

Responsibility Report | 2017

PACKAGING CORPORATION OF AMERICA is an ideas and solutions company. As PCA grows and delivers results for our stakeholders, our Packaging division continues to build upon our long history of excellence in designing, engineering and manufacturing corrugated products. Our Boise Paper division delivers Quality You Can Trust™ into offices and homes every day, with an emphasis on the highest level of customer service and operational excellence. Together, we are focused on bringing our strengths, experience and expertise to a growing number of customers across the United States.

The cornerstone of our business is the relationship between PCA customers and PCA people. Our success is made possible by a highly engaged, results-oriented workforce operating in an entrepreneurial culture and is driven by adding value to our customers' businesses.

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EXECUTIVE STATEMENT

June 29, 2018

 Λ elcome to Packaging Corporation of America's first annual Responsibility Report.

We want to share with you and all of our stakeholders comprehensive information about what we manufacture, how we manufacture our products and why. We understand that our business and our products impact many people, especially our stakeholders, and the environment we all share. Packaging Corporation of America (PCA)

has been in business for more than 100 years. We have always been and will always be committed to manufacturing sustainable products and upholding responsible business practices in everything we do. Our actions support our mission to be the leading supplier of packaging and paper solutions for all our customers, while generating the best returns in our industry for our shareholders.

Our primary end-use product is corrugated packaging that serves to safely contain, protect, transport and market goods to businesses and consumers. We design and manufacture custom corrugated packaging in converting operations located throughout the United States. PCA is a vertically integrated company – meaning that we also manufacture the paper (containerboard) that we use to make our boxes. PCA's entire manufacturing process and its products – from trees, to paper, to packaging – are renewable, recyclable and sustainable. Our objective is to be environmentally, socially and economically responsible in how we make and deliver our products.

As we look to the future of our company and the industry in which we participate, current economic forecasts point toward growing demand for



Mark Kowlzan Chairman and CEO

first-use (virgin) fiber in the world – with North America being the primary supplier. In order to meet the needs of our customers and provide a dependable and sustainable source of paper for our packaging operations, PCA announced and began preparing to add virgin fiber containerboard capacity at our mill in Wallula, Washington. This conversion, which began in 2017 and will be complete in 2018, will produce about 400,000 tons per year of kraft linerboard. The Wallula project, along with enhancements at PCA's containerboard mill in DeRidder, Louisiana, will help supply PCA's growth across our packaging business. Notably in early 2017, PCA became the first North American integrated corrugated packaging manufacturer with a large number of full-line operations to achieve Global Food Safety Initiative (GFSI) certification at each of its combining operations. This strategic

accomplishment serves as an example of our dedication to being a leader in food packaging safety for the benefit of our customers and the consumer.

PCA has consistently invested resources and capital to reduce the environmental footprint of our containerboard mills. Our proactive and direct investment has resulted in several sustainable improvements, such as reducing purchased electricity per ton of production by 15%, reducing Greenhouse Gas (GHG) intensity by 33% and continuing to self-generate a significant portion of our electricity requirements. While we are proud of these results, we continue to seek ways to reduce the environmental impact across all of our operations.

Since the founding of our company, we have always believed that we will succeed through our people. PCA is committed to providing a safe work environment for all our employees as well as providing the tools, resources

"We have always been and will always be committed to manufacturing sustainable products and upholding responsible business practices in everything we do."

and training that are required for them to successfully perform their work. We pride ourselves on having a highly-engaged, results-oriented workforce. PCA and our employees also work to support the local communities in which we live and work. We continuously strive to create a

company and maintain a culture that will endure the tests of time and provide products of value, rewarding work and opportunities for future generations.

We are proud of what we have accomplished at PCA. We are very pleased to publish our inaugural responsibility report to our stakeholders and share the progress we have made in doing our part to ensure the long-term health of the resources on which we all depend. Our actions demonstrate our unwavering commitment to sustainable and responsible growth over the long term, which will ultimately benefit all of our stakeholders.

Sincerely,

MAX. Kouf Mark Kowlzan

Chairman and Chief Executive Officer



When you choose Packaging
Corporation of America, you
work with people who do the
right things for each other and
for our customers. We believe
in utilizing the power of strong
collaborative relationships,
bound by the trust we have
earned, to deliver innovative
packaging solutions and an
outstanding service experience.

People • Customers • Trust

102 | GENERAL DISCLOSURES

NAME OF THE ORGANIZATION

Packaging Corporation of America

ACTIVITIES, BRANDS, PRODUCTS, SERVICES

PCA produces paper and packaging products. We operate mills that produce containerboard and white papers, corrugated products manufacturing plants and related operations. The company's two primary business units are "packaging" and "paper."

Our containerboard mills produce kraft linerboard and semi-chemical corrugating medium, which are papers primarily used in the production of corrugated products. Our corrugated products manufacturing plants produce a wide variety of corrugated packaging products, including conventional shipping containers used to protect and transport manufactured goods, multi-color boxes and displays with strong visual appeal that help to merchandise the packaged product in retail locations as well as honeycomb protective packaging. In addition, we are a large producer of packaging for meat, fresh fruit and vegetables, processed food, beverages and other industrial and consumer products.

We manufacture and sell white papers, including both commodity and specialty papers which may have custom or specialized features such as colors, coatings, high brightness and recycled content. White papers consist of communication papers (cut-size office papers and printing and converting papers) and pressure sensitive papers, including release liners which our customers use to produce labels for use in consumer and commercially-packaged products.

LOCATION OF HEADQUARTERS

1955 West Field Court Lake Forest, IL 60045 USA

LOCATION OF OPERATIONS

Substantially all of PCA's operations and employees are located in the United States of America. Therefore, for purposes of this report, we deem our significant operations to be located in the USA, due to our corporate, employee, sales and production footprint.

OWNERSHIP AND LEGAL FORM

Packaging Corporation of America is publicly held. It is incorporated in the State of Delaware, USA, and its common stock is listed on the New York Stock Exchange under the symbol "PKG."

MARKETS SERVED

Paper Customers

As of the end of 2017, PCA has over 180 paper customers in approximately 500 locations. These customers include contract stationers, retailers, online marketplaces, paper merchants, commercial and financial printers, envelope converters and customers who use our pressure sensitive paper for specialty applications such as consumer and commercial product labels. Office Depot represents more than 40% of our white paper volume by revenue.

MARKETS SERVED

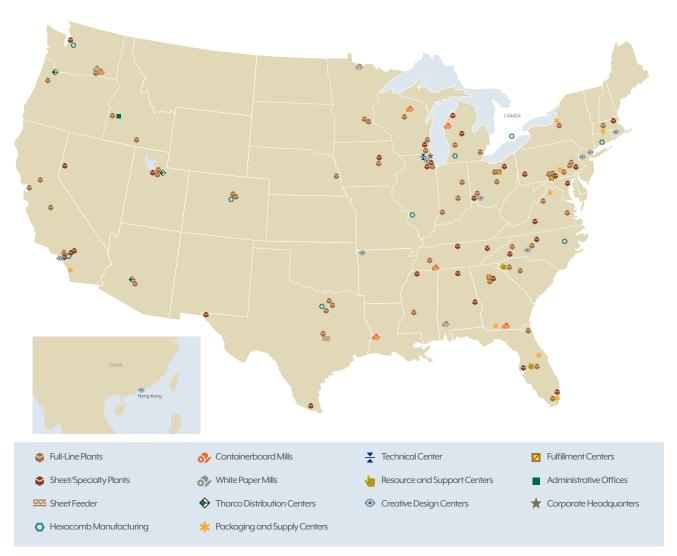
Packaging Customers

PCA operates primarily in the United States and sells corrugated products to over 18,000 customers in more than 35,000 locations. The majority of our corrugated products sales are to regional and local accounts which are broadly diversified across industries and geographic locations. The remainder of our customer base consists primarily of national accounts that have multiple locations and are served by a number of PCA plants. No single customer exceeds 10% of segment sales.

