Date” means the date as of which lump-sum payments will be made to Members, Beneficiaries and alternate payees in connection with the termination of the Plan. Within a reasonable period of time following the Final Distribution Date, the Plan’s remaining benefit liabilities shall be satisfied through payments to the PBGC or through the purchase of a group annuity contract from an insurance company selected by the Retirement Committee.
 - (iii) Window Election Deadline. The “Window Election Deadline” means the earlier of (i) the date that is 60 days after an Eligible Individual initiates the process of commencing benefits under this Section, or (ii) such administrative date as the Retirement Committee may establish in its sole discretion, which shall be no later than the Final Distribution Date.
 - (iv) Window Initiation Period. The “Window Initiation Period” means the period established by the Retirement Committee during which an Eligible Individual may elect to commence his pension pursuant to this Section.
- (b) Payment Options for Eligible Individuals. The following provisions apply to Eligible Individuals who commence their Plan benefits under this Section:
 - (i) Retirement-Eligible Individual. An Eligible Individual who, as of the Final Distribution Date, is eligible, or would be eligible if he or she terminated employment, to commence a normal retirement Pension under Section 5.1 of the applicable Appendix, a late retirement Pension under Section 5.2 of the applicable Appendix, an early retirement Pension under Section 5.3 of the applicable Appendix or a vested Pension under Section 5.5 of the applicable

Appendix as of the Final Distribution Date, may elect to receive his or her Pension benefit in the form of a lump-sum payment pursuant to this Section or in any form of benefit otherwise available to the Eligible Individual under Section 6.2 of the applicable Appendix.

- (ii) Non-Retirement-Eligible Individual. An Eligible Individual who, as of the Final Distribution Date, is otherwise not eligible to commence his benefit as of the Final Distribution Date even if he or she terminated employment, may elect to receive his or her Pension benefit in the form of:
 - (A) a lump-sum payment pursuant to this Section,
 - (B) a single life annuity under Section 6.2(a) of the applicable Appendix,
 - (C) if the Eligible Individual is married on the Final Distribution Date, a Qualified Joint and Survivor Annuity, provided this form of distribution will not be available to an Eligible Individual who is a Beneficiary or an alternate payee, or
 - (D) if the Eligible Individual is married on the Final Distribution Date, a 75% joint and survivor annuity under Section 6.2(c) of the applicable Appendix with the Eligible Individual's Spouse as his Beneficiary, provided this form of distribution will not be available to an Eligible Individual who is a Beneficiary or an alternate payee.
- (iii) Spousal Consent Requirements. The election of an Eligible Individual who is a Member to waive the normal form of benefit under Section 6.1(b) of the applicable Appendix is subject to Spousal Consent, as described in Section 2.3(a)(ii).
- (c) Calculation of Benefits.
 - (i) Retirement-Eligible Individual. With respect to an Eligible Individual described in subsection (b)(i) hereof, the benefit payable under this Section shall be calculated under the provisions of the Plan that generally apply to the calculation of such benefit, but disregarding any limitation on the amount of lump sums otherwise payable under the terms of the Plan.
 - (ii) Non-Retirement-Eligible Individual. With respect to an Eligible Individual described in subsection (b)(ii) hereof, the benefit payable under this Section shall be of Equivalent Actuarial Value to the

Eligible Individual's Accrued Benefit using the actuarial assumptions for calculating lump sums.

- (d) Election Procedures. An Eligible Individual's election to commence benefits under this Section must be made in accordance with procedures established by the Retirement Committee. An Eligible Individual's election to receive payment under this Section must be (i) initiated by the Eligible Individual no later than the last day of the Window Initiation Period and (ii) completed by returning an election form postmarked on or before the Window Election Deadline, unless a later date is required by law due to a delay in the delivery of the election notice to the Eligible Individual. An Eligible Individual who does not notify the Retirement Committee of a change in his or her address by the date established by the Retirement Committee in order for the Eligible Individual to commence a benefit with an Annuity Starting Date on the Final Distribution Date, shall not be eligible to commence his or her benefit under this Section. An Eligible Individual who does not submit a completed election form (including any applicable Spousal Consent) in accordance with this subsection (d) may commence benefits only at the time and in the form determined under the Plan without regard to this Section.

5. Effective as of the date this Fourth Amendment is executed, Section 1.8A of Appendix 5 of the Graphic Packaging Retirement Subplan of the Consolidated Plan is amended by adding to the end thereof the following new sentence:

Notwithstanding the foregoing, Martin E. McGuire, Phyllis R. Vaden, James M. Woodard, Danny W. Key, Tammy R. Mise, Jeff W. Vaden, Michael W. Burton, Sherry L. Brockett, Donnie K. Vaden, Leah D. Gregory, Robert F. Gregory, Mark D. Payne, Morris Maynard, Michael W. Richardson, Marjorie D. Key, Lisa L. Richardson and Shannon T. Shoulders shall not be Non-Grandfathered Members, and their benefits hereunder shall be determined as if they had never been Non-Grandfather Members.