End Use of Corrugated Products in the USA	
Food, beverages and agricultural products	45%
Retail and wholesale trade	22%
Miscellaneous manufacturing	12%
Paper and other products	11%
Chemical, plastic and rubber products	10%

SOURCE: 2016 Fibre Box Association annual report

SCALE OF THE ORGANIZATION



SCALE OF THE ORGANIZATION (CONT.)

Packaging

Our primary packaging products are containerboard and corrugated packaging products.

We currently manufacture containerboard at six mills. In 2017 we produced 3.9 million tons of containerboard. In 2017 we announced plans to cease producing white paper on the W3 paper machine at our Wallula, Washington mill and convert the machine to containerboard production. This conversion will further increase our containerboard production capacity. Our containerboard mills are described below.

Counce. Our Counce, Tennessee mill produces kraft linerboard on two machines.

DeRidder. Our DeRidder, Louisiana mill produces kraft linerboard on its No. 1 machine and linerboard and semi-chemical corrugating medium on its No. 3 machine.

Valdosta. Our Valdosta, Georgia mill produces kraft linerboard.

Tomahawk. Our Tomahawk, Wisconsin mill produces semi-chemical corrugating medium.

Filer City. Our Filer City, Michigan mill produces semichemical corrugating medium.

Wallula. Our Wallula, Washington mill will produce kraft linerboard and semi-chemical corrugating medium. As described above, we are converting the No. 3 machine at the mill from white paper to kraft linerboard after ceasing production of white paper at the mill.

We operate 94 corrugated manufacturing operations, and related facilities to support these operations. Our corrugated manufacturing operations include

corrugated plants which manufacture corrugated sheets and finished corrugated packaging products, sheet plants which procure combined sheets and manufacture finished corrugated packaging products as well as one corrugated sheet-only manufacturer.

White Paper

Our paper business produces uncoated freesheet in the United States, primarily for sale in North America. Brands sold under the BOISE name:

X-9® Multi-use Copy Paper

Aspen® Recycled Paper Line:

Multi-use recycled copy paper Premium recycled laser paper Premium recycled color copy paper

Boise Polaris® Premium Paper Line:

Multipurpose paper

Inkjet paper

Laser paper

Color copy paper

Fireworx® Premium Multi-use Colored Paper

Boise® Opaque and Offset

Boise® Data and Office Label

White Paper Production and Converting:

In 2017 we operated three white paper mills located in the United States. At year end, our total annual white paper capacity was 1.1 million tons. Our bleaching processes are elemental chlorine free (ECF). The following describes our white paper mills:

Jackson. Our Jackson, Alabama mill produces both commodity and premium papers on two paper machines.

International Falls. Our International Falls, Minnesota mill produces both commodity and premium papers on two paper machines.

QUANTITY OF PRODUCTS PROVIDED

PRODUCTION AND SHIPMENTS	2017	2016	2015
Packaging			
Containerboard Production (thousand tons)	3,881	3,736	3,656
Corrugated Shipments (BSF)	56	51	49
White Paper (UFS)			
White Paper (UFS) Production (thousand tons)	1,118	1,127	1,117
Market Pulp Production* (thousand tons)	0	45	96

^{*} On December 1, 2016 PCA ceased production of softwood market pulp at our Wallula, WA Mill and permanently shut down the No. 1 machine.

INFORMATION ON EMPLOYEES AND OTHER WORKERS

Substantially all PCA employees are full time. We use temporary labor, sourced from reputable staffing agencies to help fill short-term needs primarily driven by the need to scale up operations due to customer demand. For example, in our packaging plants, short-term labor is often required due to a surge in customer orders, a customer's need to move up delivery dates, or a need to accommodate labor intensive individual projects such as order fulfillment or assembly.

Very few of our significant operations encounter seasonality or extreme cyclicality in demand that would drive significant or frequent swings in numbers of shifts or other organizational changes that may impact our workforce.

2017 EMPLOYEES	14,631
Gender (US Only)	
Female	16%
Male	84%
Employment Mode	
Full Time	99.85%
Part Time	0.15%
Geographic Location	
USA	99.74%
Canada	0.13%
Hong Kong	0.13%

We derived this information from our internal systems and no material assumptions were required.

SUPPLY CHAIN

While PCA has a broad, national supply chain, it is simple, short and direct. Our mills' primary supply requirements are fiber, energy and chemicals; water is typically sourced on or adjacent to the mill site. Our

packaging operations primary requirements are containerboard (which we produce and, in some instances procure from other producers), as well as corn starch, caustic soda and other chemicals required to combine containerboard into corrugated sheets.

Fiber supply. Fiber is the most significant material required in the manufacturing of containerboard. We consume both first-use, virgin wood fiber and recycled fiber in our containerboard mills. We are able to shift a portion of our fiber consumption between softwood, hardwood and recycled sources. All of our mills utilize first-use (virgin) wood fiber and all of our mills, other than Valdosta, utilize recycled fiber. Our corrugated manufacturing operations generate recycled fiber as a by-product from the manufacturing process, which is consumed by our mills. In 2017 our usage of recycled fiber, net of internal generation, represents 17% (measured as input) of our containerboard production. Sourcing and use of first-use fiber in North America is crucial to support the continuing availability of containerboard and corrugated globally – and enables PCA's provision of renewablysourced packaging solutions. We procure first-use wood fiber through leases of cutting rights, long-term supply agreements, and market purchases, and believe we have adequate sources of fiber supply.

PCA participates in the Sustainable Forestry Initiative® (SFI), the Programme for the Endorsement of Forest Certification (PEFCTM), as well as the Forest Stewardship Council (FSC®), and is certified under their sourcing standards. These standards are aimed at ensuring the long-term health and conservation of forestry resources. Our Aspen line of office papers are certified to meet the Green SealTM Standard GS-7, based on minimum 30% post-consumer content and industry standard performance, attesting to demonstrated effective quality and environmental systems. All of our office papers are USDA Biobased certified.

PCA is committed to sourcing wood fiber through environmentally, socially and economically sustainable practices and promoting resource and conservation stewardship ethics. In 2017 PCA began preparations to extend our certification to FSC beyond White Paper operations – to our woodlands, containerboard mills and fullline packaging plants.

Energy supply. Energy at our packaging mills is obtained through purchased and self-generated fuels and electricity. Fuel sources include natural gas, by-products of the containerboard manufacturing and pulping process (including black liquor and wood waste), purchased wood waste as well as other purchased fuels. Each of our mills self-generates process steam requirements from by-products (black liquor and wood waste) as well as from the various purchased fuels. The process steam is used throughout the production process as well as to generate electricity.

Chemical supply. PCA consumes various chemicals in the production of containerboard, including caustic soda and sulfuric acid. Caustic soda and borax are the predominant chemical needs in our packaging plants. Most of our chemicals are purchased directly from their producers under contracts.

SIGNIFICANT CHANGES TO THE ORGANIZATION

Since January 1, 2017, PCA has acquired two corrugated products facilities located in the United States to further our growth strategy and improve our ability to serve our customers.

PRECAUTIONARY PRINCIPLE OR APPROACH

PCA follows "precautionary approach" when developing and prior to offering new products. We seek to identify potential hazards and risk early in development, such that they can either be eliminated or assuredly managed to a level where they are acceptably mitigated for purposes of our customers, employees, communities and other stakeholders. Sensitivity to the impact that our products and their sourcing/production/provision may have on health, safety and the environment is a key underpinning of our sustainability strategy and objectives.