6. Effective as of the close of business on December 31, 2018, Article 5 of the Riverwood International Employees Retirement Subplan of the Consolidated Plan is amended by adding the following new Section 5.09 to the end thereof:

5.09 Special Commencement Right Upon Termination

Notwithstanding anything in Article 4 or Article 5 to the contrary, certain individuals may elect to commence their benefits with an Annuity Starting Date on the Final Distribution Date (as defined below), in accordance with this Section.

- (a) Definitions. For purposes of this Section, each of the following terms when capitalized has the respective meaning set forth below:

- (i) Eligible Individual. An “Eligible Individual” is a vested Member, the Beneficiary of a deceased vested Member or the alternate payee under a qualified domestic relations order as defined in Section 414(p) of the Code of a vested Member, who meets all of the requirements described in Subsections (A) through (C) below:
 - (A) The Member, Beneficiary or alternate payee, as applicable, has not attained his or her Required Beginning Date on or before the Final Distribution Date;
 - (B) The Member, Beneficiary or alternate payee, as applicable, has not commenced his or her benefit as of an Annuity Starting Date prior to the Final Distribution Date; and
 - (C) No portion of the benefit of the Member, Beneficiary or alternate payee, as applicable, is subject to a qualified domestic relations order or other lien that is in effect or pending as of the Final Distribution Date and that would prohibit distribution of such benefit in the form of a single lump-sum payment.
 - (ii) Final Distribution Date. The “Final Distribution Date” means the date as of which lump-sum payments will be made to Members, Beneficiaries and alternate payees in connection with the termination of the Plan. Within a reasonable period of time following the Final Distribution Date, the Plan’s remaining benefit liabilities shall be satisfied through payments to the PBGC or through the purchase of a group annuity contract from an insurance company selected by the Retirement Committee.
 - (iii) Window Election Deadline. The “Window Election Deadline” means the earlier of (i) the date that is 60 days after an Eligible Individual initiates the process of commencing benefits under this Section, or (ii) such administrative date as the Retirement Committee may establish in its sole discretion, which shall be no later than the Final Distribution Date.
 - (iv) Window Initiation Period. The “Window Initiation Period” means the period established by the Retirement Committee during which an Eligible Individual may elect to commence his pension pursuant to this Section.
- (b) Payment Options for Eligible Individuals. The following provisions apply to Eligible Individuals who commence their Plan benefits under this Section:

- (i) Retirement-Eligible Individual. An Eligible Individual who, as of the Final Distribution Date, is eligible, or would be eligible if he or she terminated employment, to commence a normal retirement Pension under Section 4.01, a late retirement Pension under Section 4.02, an early retirement Pension under Section 4.03 or a vested Pension under Section 4.05 as of the Final Distribution Date, may elect to receive his or her Pension benefit in the form of a lump-sum payment pursuant to this Section or in any form of benefit otherwise available to the Eligible Individual under Section 5.02.
 - (ii) Non-Retirement-Eligible Individual. An Eligible Individual who, as of the Final Distribution Date, is otherwise not eligible to commence his or her benefit as of the Final Distribution Date even if he or she terminated employment, may elect to receive his or her Pension benefit in the form of:
 - (A) a lump-sum payment pursuant to this Section,
 - (B) a single life annuity under Section 5.02(a),
 - (C) if the Eligible Individual is married on the Final Distribution Date, a Qualified Joint and Survivor Annuity, provided this form of distribution will not be available to an Eligible Individual who is a Beneficiary or an alternate payee, or
 - (D) if the Eligible Individual is married on the Final Distribution Date, a 75% joint and survivor annuity under Section 5.02(c) with the Eligible Individual's Spouse as his or her Beneficiary, provided this form of distribution will not be available to an Eligible Individual who is a Beneficiary or an alternate payee.
 - (iii) Spousal Consent Requirements. The election of an Eligible Individual who is a Member to waive the normal form of benefit under Section 5.01(b) is subject to Spousal Consent.
- (c) Calculation of Benefits.
- (i) Retirement-Eligible Individual. With respect to an Eligible Individual described in subsection (b)(i) hereof, the benefit payable under this Section shall be calculated under the provisions of the Plan that generally apply to the calculation of such benefit, but disregarding any limitation on the amount of lump sums otherwise payable under the terms of the Plan.
 - (ii) Non-Retirement-Eligible Individual. With respect to an Eligible Individual described in subsection (b)(ii) hereof, the benefit payable

under this Section shall be of Equivalent Actuarial Value to the Eligible Individual's Accrued Benefit using the actuarial assumptions for calculating lump sums.

- (d) Election Procedures. An Eligible Individual's election to commence benefits under this Section must be made in accordance with procedures established by the Retirement Committee. An Eligible Individual's election to receive payment under this Section must be (i) initiated by the Eligible Individual no later than the last day of the Window Initiation Period and (ii) completed by returning an election form postmarked on or before the Window Election Deadline, unless a later date is required by law due to a delay in the delivery of the election notice to the Eligible Individual. An Eligible Individual who does not notify the Retirement Committee of a change in his or her address by the date established by the Retirement Committee in order for the Eligible Individual to commence a benefit with an Annuity Starting Date on the Final Distribution Date, shall not be eligible to commence his or her benefit under this Section. An Eligible Individual who does not submit a completed election form (including any applicable Spousal Consent) in accordance with this subsection (d) may commence benefits only at the time and in the form determined under the Plan without regard to this Section.

7. Effective as of the close of business on December 31, 2018, Article 5 of the Riverwood International Hourly Retirement Subplan of the Consolidated Plan is amended by adding the following new Section 5.09 to the end thereof:

5.09 Special Commencement Upon Termination

Notwithstanding anything in Article 4 or Article 5 to the contrary, certain individuals may elect to commence their benefits with an Annuity Starting Date on the Final Distribution Date (as defined below), in accordance with this Section.

- (a) Definitions. For purposes of this Section, each of the following terms when capitalized has the respective meaning set forth below:
- (i) Eligible Individual. An "Eligible Individual" is a vested Member, the Beneficiary of a deceased vested Member or the alternate payee under a qualified domestic relations order as defined in Section 414(p) of the Code of a vested Member, who meets all of the requirements described in Subsections (A) through (C) below:
- (A) The Member, Beneficiary or alternate payee, as applicable, has not attained his or her Required Beginning Date on or before the Final Distribution Date;

- (B) The Member, Beneficiary or alternate payee, as applicable, has not commenced his or her benefit as of an Annuity Starting Date prior to the Final Distribution Date; and
 - (C) No portion of the benefit of the Member, Beneficiary or alternate payee, as applicable, is subject to a qualified domestic relations order or other lien that is in effect or pending as of the Final Distribution Date and that would prohibit distribution of such benefit in the form of a single lump-sum payment.
- (ii) Final Distribution Date. The “Final Distribution Date” means the date as of which lump-sum payments will be made to Members, Beneficiaries and alternate payees in connection with the termination of the Plan. Within a reasonable period of time following the Final Distribution Date, the Plan’s remaining benefit liabilities shall be satisfied through payments to the PBGC or through the purchase of a group annuity contract from an insurance company selected by the Retirement Committee.
 - (iii) Window Election Deadline. The “Window Election Deadline” means the earlier of (i) the date that is 60 days after an Eligible Individual initiates the process of commencing benefits under this Section, or (ii) such administrative date as the Retirement Committee may establish in its sole discretion, which shall be no later than the Final Distribution Date.
 - (iv) Window Initiation Period. The “Window Initiation Period” means the period established by the Retirement Committee during which an Eligible Individual may elect to commence his pension pursuant to this Section.
- (b) Payment Options for Eligible Individuals. The following provisions apply to Eligible Individuals who commence their Plan benefits under this Section:
 - (i) Retirement-Eligible Individual. An Eligible Individual who, as of the Final Distribution Date, is eligible, or would be eligible if he or she terminated employment, to commence a normal Retirement Allowance under Section 4.01, a late Retirement Allowance under Section 4.02, an early Retirement Allowance under Section 4.03 or a vested Retirement Allowance under Section 4.04 as of the Final Distribution Date, may elect to receive his or her Retirement Allowance in the form of a lump-sum payment pursuant to this Section or in any form of benefit otherwise available to the Eligible Individual under Section 5.02.

- (ii) Non-Retirement-Eligible Individual. An Eligible Individual who, as of the Final Distribution Date, is otherwise not eligible to commence his benefit as of the Final Distribution Date even if he or she terminated employment, may elect to receive his or her Retirement Allowance:
 - (A) as a lump-sum payment pursuant to this Section,
 - (B) under the “Life Only Option” described in Section 5.02(a),
 - (C) if the Eligible Individual is married on the Final Distribution Date, as a Qualified Joint and Survivor Annuity, provided this form of distribution will not be available to an Eligible Individual who is a Beneficiary or an alternate payee, or
 - (D) if the Eligible Individual is married on the Final Distribution Date, under the 75% “Joint and Survivor Option” described in Section 5.02(a) with the Eligible Individual’s Spouse as his Beneficiary, provided this form of distribution will not be available to an Eligible Individual who is a Beneficiary or an alternate payee.
 - (iii) Spousal Consent Requirements. The election of an Eligible Individual who is a Member to waive the normal form of benefit under Section 5.01(b) is subject to Spousal Consent.
- (c) Calculation _____ of Benefits.
- (i) Retirement-Eligible Individual. With respect to an Eligible Individual described in subsection (b)(i) hereof, the benefit payable under this Section shall be calculated under the provisions of the Plan that generally apply to the calculation of such benefit, but disregarding any limitation on the amount of lump sums otherwise payable under the terms of the Plan.
 - (ii) Non-Retirement-Eligible Individual. With respect to an Eligible Individual described in subsection (b)(ii) hereof, the benefit payable under this Section shall be of Equivalent Actuarial Value to the Eligible Individual’s Accrued Benefit using the actuarial assumptions for calculating lump sums.
- (d) Election Procedures. An Eligible Individual’s election to commence benefits under this Section must be made in accordance with procedures established by the Retirement Committee. An Eligible Individual’s election to receive payment under this Section must be (i) initiated by the Eligible Individual no later than the last day of the Window Initiation Period and (ii) completed