EXTERNAL INITIATIVES

EcoVadis

Forest Stewardship Council®

MEMBERSHIP OF ASSOCIATIONS

American Forest and Paper Association (AF&PA) National Council for Air & Stream Improvement (NCASI)

American Forest Resource Council National Paper Trade Association (NPTA)

ASTM International North American Forest Partnership

Corrugated Packaging Alliance Programme for the Endorsement of Forest Certification[™] (PEFC[™])

Envelope Manufacturers Association (EMA) Project-UP! Federal Water Quality Coalition Sedex

Fibre Box Association (FBA) Society of American Foresters Forest Resource Association Sustainable Forestry Initiative® (SFI) Forest Stewardship Council® (FSC®) Sustainable Packaging Coalition (SPC)

International Corrugated Case Association Technical Association of Pulp & Paper Industry (TAPPI)

International Corrugated Packaging Foundation (ICPF) The Nature Conservancy

International Safe Transit Association (ISTA) Two-Sides

STATEMENT FROM SENIOR DECISION MAKER

See Executive Statement, starting on page 4.

KEY IMPACTS	FIBER SOURCING	PULP & PAPER MAKING	CONVERTING	SUPPORT, SERVICE	CUSTOMER USE	END-OF-LIFE, RECOVERY
Environment						
Materials						
Energy						
Water						
Biodiversity						
Emissions						
Effluents & Waste						
Environmental Compliance						
Social						
Employment						
Labor Management						
Occupational Health & Safety						
Training & Education						
Diversity & Equal Opportunity						
Local Communities						
Consumer Health & Safety						
Economic						
Economic Performance						
Procurement Practices						

RISKS

For a full description of material risks that PCA sees potential for, please refer to pages 8-13 of PCA's 2017 Annual Report 10-K.

OPPORTUNITIES

As the world continues to develop economically, significant economic, social and environmental changes are inevitable. PCA believes that the combination of the trends we see (listed below) and their outcomes will drive strong and growing interest in sustainable living and development. For PCA, and our customers and prospects in particular, this is a key opportunity. While growing demand for packaging is an obvious outcome, what that packaging is made from and how it is manufactured will be a differentiator. PCA's position and strategy around development of packaging solutions from renewable, first-use wood fiber, manufactured substantially with energy self-supplied from renewable biogenic sources will be advantageous as we strive to be both supplier and employer of choice.

Growing Global Demand/Pressure on Resources

With population growth and positive shifts in income there will also come continuing increases in demand for products and services. Increased global demand will challenge available resources if adjustments in production of packaging, including sourcing of materials and manufacturing energy, are not made.

Urbanization and Ecosystem Impacts

Continuing and worldwide human population migration from rural areas toward, or directly into, cities is resulting in significant land use shifts driven by development with resulting impacts on ecosystems and in land available for human food production.

Concerns Regarding Climate Change

In parallel to the growth of the global middle class, there is growing acknowledgment within the existing middle class of the pressure we humans and our preferred lifestyles are placing on ecosystems. Further, the continuing expansion in use of combustion-powered transportation, and building power, heating and cooling is almost certainly the cause of increased atmospheric CO₂ levels, with resultant worries about climate change, sea-level rise and related. The global population is increasingly focused on the impacts of actions such as usage of fossil fuels on our climate, with impacts such as higher temperatures and rising sea levels.

Demand for Access and Disclosure

The combination of a more educated global population, accompanied by greater availability of information, has resulted in increasing demands for transparency into the values, operations and behaviors of businesses.

Accountability of Business

The increased visibility into how businesses operate accompanied by the ease and scale of communication made possible in an internet and social media era has made it possible for individual citizens to hold entities accountable for their actions (or in-action).

VALUES, PRINCIPLES, STANDARDS AND NORMS OF BEHAVIOR

At PCA, ethics, integrity and lawful conduct are everyone's responsibility. Leadership on these key principles is provided by PCA's executive management team.

All of our employees, including all officers, are required to abide by Statement of Business Principles. Also, separate Codes of Ethics for our executive officers and principal accounting personnel, as well as our directors, are in place to help ensure that our business is conducted in a consistently legal and ethical manner. These documents cover all areas of professional conduct, including employment policies, conflicts of interest, fair dealing and the protection of confidential information, as well as strict adherence to all laws and regulations applicable to the conduct of our business, including competition laws and regulations. The full text of our Statement of Business Principles and the Codes of Ethics are published on the Corporate Governance page of our website.

Communication and Training of Employees on PCA's Business Principles

PCA's approach to communication and understanding of the Statement of Business Principles can be seen in the keystone training element that all managers and virtually all salaried employees are required to take and successfully complete. PCA requires acknowledgment and certification to the Statement of Business Principles as part of the salaried employee on-boarding process and conducts periodic training and re-certification at least every two years.

PCA's compliance program involves training and certification on important areas within the Statement of Business Principles. Examples of topics covered include compliance with competition laws for sales and management employees, compliance with employment policies and regulations, and avoiding conflicts of interest. PCA uses in-person as well as online training modules. Compliance with competition laws is of particular importance. PCA maintains a standalone Antitrust Compliance Guide and conducts training to sales and management personnel at regular intervals to assure compliance.

The company reviews the compliance program objectives and accomplishments at least quarterly with the audit committee of the board of directors.

MECHANISMS FOR ADVICE AND CONCERNS ABOUT ETHICS

If an employee has any question whether a proposed course of action is consistent with the law, the Statement of Business Principles, or any other requirement, they are strongly encouraged to seek guidance before taking any action. In addition to speaking with their direct supervisor and others in the reporting chain, our employees are encouraged to ask Corporate Counsel, the Vice President of Human Resources, or the Chief Financial Officer. Concerns may also be brought to the attention of the Audit Committee of PCA's Board of Directors such as any questions, concerns or complaints our employees may have regarding accounting, internal accounting controls or auditing matters.

Employees may bring concerns to or seek advice on matters involving the Statement of Business Principles or other compliance related matters from supervisors or other designated individuals, such as members of the legal department. Our Employees, Suppliers and Contractors may also communicate concerns confidentially by calling PCA's toll-free, 24-hour help line number: 1-877-643-8722, or electronically at: www.pca.ethicspoint.com

Concerns may also be forwarded by mail to:

Compliance Officer Packaging Corporation of America c/o Corporate Counsel 1955 West Field Court Lake Forest, Illinois 60045

All reports of suspected violations are promptly investigated on a confidential basis to the greatest extent possible. No employee will be subject to reprisal or retaliation for reporting in good faith a suspected violation, and all appropriate steps will be taken to keep confidential the identity of the reporting employee. Full cooperation is expected both from anyone who is suspected or accused of improper conduct and from anyone who makes accusations against someone else.

GOVERNANCE STRUCTURE

PCA is governed by a board of directors. Each director serves a one-year term and stands for election at every annual meeting of stockholders.

The Board has three standing committees which include: Audit, Compensation, as well as Nominating and Governance. The Board elects PCA's Chairperson. PCA's current Chairman and Chief Executive Officer (CEO) is Mark Kowlzan. Our executive officers report to Mr. Kowlzan as CEO. PCA's executive officers are identified in PCA's annual report for 2017, and can be accessed at PCA's 2017 Annual Report 10-K.

Each standing committee is required to be comprised solely of independent directors (that is, directors who do not have a material relationship with PCA other than service as a director). Each committee is governed by a charter, which is available in the Investor Relations section of PCA's website.

Code of Ethics for Directors

As described above, our directors are subject to a Code of Ethics which requires compliance with legal requirements.