by returning an election form postmarked on or before the Window Election Deadline, unless a later date is required by law due to a delay in the delivery of the election notice to the Eligible Individual. An Eligible Individual who does not notify the Retirement Committee of a change in his or her address by the date established by the Retirement Committee in order for the Eligible Individual to commence a benefit with an Annuity Starting Date on the Final Distribution Date, shall not be eligible to commence his or her benefit under this Section. An Eligible Individual who does not submit a completed election form (including any applicable Spousal Consent) in accordance with this subsection (d) may commence benefits only at the time and in the form determined under the Plan without regard to this Section.

8. Effective as of the date this Fourth Amendment is executed, the section of Appendix C of the Riverwood International Hourly Retirement Subplan of the Consolidated Plan entitled "PAPERBOARD DIVISION, WEST MONROE BENEFIT ACCRUALS FROZEN FOR CERTAIN MEMBERS AND ELIGIBILITY FROZEN TO NEW MEMBERS" is amended by adding to the end thereof the following new paragraph (7):

- (7) Notwithstanding the foregoing, Calvin R. Archie, Michael W. Hatten and Grenda L. Smith shall not be Non-Grandfathered Members, and their benefits hereunder shall be determined as if they had never been Non-Grandfather Members.

9. Effective as of the close of business on December 31, 2018, Article 6 of the Core Document of the Altivity Packaging Pension Subplan for Hourly Employees of the Consolidated Plan is amended by adding the following new Section 6.6 to the end thereof:

6.6 Special Commencement Right Upon Termination

Notwithstanding anything in Article 5, Article 6, or the applicable Appendix to the contrary, certain individuals may elect to commence their benefits with an Annuity Starting Date on the Final Distribution Date (as defined below), in accordance with this Section.

- (a) Definitions. For purposes of this Section, each of the following terms when capitalized has the respective meaning set forth below:
 - (i) Eligible Individual. An "Eligible Individual" is a vested Member, the Beneficiary of a deceased vested Member or the alternate payee under a qualified domestic relations order as defined in Section 414(p) of the Code of a vested Member, who meets all of the requirements described in Subsections (A) through (C) below:

- (A) The Member, Beneficiary or alternate payee, as applicable, has not attained his or her Required Beginning Date on or before the Final Distribution Date;
 - (B) The Member, Beneficiary or alternate payee, as applicable, has not commenced his or her benefit as of an Annuity Starting Date prior to the Final Distribution Date; and
 - (C) No portion of the benefit of the Member, Beneficiary or alternate payee, as applicable, is subject to a qualified domestic relations order or other lien that is in effect or pending as of the Final Distribution Date and that would prohibit distribution of such benefit in the form of a single lump-sum payment.
- (ii) Final Distribution Date. The “Final Distribution Date” means the date as of which lump-sum payments will be made to Members, Beneficiaries and alternate payees in connection with the termination of the Plan. Within a reasonable period of time following the Final Distribution Date, the Plan’s remaining benefit liabilities shall be satisfied through payments to the PBGC or through the purchase of a group annuity contract from an insurance company selected by the Retirement Committee.
 - (iii) Window Election Deadline. The “Window Election Deadline” means the earlier of (i) the date that is 60 days after an Eligible Individual initiates the process of commencing benefits under this Section, or (ii) such administrative date as the Retirement Committee may establish in its sole discretion, which shall be no later than the Final Distribution Date.
 - (iv) Window Initiation Period. The “Window Initiation Period” means the period established by the Retirement Committee during which an Eligible Individual may elect to commence his pension pursuant to this Section.
- (b) Payment Options for Eligible Individuals. The following provisions apply to Eligible Individuals who commence their Plan benefits under this Section:
 - (i) Retirement-Eligible Individual. An Eligible Individual who, as of the Final Distribution Date, is eligible, or would be eligible if he or she terminated employment, to commence a normal retirement Pension under Section 5.1, a late retirement Pension under Section 5.2, an early retirement Pension under Section 5.3 or a vested Pension under Section 5.5 (or, with respect to an Eligible Individual covered under Appendix 50, a normal retirement benefit under

Section 5.1(a) of Appendix 50, a delayed retirement benefit under Section 5.1(d) of Appendix 50, an early retirement benefit under Section 5.1(b) of Appendix 50 or a vested retirement benefit under Section 5.6 of Appendix 50) as of the Final Distribution Date, may elect to receive his or her Pension benefit in the form of a lump-sum payment pursuant to this Section or in any form of benefit otherwise available to the Eligible Individual under Section 6.2 (or, with respect to an Eligible Individual covered under Appendix 50, under Section 5.7 of Appendix 50).