Executive Officers and Principal Accounting Personnel Code of Ethics

As described above, our executive officers and principal accounting personnel are subject to a **Code of Ethics**. In addition to provisions relating to compliance with laws and regulations set forth in the Statement of Business Principles, executive officers of PCA and the primary individuals at PCA are directly responsible for financial reporting, must abide by our policies.

ENTITIES INCLUDED IN CONSOLIDATED STATEMENTS

This report includes the entire scope of PCA including all fully-owned subsidiary organizations as listed in PCA's 2017 Annual Report 10-K.

COLLECTIVE BARGAINING AGREEMENTS

Percentage of employees covered by collective bargaining agreements (CBA):

USA	Total	In CBA	%
Salaried	4,750	-	-
Hourly	9,843	6,652	68%
TOTAL	14,593	6,652	46%
(As of 12/31/2017)			

LIST OF STAKEHOLDER GROUPS

Customers **Employees** Shareholders and other capital providers Neighbors (Community Members) Landowners/Timber and Fiber Suppliers Suppliers of other goods and services Company Leadership

IDENTIFYING AND SELECTING STAKEHOLDERS

We identified stakeholders in PCA by determining which groups of people or entities are most likely to be influenced or impacted by our strategy, leadership, operations and behavior.

APPROACH TO STAKEHOLDER ENGAGEMENT

PCA frequently engages with our stakeholders, both in our normal course of business, as well as in executing our strategy of being the supplier, employer, customer, neighbor and investment-of-choice. In preparations prior to creation of this inaugural Responsibility Report, we chose to undertake more formal efforts to capture and analyze input from our stakeholder groups.

As it was not possible in our first year of reporting to accomplish primary and direct research on each of the stakeholder groups, we took different approaches as appropriate to support our materiality analysis. Those approaches in research and analysis of inputs were determined by availability of dependable input and information to support materiality determination for our initial report. For certain stakeholder groups, known good and credible information was readily and publicly available. In these cases, we relied on indirect means of capturing input for purposes of materiality determination. Examples of this approach were in the cases of both customers and shareholders. In the case of shareholders/providers of capital to PCA, we chose to leverage the existing industry-specific research, findings and recommendations of SASB/Bloomberg for our industry. For many of PCA's larger customers, it was possible to deeply research and capture findings from their published statements, policies and existing sustainability/social responsibility reporting.

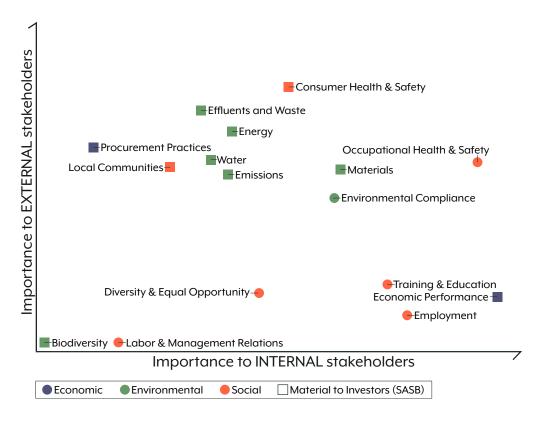
In two other stakeholder situations in 2017 we chose to use proxy-inputs as we had a very high degree of confidence in them. We leveraged the deep and local experience of our foresters for input on topics of greatest importance to landowners/timber providers. We also chose to directly query our employees, for their input on topics and issues of strong interest to the communities in which we operate in. This given that in virtually all cases, our employees are also neighbors of our operations and community members. Looking forward, it is likely that we will continue to invest in direct, primary research with one or two additional stakeholder groups each subsequent year/report.

With the strategic importance we place on our "people," we chose for this first report to focus and invest most deeply in direct stakeholder research on the interests and concerns of our employees as well as our leadership. To assure we fully characterize how our employee stakeholders saw issues and themes, we cast a broad net, surveying and offering opportunities for input to a wide range of employees at six PCA packaging plants. To capture and characterize how the leadership of PCA views various themes, we also chose to directly survey 11 leaders within PCA in a range of functional and business responsibilities.

MATERIAL TOPICS

Our approach to surveying and research involved identifying each of the themes identified by GRI, as well as by SASB. From there we offered the opportunity for each prospective participant to force-rank these themes relative to how they viewed PCA's current or potential influence or impact on them. From the responses we collected, we merged these within their respective stakeholder group; this resulted in a ranking and "score" for each identified and subsequently ranked GRI and SASB topic for that stakeholder group. We then merged on a weighted basis, the results of each stakeholder group into one of two vectors, depending on whether they are internal or external to PCA. Those results were then plotted to allow us to graphically determine which were "material" for the purposes of PCA reporting. Those themes that scored sufficient to be determined as "material" for this purpose are displayed in the graph below.

Material topics Occupational Health & Safety Consumer Health & Safety Materials **Economic Performance Environmental Compliance** Energy Effluents & Waste Training & Education Water **Emissions Employment Local Communities Procurement Practices** Diversity & Equal Opportunity Labor/Management Relations **Biodiversity**



Due to the importance our employees and investors have placed on two topics, we have voluntarily chosen to include disclosure on items that were not considered material under the foregoing analysis.

REPORT CONTENT TOPIC BOUNDARIES, REPORTING PRINCIPLES

Boundaries for topic disclosures were determined based on data relevance, data availability and overall materiality to our stakeholders. Topics' significance were determined for external stakeholders, including customers, suppliers and investors as explained earlier. We surveyed employees across our network to understand importance of several topics to our internal stakeholders. The topics we are reporting on represent evaluation of input from both internal and external stakeholders and includes those of significant importance to either group as well as items of meaningful importance to both.

RESTATEMENTS OF INFORMATION

There are no restatements present within this report.

CHANGES IN REPORTING

This being our first Responsibility Report, there have been no changes in reporting periods, material topics or topic boundaries.

REPORTING PERIOD

This report is based on PCA's Fiscal (Calendar) Year 2017.

DATE OF MOST RECENT REPORT

This is PCA's first Responsibility Report, issued June 29th, 2018. There are no prior/previous reports.

REPORTING CYCLE

PCA currently intends to report each fiscal/calendar year, with reports being released on, or about June 29th of 2019 and each subsequent year.

CONTACT POINT FOR QUESTIONS ABOUT THE REPORT

Please contact:

James Southwell, Director: Product Development, Quality and Responsibility email: responsibility@packagingcorp.com | ph: 1.847.482.2091

CLAIMS OF REPORTING IN ACCORDANCE WITH THE GRI STANDARDS

"This report has been prepared in accordance with the GRI Standards: Core Option"

GRI CONTENT INDEX

Please see our Index, starting on page 46.

EXTERNAL ASSURANCE

We have not provided external assurance for this, PCA's first, Responsibility Report. The information within and the underlying data has undergone thorough internal review.

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ENVIRONMENT

SOCIAL

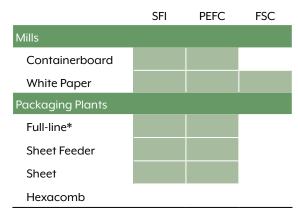
ECONOMIC

301 | MATERIALS

PCA procures significant amounts of fiber from both first-use (virgin) and recaptured sources in the United States and to a limited extent from nearby portions of several Canadian Provinces as feedstock to make our paper and packaging products. Responsible and sustainable procurement of fiber is both a key policy and principle at PCA. This material GRI topic is the only one where our reporting boundaries extend beyond PCA's owned and managed operations and includes supplying entities.