- (ii) Non-Retirement-Eligible Individual. An Eligible Individual who, as of the Final Distribution Date, is otherwise not eligible to commence his benefit as of the Final Distribution Date even if he or she terminated employment, may elect to receive his or her Pension benefit in the form of:
 - (A) a lump-sum payment pursuant to this Section,
 - (B) a single life annuity under Section 6.2(a) (or, with respect to an Eligible Individual covered under Appendix 50, under Section 5.7(b)(1) of Appendix 50),
 - (C) if the Eligible Individual is married on the Final Distribution Date, a Qualified Joint and Survivor Annuity, provided this form of distribution will not be available to an Eligible Individual who is a Beneficiary or an alternate payee, or
 - (D) if the Eligible Individual is married on the Final Distribution Date, a 75% joint and survivor annuity under Section 6.2(c) (or, with respect to an Eligible Individual covered under Appendix 50, a qualified optional survivor annuity as described in Section 5.7(b) of Appendix 50) with the Eligible Individual's Spouse as his Beneficiary, provided this form of distribution will not be available to an Eligible Individual who is a Beneficiary or an alternate payee.
- (iii) Spousal Consent Requirements. The election of an Eligible Individual who is a Member to waive the normal form of benefit under Section 6.1(b) (or, with respect to an Eligible Individual covered under Appendix 50, under Section 5.7(a) of Appendix 50) is subject to the Spousal Consent, as described in Section 7.1(a)(ii) (or, with respect to an Eligible Individual covered under Appendix 50, in Section 5.7(a)(2) of Appendix 50).

- (c) Calculation of Benefits.

- (i) Retirement-Eligible Individual. With respect to an Eligible Individual described in subsection (b)(i) hereof, the benefit payable under this Section shall be calculated under the provisions of the Plan that generally apply to the calculation of such benefit, but disregarding any limitation on the amount of lump sums otherwise payable under the terms of the Plan.
 - (ii) Non-Retirement-Eligible Individual. With respect to an Eligible Individual described in subsection (b)(ii) hereof, the benefit payable under this Section shall be of Equivalent Actuarial Value to the Eligible Individual's Accrued Benefit using the actuarial assumptions for calculating lump sums.
- (d) Election Procedures. An Eligible Individual's election to commence benefits under this Section must be made in accordance with procedures established by the Retirement Committee. An Eligible Individual's election to receive payment under this Section must be (i) initiated by the Eligible Individual no later than the last day of the Window Initiation Period and (ii) completed by returning an election form postmarked on or before the Window Election Deadline, unless a later date is required by law due to a delay in the delivery of the election notice to the Eligible Individual. An Eligible Individual who does not notify the Retirement Committee of a change in his or her address by the date established by the Retirement Committee in order for the Eligible Individual to commence a benefit with an Annuity Starting Date on the Final Distribution Date, shall not be eligible to commence his or her benefit under this Section. An Eligible Individual who does not submit a completed election form (including any applicable Spousal Consent) in accordance with this subsection (d) may commence benefits only at the time and in the form determined under the Plan without regard to this Section.

10. Effective as of the close of business on December 31, 2018, Article VI of the Field Container Company, L.P. and Related Entities Pension Subplan of the Consolidated Plan is amended by adding the following new Section 6.13 to the end thereof:

6.13 Special Commencement Right During 2015

Notwithstanding anything in Article IV or Article VI to the contrary, certain individuals may elect to commence their benefits with a Payment Date on the Final Distribution Date (as defined below), in accordance with this Section.

- (a) Definitions. For purposes of this Section, each of the following terms when capitalized has the respective meaning set forth below:
 - (i) Eligible Individual. An "Eligible Individual" is a vested Participant, the Beneficiary of a deceased vested Participant or the alternate payee

under a qualified domestic relations order as defined in Section 414(p) of the Code of a vested Participant, who meets all of the requirements described in Subsections (A) through (C) below:

- (A) The Participant, Beneficiary or alternate payee, as applicable, has not attained his or her Required Beginning Date on or before the Final Distribution Date;
 - (B) The Participant, Beneficiary or alternate payee, as applicable, has not commenced his or her benefit as of an Annuity Starting Date prior to the Final Distribution Date; and
 - (C) No portion of the benefit of the Participant, Beneficiary or alternate payee, as applicable, is subject to a qualified domestic relations order or other lien that is in effect or pending as of the Final Distribution Date and that would prohibit distribution of such benefit in the form of a single lump-sum payment.
- (ii) Final Distribution Date. The “Final Distribution Date” means the date as of which payments will be made to Participants, Beneficiaries and alternate payees in connection with the termination of the Plan. Within a reasonable period of time following the Final Distribution Date, the Plan’s remaining benefit liabilities shall be satisfied through payments to the PBGC or through the purchase of a group annuity contract from an insurance company selected by the Retirement Committee.
- (iii) Window Election Deadline. The “Window Election Deadline” means the earlier of (i) the date that is 60 days after an Eligible Individual initiates the process of commencing benefits under this Section, or (ii) such administrative date as the Retirement Committee may establish in its sole discretion, which shall be no later than the Final Distribution Date.
- (iv) Window Initiation Period. The “Window Initiation Period” means the period established by the Retirement Committee during which an Eligible Individual may elect to commence his pension pursuant to this Section.
- (b) Payment Options for Eligible Individuals. An Eligible Individual may elect to receive his or her Retirement Benefit in the form of a lump-sum payment pursuant to this Section or in any form of benefit otherwise available to the Eligible Individual under Section 6.3. The election of an Eligible Individual who is a Participant to waive the normal form of benefit under Section 6.1(a) is subject to Spousal Consent.

- (c) Calculation of Benefits. The benefit payable under this Section shall be calculated under the provisions of the Plan that generally apply to the calculation of such benefit, but disregarding any limitation on the amount of lump sums otherwise payable under the terms of the Plan.
- (d) Election Procedures. An Eligible Individual's election to commence benefits under this Section must be made in accordance with procedures established by the Retirement Committee. An Eligible Individual's election to receive payment under this Section must be (i) initiated by the Eligible Individual no later than the last day of the Window Initiation Period and (ii) completed by returning an election form postmarked on or before the Window Election Deadline, unless a later date is required by law due to a delay in the delivery of the election notice to the Eligible Individual. An Eligible Individual who does not notify the Retirement Committee of a change in his or her address by the date established by the Retirement Committee in order for the Eligible Individual to commence a benefit with a Payment Date on the Final Distribution Date, shall not be eligible to commence his or her benefit under this Section. An Eligible Individual who does not submit a completed election form (including any applicable Spousal Consent) in accordance with this subsection (d) may commence benefits only at the time and in the form determined under the Plan without regard to this Section.

11. Effective as of the close of business on December 31, 2018, Article VII of the Mid-America Packaging Retirement Subplan of the Consolidated Plan is amended by adding the following new Section 7.14 to the end thereof:

7.14 Special Commencement Right Upon Termination

Notwithstanding anything in Article V, Article VI, or Article VII to the contrary, certain individuals may elect to commence their benefits with an Annuity Commencement Date on the Final Distribution Date (as defined below), in accordance with this Section.

- (a) Definitions. For purposes of this Section, each of the following terms when capitalized has the respective meaning set forth below:
 - (i) Eligible Individual. An "Eligible Individual" is a vested Participant, the Beneficiary of a deceased vested Participant or the alternate payee under a qualified domestic relations order as defined in Section 414(p) of the Code of a vested Participant, who meets all of the requirements described in Subsections (A) through (C) below:
 - (A) The Participant, Beneficiary or alternate payee, as applicable, has not attained his or her Required Beginning Date on or before the Final Distribution Date;

- (B) The Participant, Beneficiary or alternate payee, as applicable, has not commenced his or her benefit as of an Annuity Starting Date prior to the Final Distribution Date; and
 - (C) No portion of the benefit of the Participant, Beneficiary or alternate payee, as applicable, is subject to a qualified domestic relations order or other lien that is in effect or pending as of the Final Distribution Date and that would prohibit distribution of such benefit in the form of a single lump-sum payment.
- (ii) Final Distribution Date. The “Final Distribution Date” means the date as of which payments will be made to Participants, Beneficiaries and alternate payees in connection with the termination of the Plan. Within a reasonable period of time following the Final Distribution Date, the Plan’s remaining benefit liabilities shall be satisfied through payments to the PBGC or through the purchase of a group annuity contract from an insurance company selected by the Retirement Committee.
 - (iii) Window Election Deadline. The “Window Election Deadline” means the earlier of (i) the date that is 60 days after an Eligible Individual initiates the process of commencing benefits under this Section, or (ii) such administrative date as the Retirement Committee may establish in its sole discretion, which shall be no later than the Final Distribution Date.
 - (iv) Window Initiation Period. The “Window Initiation Period” means the period established by the Retirement Committee during which an Eligible Individual may elect to commence his pension pursuant to this Section.
- (b) Payment Options for Eligible Individuals. The following provisions apply to Eligible Individuals who commence their Plan benefits under this Section:
 - (i) Retirement-Eligible Individual. An Eligible Individual who, as of the Final Distribution Date, is eligible, or would be eligible if he or she terminated employment, to commence a Normal or Deferred Retirement Benefit under Section 5.1, an Early Retirement Benefit under Section 5.3 or a Deferred Vested Benefit under Section 6.5 as of the Final Distribution Date, may elect to receive his or her Plan benefit in the form of a lump-sum payment pursuant to this Section or in any form of benefit otherwise available to the Eligible Individual under Section 7.1 or Section 7.2.

- (ii) Non-Retirement-Eligible Individual. An Eligible Individual who, as of the Final Distribution Date, is otherwise not eligible to commence his benefit as of the Final Distribution Date even if he or she terminated employment, may elect to receive his or her Plan benefit in the form of:
 - (A) a lump-sum payment pursuant to this Section,
 - (B) a Life Annuity,
 - (C) if the Eligible Individual is married on the Final Distribution Date, a Qualified Joint and Survivor Annuity, provided this form of distribution will not be available to an Eligible Individual who is a Beneficiary or an alternate payee, or
 - (D) if the Eligible Individual is married on the Final Distribution Date, a 75% Joint and Survivor Annuity under Section 7.2(a) with the Eligible Individual's Eligible Spouse as his Beneficiary, provided this form of distribution will not be available to an Eligible Individual who is a Beneficiary or an alternate payee.
 - (iii) Spousal Consent Requirements. The election of an Eligible Individual who is a Participant to waive the normal form of benefit under Section 7.1(a)(i) is subject to the spousal consent requirements of Section 7.1(b).
- (c) Calculation of Benefits.
- (i) Retirement-Eligible Individual. With respect to an Eligible Individual described in subsection (b)(i) hereof, the benefit payable under this Section shall be calculated under the provisions of the Plan that generally apply to the calculation of such benefit, but disregarding any limitation on the amount of lump sums otherwise payable under the terms of the Plan.
 - (ii) Non-Retirement-Eligible Individual. With respect to an Eligible Individual described in subsection (b)(ii) hereof, the benefit payable under this Section shall be Actuarially Equivalent to the Eligible Individual's Accrued Benefit using the actuarial assumptions for calculating lump sums.
- (d) Election Procedures. An Eligible Individual's election to commence benefits under this Section must be made in accordance with procedures established by the Retirement Committee. An Eligible Individual's election to receive payment under this Section must be (i) initiated by the Eligible Individual

no later than the last day of the Window Initiation Period and (ii) completed by returning an election form postmarked on or before the Window Election Deadline, unless a later date is required by law due to a delay in the delivery of the election notice to the Eligible Individual. An Eligible Individual who does not notify the Retirement Committee of a change in his or her address by the date established by the Retirement Committee in order for the Eligible Individual to commence a benefit with a Payment Date on the Final Distribution Date, shall not be eligible to commence his or her benefit under this Section. An Eligible Individual who does not submit a completed election form (including any applicable Spousal Consent) in accordance with this subsection (d) may commence benefits only at the time and in the form determined under the Plan without regard to this Section.

BE IT FURTHER RESOLVED, that the Retirement Committee has approved this Fourth Amendment to the GPI US Consolidated Pension Plan this 20th day of December, 2018.