We are committed to promoting and practicing sustainable forestry and responsible wood fiber procurement to meet our customers' needs. The majority of our raw material is wood fiber from both responsibly sourced virgin fiber and recovered paper and packaging sources. PCA maintains our wood fiber procurement program in compliance with the Sustainable Forestry Initiative® (SFI) 2015-2019 Standard Requirements, the Forest Stewardship Council® (FSC®), the Programme for the Endorsement of Forest Certification™ (PEFC™) and recognizes the American Tree Farm System® (ATFS®) individual and group certifications. At a minimum, all PCA manufacturing sites are certified to the SFI® Certified Sourcing Standard. Our Woodlands certification program assures compliance with the certification standards and follow all US applicable laws and regulations.

2017 CHAIN OF CUSTODY CERTIFICATIONS



*Recent acquisition locations McClellan and Kingsburg are not currently certified to Chain of Custody standards but are intended to be audited in 2019. PCA's Hexacomb product is SFI Certified Sourcing only.

PCA is an active member of the National Council for Air and Stream Improvement (NCASI). Among its numerous functions, NCASI conducts primary research for the industry in the areas of forest growth and health, ecological biodiversity and wildlife management issues. This research helps develop and promote industry best practices which are utilized for continued access to sustainable wood fiber throughout North America.

PCA adheres to our internal Sustainable Forestry Policy which clearly communicates our Terms and Conditions for the Purchase of Wood Fiber Goods to our suppliers. Full text can be accessed here.

Our wood management system for the containerboard mills tracks and catalogs all of our wood and fiber sourcing. Prior to delivery, we assure that suppliers are adequately insured and incorporated. Once a company has approval to become a PCA supplier, they must submit a Purchase Order (PO) with all required origin information to be approved for delivery. Once, the PO request is approved, the supplier may deliver their wood fiber goods. PCA Woodlands managers and foresters verify PO information by conducting security checks to confirm origin locations match the submitted PO.

Our packaging plants source containerboard and corrugated sheets. The majority of our containerboard comes from PCA Mills or Trade Partners. To assure our containerboard and sheets come from non-controversial sources, all containerboard sourcing is controlled centrally by our Containerboard Sales department (CBS). Sheet purchases are only allowed from CBS approved vendors.

MATERIALS USED BY WEIGHT OR VOLUME

SOURCING STREAM (UOM)	CONTAINERBOARD	WHITE PAPER	TOTAL
Virgin Fiber (Green Short Tons)	10,836,721	3,470,698	14,307,419
PEFC Certified [†]	31%	15%	
FSC Certified	0%	22%	
TOTAL Certified	31%	37%	
Market Pulp (ADS Tons)	-	2,664	2,664
Recovered Fiber (ADS Tons)	861,160	190,174	1,051,334

[†]Fiber inputs from timberland certified to ATFS and SFI standards, which are endorsed by PEFC.

RECYCLED CONTENT

Moisture content varies between components. Recovered and virgin fiber inputs utilize different metrics for weight thus producing varying moisture content. The following information is a reflection of the average recycled content after conversion (output). PCA's average recycled content for finished products in 2017 was approximately 20% for containerboard, and 11% for white paper.

302 | ENERGY

A substantial amount of energy is required for the manufacture of containerboard and white paper. In the following, we provide information on energy employed across the full range PCA's paper manufacturing, combining and converting operations. We also provide depth and historical context on our pulping and papermaking processes, as they constitute the significant majority of PCA's energy use. Each of our mills selfgenerates process steam requirements from carbon-neutral biomass by-products (black liquor and wood waste), as well as from the various purchased fuels, some of which are also biogenic. The majority of our mills utilize combined heat and power processes in which high pressure steam is routed to on-site turbines to generate electricity. The turbine exhaust steam is then further utilized as process steam (heat source) in both the pulping and papermaking processes.

PCA has made significant investments at our mills to: increase self-supplied energy production capacity utilizing biogenic fuel types, convert fuel sources to lower emitting fuels like natural gas and replace fixed speed electrical drives with variable speed electrical drives to improve efficiency. These investments include significant upgrades to existing equipment and substantial purchases of new equipment.

Our packaging converting operations use mostly purchased electricity and natural gas and account for less than 5% of our total energy requirements. Our full-line packaging plant boilers combust natural gas to supply steam to corrugators, as well as provide building heat. Over the past decade we have transitioned many of our Powered Industrial Trucks for material handling from propane to electric energy sources.

ENERGY CONSUMPTION WITHIN THE ORGANIZATION

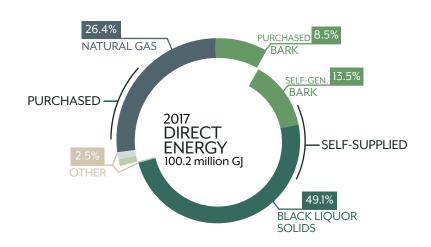
TOTAL ENERGY CONSUMPTION BY LOCATION TYPE



NOTE: For topic disclsoures from 302-306 our Wallula mill is grouped with White Paper Mills. It will be grouped with Containerboard in following years.

Direct Energy comes from fuels that are combusted on-site or within a user application (like burning fuel to propel a car). Energy for this stream can be purchased (natural gas, coal, etc), or self-generated from manufacturing by-products or with on-site generation from renewable sources like solar panels or wind turbines. The greenhouse gas emissions from this type of energy are assigned to Scope 1.

2017 DIRECT ENERGY	(million GJ)	
Biogenic Fuel Sources		
Manufacturing By-products		
Black Liquor Solids	49.20	
Bark	13.49	
Biogas	0.14	
WWTP Residuals	<0.01	
Purchased		
Bark	8.53	
Railroad Crosstie	1.00	
Fossil Fuel Sources		
Natural Gas	26.50	
Tire Derived Fuel	0.79	
Coal	0.07	
Number 4 Fuel Oil	0.07	
Number 2 Fuel Oil	0.04	
Number 6 Fuel Oil	0.01	
On Spec Used Oil	<0.01	
Industrial Equipment Fuel (c	n-site)	
Diesel	0.20	
Propane	0.12	
Gasoline	0.01	
TOTAL	100.17	



Direct Energy data includes all manufacturing. Does not include PCA's Supply Services, Creative Design Centers, Tharco Distribution, BCT Trucking, corrugated operations acquired in 2017, or other administrative type buildings. Mill-specific Higher Heating Values (HHV) were used to calculate energy from bark combustion.

Some natural gas data points for our packaging plants were interpolated, accounting for less than 0.1% of total volume reported.

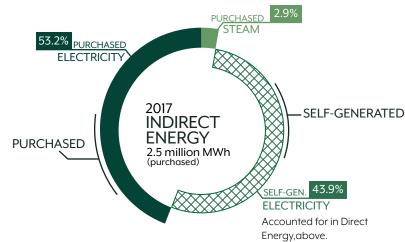
Indirect energy, in this case, is electricity or purchased steam, but the term can be used more broadly. This energy source is secondary, meaning it requires a direct energy fuel source, but is converted into electricity, in most cases using a steam turbine. As mentioned, we self-generate our own electricity, but to avoid double counting, the direct fuel is only reported above, and the graph below is for illustration purposes only. The table below only includes purchased energy. The greenhouse gas emissions from purchased indirect energy are assigned to Scope 2.

2017 INDIRECT ENERGY (million MWh)

Purchased Indirect Energy	
Electricity	2.37
Steam	0.13
TOTAL	2.50

Indirect energy data includes all manufacturing. Does not include PCA's Supply Services, Creative Design Centers, Tharco Distribution, BCT Trucking, plants acquired in 2017, or other administrative type buildings.

Some electricity data points for our packaging plants were interpolated, accounting for 0.2% of total volume reported.



ENERGY INTENSITY

PCA PURCHASED ENERGY EFFICIENCY - CONTAINERBOARD

(DeRidder Mill data starting in 2015)

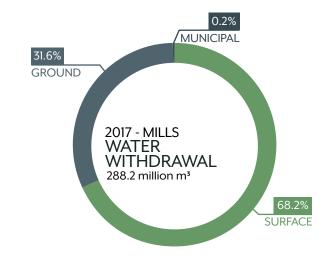


Doing our part: AF&PA Better Practices, Better Planet 2020

GOAL: 10% increase in purchased energy efficiency from 2005 to 2020

303 | WATER

Pulp and paper manufacturing is a water intensive process. While we utilize water at all operating locations, the bulk of our requirements are at our containerboard and paper mills. In addition to the water utilized directly in the pulping and papermaking processes, we also use 'non-contact' water to cool turbines and other manufacturing processes. In almost all instances, the majority of our water supply is drawn from sources nearby operations; individual states issue permits for extracting surface and/or ground water. PCA is required to measure and log the volume extracted with flow meters on site. Much of the water we withdraw and utilize is returned to the environment, after treatment if necessary.



WATER WITHDRAWAL BY SOURCE

2017 WATER WITHDRAWAL	(million m ³)
Surface Water	203.9
Cooling	81.5
Process	121.9
Potable	0.4
Ground Water	83.8
Cooling	14.1
Process	69.4
Potable	0.3
Municipal Water	0.5
TOTAL	288.2

PCA WATER USE - CONTAINERBOARD

(DeRidder Mill data starting in 2015)



GOAL: 12% reduction in pulp and paper mills water use from 2005 to 2020

304 | BIODIVERSITY

PCA's long-term success depends on our commitment to sustainably managing North American forests. We take this responsibility with great care by ensuring our fiber sourcing program is evaluated by rigorous forest certification standards: SFI®, PEFC™, and FSC®. For decades, PCA has worked with family and small-scale landowners providing long-term sustainable forest management applications and education.

The US and Canada are home to many unique forest ecosystems and habitats and have a long history of developing laws, acts and regulations as guidance for forest management practices. PCA acknowledges and follows all US and Canadian governance to help maintain biodiversity integrity in the forest ecosystems managed for fiber procurement. This comprehensive network of US and Canadian laws is one of the major benefits of procuring virgin fiber exclusively from North America. Annually, our corporate forestry staff review the IUCN Red List and other reputable organizations for unacceptable sources or locations of high conservation interest. We then incorporate adjustments into staff training and fiber sourcing procedures. In addition to the IUCN Red List, each US state has published separate Forest and Wildlife Action Plans referencing at a state level, by species or habitat areas that are or may be susceptible to becoming threatened or endangered.

PCA promotes training programs for logging professionals to increase professionalism of sustainable forestry practices during harvest activity, as required by our sustainable forestry standards. PCA is dedicated to applying all mandatory and voluntary state Best Management Practices (BMPs) on all harvest activity to protect the sites biodiversity and conserve the quality of the soil and water in the landscape.

HABITATS PROTECTED OR RESTORED

We believe that in order to stay current in practicing responsible fiber procurement, supporting research and partnering in conservation efforts is a must. Annually, PCA reviews and trains staff on the latest research and conservation priorities to broaden the practice of sustainable forest management. We partner with Forest Resource Association, The Nature Conservancy and NCASI for accomplishing research and conservation.

The forest certification programs we adhere to require and ensure protection from biodiversity loss. The SFI standard, specifically, requires a trained Master Logger or Qualified Logging Professional (QLP) on site during harvest activities and remain up to date on continuing education.

HABITATS IN AREAS AFFECTED BY OPERATIONS

Utilizing NatureServe and state Natural Heritage websites, we check for threatened or endangered species and ecosystem conservation priorities in combination with on the ground inspections (Environmental Impact Assessments) before harvest activity. This enables us to ensure biodiversity constraints are identified and have a plan of action before, during and after management takes place. PCA also adheres to the US laws and regulations outlined below and consults with local and the federal government when necessary.

PCA fully complies with the US Lacey Act, Endangered Species Act and the Clean Water Act. We also fully comply with the Canadian Forestry Act, Timber Regulations, First Nations Land Management Act and Species at Risk Act. PCA is in full conformance with the European Timber Regulations.

305 | EMISSIONS

PCA is one of the larger producers of containerboard, corrugated packaging products and business paper in the United States, this scale requires significant amounts of energy. Much of those energy requirements are met via self-generation, leveraging combustion of current-carbon and biogenic fuels. While doing so creates emissions; their biomass sourcing means that majority do not contribute to PCA's carbon-footprint. Today we track direct (Scope 1) and indirect (Scope 2) emissions at all mills and packaging plants for which we have operational control and apply the most appropriate emission factors to each of the energy sources we track. Biomass combustion (while carbon-neutral) results in net additions of methane and nitrous oxide to the atmosphere. These emissions are therefore included as part of our Scope 1 emissions. Our biogenic CO₂ emissions were 6.46 million metric tons for 2017.

Four years ago, we set out to benchmark our resource utilization at all of our manufacturing locations to better understand our environmental footprint; most specifically GHG emissions. Our mills use biogenic fuel sources specific to our industry, and we wanted to be certain to quantify our impacts appropriately. We partnered with Schneider Electric for two reasons: Firstly, to develop an inventory management plan to assure our impact assessments are both credible and accurate and secondly, for use of their sustainability data management platform, Resource Advisor™(RA).

To further our commitment to data accuracy and completeness, in 2017 we continued work with Schneider Electric to have usage data directly captured for each of our corrugated operations and uploaded into RA. Images of invoices then reside with the data, so every data point is auditable back to its source. In 2018, we will expand the program to additional data streams and include our mills as well.

GREENHOUSE GAS EMISSIONS, DIRECT (SCOPE 1) & INDIRECT (SCOPE 2)

TOTAL GHG EMISSIONS (SCOPE 1 & 2) BY LOCATION TYPE

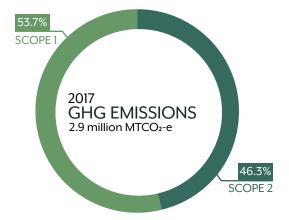




Scope 1 US EPA MRR: Final Rule (40 CFR 98) - Industrial Sector 2013

Scope 2 US EPA eGRID: eGRID 2017 v2 (w/2014 Data)

CH₄ GWP N₂O GWP 298

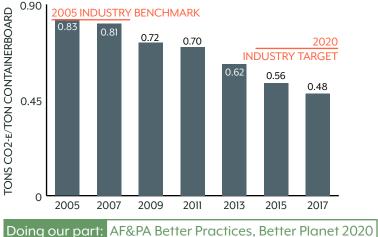


GHG EMISSIONS INTENSITY

"PCA has consistently invested resources and capital to reduce the environmental footprint of our containerboard mills."

PCA GHG INTENSITY - CONTAINERBOARD

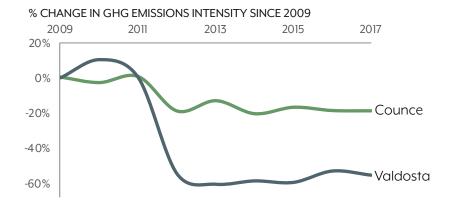
(DeRidder Mill data starting in 2015)



GOAL: 15% reduction in greenhouse gas emissions from 2005 to 2020

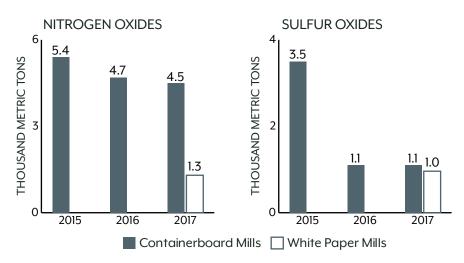
REDUCTION OF GHG EMISSIONS

In 2009 we announced a \$295 million investment at our (then) two linerboard mills, Counce, TN; and Valdosta, GA. The project was completed December 2011. This investment resulted in significant reductions in GHG emissions (scope 1 & 2) per ton of containerboard produced.