GRAPHIC PACKAGING INTERNATIONAL, LLC RETIREMENT COMMITTEE MEMBERS

/s/ Stephen R. Scherger

Stephen R. Scherger

/s/ Carla J. Chaney

Carla J. Chaney

/s/ Brad Ankerholz

Brad Ankerholz

/s/ Debbie Frank

Debbie Frank

/s/ Brian A. Wilson

Brian A. Wilson

SUBSIDIARIES OF THE REGISTRANT

Subsidiary Name	Jurisdiction of Incorporation
Altivity Packaging Grupo, S. de R.L. de C.V.	Mexico
Altivity Packaging Servicios, S. de R.L. de C.V.	Mexico
Bond Project Holdings, LLC	Delaware
Field Container Queretaro (USA), L.L.C.	Delaware
Gbox SA de C.V.	Mexico
Golden Equities, LLC	Colorado
Golden Technologies Company, LLC	Colorado
GPI Funding LLC	Delaware
GPI Holding I, Inc.	Delaware
GPI Holding II, Inc.	Delaware
GPI Holding III, LLC	Delaware
GPI Project, LLC	Delaware
GPI Netherlands Finance B.V.	Netherlands
GPI Scotland Finance LP	UK
GPI Scotland Limited	UK
Graphic Packaging Flexible Canada ULC	Canada
Graphic Packaging Flexible Holdings, LLC	Delaware
Graphic Packaging International (Shanghai) Co., Ltd.	China
Graphic Packaging International Australia Converting Limited	Australia
Graphic Packaging International Australia Pty Limited	Australia
Graphic Packaging International Bardon Limited	UK
Graphic Packaging International Box Holdings Limited	UK
Graphic Packaging International Bremen GmbH	Germany
Graphic Packaging International Canada Corporation	Canada
Graphic Packaging International Canada, ULC	Canada
Graphic Packaging International Cartons Santander, S.A.	Spain
Graphic Packaging International Distribution Limited	UK
Graphic Packaging International do Brasil - Embalagens Ltda.	Brazil
Graphic Packaging International Enterprises, LLC	Delaware
Graphic Packaging International Europe Carton Design Limited	UK
Graphic Packaging International Europe Cartons B.V.	Netherlands
Graphic Packaging International Europe Finance & Real Estate B.V.	Netherlands
Graphic Packaging International Europe Holdings B.V.	Netherlands
Graphic Packaging International Europe Netherlands B.V.	Netherlands
Graphic Packaging International Europe Netherlands Holdings B.V.	Netherlands
Graphic Packaging International Europe N.V.	Belgium
Graphic Packaging International Europe Spain Holding, S.A.	Spain
Graphic Packaging International Europe UK Holdings Limited	UK
Graphic Packaging International Europe UK Limited	UK
Graphic Packaging International Foodservice Europe Ltd	UK
Graphic Packaging International France	France
Graphic Packaging International Gateshead Limited	UK
Graphic Packaging International Holding Company, LLC	Delaware
Graphic Packaging International Holdings Mexico, S. de R.L. de C.V.	Mexico
Graphic Packaging International Ireland Designated Activity Company	Ireland
Graphic Packaging International Japan Ltd.	Japan
Graphic Packaging International Limited	UK
Graphic Packaging International, LLC	Delaware
Graphic Packaging International Mexicana, S. de R.L. de C.V.	Mexico
Graphic Packaging International New Albany, LLC	Delaware
Graphic Packaging International New Zealand Limited	New Zealand
Graphic Packaging International Operadora de Mexico, S. de R.L. de C.V.	Mexico

Graphic Packaging International Partners, LLC	Delaware
Graphic Packaging International Philanthropic Fund	Delaware
Graphic Packaging International S.p.A.	Italy
Graphic Packaging International Servicios, S. de R.L. de C.V.	Mexico
Graphic Packaging International Spain, S.A.	Spain
Graphic Packaging International UK Finance Limited	UK
Graphic Packaging International US Finance LLC	Delaware
Graphic Packaging UK Pension Trustee Company Ltd.	UK
Handschy Holdings, LLC	Delaware
Handschy Industries, LLC	Delaware
New Materials Limited	UK
Print Design & Graphics Limited	UK
PrinTech Systems B.V.	Netherlands
Rengo Riverwood Packaging, Limited	Japan
Riverdale Industries, LLC	Delaware
Riverwood International Pension Trustee Company Ltd.	UK
Shoo 553 Limited	UK
Spur Development, LLC	Delaware

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the Registration Statement (Form S-3 No. 333-219523) and in the related Prospectus of Graphic Packaging Holding Company and in the Registration Statements (Form S-8 No. 333-197677, No. 333-176598, No. 333-162912 and No. 333-149625) of Graphic Packaging Holding Company of our reports dated February 12, 2019, with respect to the consolidated financial statements of Graphic Packaging Holding Company, and the effectiveness of internal control over financial reporting of Graphic Packaging Holding Company, included in this Annual Report (Form 10-K) for the year ended December 31, 2018.

/s/ Ernst & Young LLP

Atlanta, Georgia
February 12, 2019

CERTIFICATION

I, Michael P. Doss certify that:

1. I have reviewed this Annual Report on Form 10-K of Graphic Packaging Holding Company;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, 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;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ Michael P. Doss

Michael P. Doss,
President and Chief Executive Officer
(Principal Executive Officer)
February 12, 2019

CERTIFICATION

I, Stephen R. Scherger certify that:

1. I have reviewed this Annual Report on Form 10-K of Graphic Packaging Holding Company;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, 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;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ Stephen R. Scherger

Stephen R Scherger

Executive Vice President and Chief Financial Officer

(Principal Financial Officer)

February 12, 2019

CERTIFICATION

Pursuant to 18 United States Code Section 1350,

As adopted pursuant to Section 906 of the

Sarbanes-Oxley Act of 2002

The undersigned hereby certifies that, to my knowledge, the Annual Report on Form 10-K for the period ended December 31, 2018 of Graphic Packaging Holding Company (the "Company") filed with the Securities and Exchange Commission on the date hereof fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that the information contained in such report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Michael P. Doss

Name: Michael P. Doss,

Title: President and Chief Executive Officer

February 12, 2019

CERTIFICATION

Pursuant to 18 United States Code Section 1350,

As adopted pursuant to Section 906 of the

Sarbanes-Oxley Act of 2002

The undersigned hereby certifies that, to my knowledge, the Annual Report on Form 10-K for the period ended December 31, 2018 of Graphic Packaging Holding Company (the "Company") filed with the Securities and Exchange Commission on the date hereof fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that the information contained in such report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Stephen R. Scherger

Name: Stephen R. Scherger

Title: Executive Vice President and Chief Financial Officer

February 12, 2019