AIR EMISSIONS

We calculated nitrogen oxides (NO_x) and sulfur oxides (SO_x) based on emission factors derived from stack testing, and/or from our Continuous Emissions Monitoring Systems (CEMS). These factors are used to calculate our emissions based on the type and volume of fuel we combust.



306 | EFFLUENTS & WASTE

Waste

PCA mills and converting operations avoid sending waste to landfills when possible. When waste diversion is not possible, a majority of our mills own and operate private landfills. These landfills are primarily used to dispose of two higher volume waste byproducts: ash from burning woody biofuels (see energy) and residuals from our process wastewater treatment plants (WWTP). Portions of the waste are also beneficially reused rather than landfilled. At some of our mills, WWTP residuals and wood-fired boiler ash are beneficially used by local farmers as soil amendments to achieve overall better moisture retention and increase the organic matter content of topsoil. Additionally, combustion residuals are used on-site at the mills for roads, building banks for wastewater treatment ponds and at the landfill as cover material. In some instances, where permitted, we dispose of mill construction waste in these landfills.

Our packaging plants recover the vast majority of their corrugated scrap and sell it back to mills as double-lined kraft (DLK), which is considered pre-consumer recycled material.

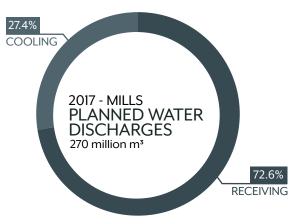
Due to inconsistencies in units of measure and conversions used in current data collection and internal reporting, we are not currently in a position to confidently report 2017 non-recyclable solid waste (to landfill) for our packaging plants. Our 2018 objectives include collection of solid waste disposal invoices to support automated data capturing to assure data consistency. We believe we will be able to report all manufacturing solid waste company-wide for 2018.

Effluents

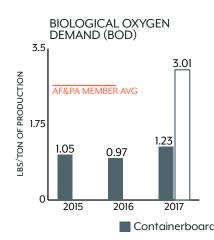
As mentioned previously, PCA withdraws considerable amounts of water at our mills and returns essentially all of it to the environment through evaporation or as wastewater. Wastewater is returned in two primary ways depending on its use at the mill*. Non-contact cooling water (NCCW) is used to cool energy turbines in the warm months and that water is returned without treatment. Process wastewater is treated in an on-site wastewater treatment plant (WWTP) prior to being discharged to a river or lake. Before being received by the WWTP, we measure biological oxygen demand (BOD) and total suspended solids (TSS) on a daily basis and report to state governments monthly to assure we operate within our permit limits.

*Due to geographic location, International Falls operates a covered, activated sludge treatment system which introduces high-purity oxygen, allowing the system to maintain higher levels of dissolved oxygen (DO) than open air systems. Some of the benefits of high DO levels are lower energy requirements, a rapid treatment rate (hours instead of days) and lowered excess solids production. This allows for a portion of the WWTP residuals to be dried sufficiently enough to be combusted as a biofuel. Less than 0.5% of Valdosta's total wastewater is treated before on-site use for irrigation purposes. Valdosta and International Falls both draw municipal water (for sinks, bathrooms, etc.) which is treated by publicly owned treatment works (POTW).

WATER DISCHARGE BY QUALITY AND DESTINATION



"Receiving" is water sent for on-site treatment water which was used in the pulp and papermaking process, treated prior to discharge.

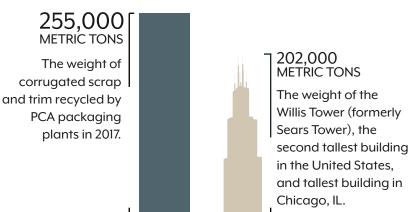




WASTE BY TYPE AND DISPOSAL METHOD



PCA PACKAGING PLANTS RECYCLING



SOURCE: theskydeck.com

307 | ENVIRONMENTAL COMPLIANCE

PCA is committed to being a good steward of the environment. A foundation of our environmental management system is to assure that we fully comply with National, State and local law and other regulations. We employ a dedicated Environmental Department within the umbrella of our EH&S structure and programs, which among other responsibilities, leads to assurance of our compliance.

Every PCA packaging plant and mill has personnel responsible for compliance to applicable federal, state and local laws related to environmental matters. PCA's environmental department provides resources, including best management practices on various subjects such as storm-water, spill response, hazardous waste, universal waste and inspection guidelines and has internally published an environmental policy regarding environmental stewardship.

To assure compliance with applicable laws and standards, and that all permitting is adequately accomplished, the environmental department regularly interacts with our plants and mills and conducts internal audits of all facilities, on a continuous and ongoing cycle. To assure the proper measurements required of any permits and/or agency are communicated in the time-frame allotted and any non-conformances identified in internal audits are resolved PCA uses Velocity EHS, a highly regarded EHS management system. Should any of our sites receive a notice of violation, environmental release or permit exceedance, it is promptly communicated to senior management through our incident reporting system, Origami, concurrent with immediate corrective-action being taken.

NON-COMPLIANCE WITH ENVIRONMENTAL LAW AND REGULATIONS

PCA did not have any material violation of environmental laws in 2017.

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Consumer Health & Safety	416
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ENVIRONMENT

SOCIAL

ECONOMIC

401 | EMPLOYMENT

People are centric to how PCA attracts its customers and their business – and thus to its success. Attracting skilled and engaged employees to join our workforce is therefore a priority. Retaining those that we recruit and develop is also key to our objectives. We strive to be the employer of choice and attempt to treat all employees accordingly, in a Golden Rule work environment.

PCA is proud to be an equal opportunity workplace and is an affirmative action employer. We are committed to equal employment opportunity regardless of race, color, gender, sexual orientation, gender identity or expression, national origin, religion, age, disability, marital status, veteran status, genetic information or any other status protected by law. [Employment]

Employment decisions including hiring, performance appraisals, promotions and discharge are based on an employee's qualifications, skills and performance without regard to race, color, age, national origin, ancestry, religion, religious creed, sex, sexual orientation, gender, gender identity, gender expression, physical or mental disability, medical condition, genetic information, marital or military status or other characteristics covered by Title VII of the Civil Rights Act of 1964 as amended and other applicable federal and state law. PCA will not tolerate discrimination of any employee on such basis. See our <u>Statement of Business Principles</u> for additional information.

NEW EMPLOYEE HIRES AND EMPLOYEE TURNOVER

2017 EMPLOYEE HIRING AND TURNOVER

New Hires	Number	Female	Male
Under 30 years old	660	116	544
30-50 years old	592	124	468
Over 50 years old	308	169	139
TOTAL	1,560	409	1,151

Turnover	Number	Female	Male
Under 30 years old	680	119	561
30-50 years old	769	141	628
Over 50 years old	659	111	548
TOTAL	2,108	371	1,737

BENEFITS PROVIDED TO FULL-TIME EMPLOYEES

PCA provides comprehensive health and welfare benefits to its employees, including participation in medical, dental and vision coverage plans, health and flexible spending accounts, supplemental life insurance, disability coverage and paid vacation. PCA provides medical and parental leave in accordance with U.S. laws.

Examples of PCA benefits:

Health Care

Medical plan that meets Affordable Care Act required for both salaried and hourly employees. Prescription drug, vision and dental plans are also available to many employees. Flexible Spending Accounts are available to many employees.

Life Insurance

Life Insurance at a value equivalent to 1.5 times the employee's annual salary. Business travel insurance is also available to many employees that travel on behalf of PCA.

Retirement Provision

Both salaried and hourly employees covered by a defined contribution plan or defined benefit plan for some hourly employees.

Disability Coverage

Long Term Disability (LTD) plan for salaried and hourly employees.

Parental Leave

Coverage provided by U.S. Family Medical Leave Act (FMLA).

Stock Ownership

Available as an option in several employee thrift plans.

Vacation Days and Holidays

Paid coverage is available to all full-time employees

Employees of PCA's Direct Suppliers

PCA is firmly committed to the fair and equitable treatment of all its employees within a safe, healthy and harassment-free work environment. We also wish to assure similar ethical treatment of all who work for PCA's direct suppliers. PCA has published our expectations, makes them available to all suppliers and incorporates them into our purchasing terms. Please refer to Section 204 within this report for a summary of PCA's expectations of our direct suppliers.

For more information on PCA's approach to further assuring a legal, sustainable and equitable supply-chain, please see PCA's Expectations of Direct Suppliers.

402 | LABOR & MANAGEMENT RELATIONS

Approximately two thirds of our hourly employees work pursuant to collective bargaining agreements. The majority of our unionized employees are represented by the United Steel Workers (USW), the International Brotherhood of Teamsters (IBT), the International Association of Machinists (IAM) and the Association of Western Pulp and Paper Workers (AWPPW). In 2017, we experienced no work stoppages and we believe we have satisfactory labor relations with our employees. For more information, please refer to page 7 of PCA's 2017 Annual Report 10-K.

MINIMUM NOTICE PERIODS REGARDING OPERATIONAL CHANGES

PCA complies with US Law and under the WARN Act, a 60-day advanced notice is provided of any plant closings that are intended to be permanent and involve 100 employees or more. We also provide similar notice timing to any plant closures not covered by the WARN Act.

Other operational changes within PCA operations are addressed in accordance with any collective bargaining agreements in-place at that time/location. These include:

Elimination of a shift or jobs: Bumping rights based on seniority and ability of affected employees may be allowed in union labor contracts.

Weekend Overtime: Union labor contracts require an advanced notice to employees scheduled.

Shift Schedule Changes: Employees to select and change their work shifts may be allowed based on collective bargaining agreements.

Work Week and Work Start Times: Union labor contracts set the start of a work week and the normal work shift schedule.

403 OCCUPATIONAL HEALTH & SAFETY

Employees

Employee safety and health is a top priority at PCA. We support our commitment and invest our efforts accordingly. We approach our occupational health and safety objectives in multiple ways to best assure success; through policy, training, supplying the most appropriate equipment/processes and direct employee engagement.

The company has established a "Corporate Safety Policy" which states our commitment to safety and outlines objectives to minimize hazards and risks in the workplace:

> PCA is committed to providing and maintaining a safe and healthy work environment. As a company, it is our philosophy that accidents are preventable and that an injury-free environment is achievable.

Each manager is responsible for the development and implementation of an effective work system which will achieve an accident-free environment. The company will provide and maintain safe equipment, processes and procedures, and employees will be trained to work in a safe manner.

All employees must be responsible for knowing and complying with safety policies, regulations and rules that apply to their job. Employees must know, understand and demand compliance with the safety laws and regulations that apply to their areas of responsibility. Following these requirements helps ensure not only safety of employees but also the safety of others.

Contractors

PCA utilizes outside contractors to accomplish a variety of work and projects. Contractors are required to perform all work safely and utilize appropriate safety procedures in performing their work, including compliance with applicable PCA safety requirements. All PCA agreements include provisions relating to the safe performance of work by contractors.

WORKERS REPRESENTATION IN FORMAL JOINT MANAGEMENT – WORKERS HEALTH & SAFETY COMMITTEES

Every PCA mill and plant maintains an active safety committee. The committee reports to the general or mill manager. The basic function of the safety committee is to create and maintain interest in health and safety to help reduce accidents and improve safety performance. The committee's objective is to monitor and support activities that promote safe work activities, methods and habits and to assure safe work conditions. Committee members include hourly and supervisory employees with an objective of equal representation.

TYPES OF INJURY AND RATES OF INJURY, OCCUPATIONAL DISEASES, LOST DAYS AND ABSENTEEISM. AND NUMBER OF WORK RELATED **FATALITIES**

All PCA locations must maintain accurate records of injuries and illnesses that may be reviewed by compliance officers when visiting the establishment and for the purpose of posting the annual report of injury and illness experience in the workplace. All occupational injuries and illnesses must be reported to the senior management representative of the location before the end of the work shift or the end of the business day. It is the responsibility of the Mill Manager, General Manager or the highest management representative of the site to ensure all injuries and illnesses are recorded accurately. Monthly injury summary reports are created and distributed to key leaders within PCA. There were zero employee fatalities in 2017.

WORKERS WITH HIGH INCIDENCE OR HIGH RISK OF DISEASES RELATED TO THEIR OCCUPATION

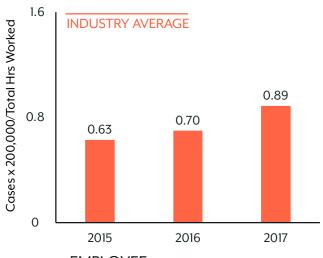
PCA is unaware of either high incidence or highrisk of disease related to current work within our operations.

The environmental, health and safety department will monitor public health communications from the Center for Disease Control (CDC) and World Health Organization (WHO) to ensure timely implementation of contingency plans at each location to mitigate the risks associated with epidemics and pandemics of communicable diseases and to ensure employees have access to timely critical information.

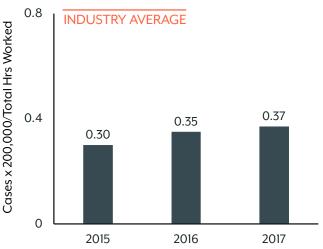
HEALTH & SAFETY TOPICS COVERED IN FORMAL AGREEMENTS WITH **TRADE UNIONS**

Collective bargaining agreements exist with trade unions on a local and global level. These agreements promote the acceptance of responsibility by both parties and the development of a positive health and safety culture.

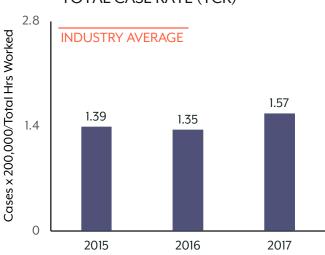
EMPLOYEE DAYS AWAY, RESTRICTED OR TRANSFERED (DART)



EMPLOYEE LOST TIME CASE RATE (LTCR)



EMPLOYEE TOTAL CASE RATE (TCR)



404 TRAINING & EDUCATION

The skills and knowledge of our workforce are among PCA's greatest strengths. Now, more than ever, continuous learning and development are essential. We seek to keep PCA and its employees at the leading edge. We expect that investing in training and education will enhance personal growth while at the same time create value for the larger organization. In doing so, we offer and make available a range of resources to our entire hourly and salaried employee team. We also offer a number of job-specific programs designed to both keep employees current, as well as to enhance their continuing success. PCA provides several educational programs as opportunities to those that have demonstrated both interest and capability to grow in management and leadership roles.

HOURS OF TRAINING AND PROGRAMS PROVIDED

eLearning

Available to all PCA employees, eLearning is a proven solution for enhancing the skills of our employees. Our employees are geographically distributed across the United States. Courseware can be provided across the network without requiring the time investment for travel. The majority of our online learning is available 24/x7; this benefit is available at no cost to PCA learners. Examples include:

Rosetta Stone Online Language Learning: Courseware for 38 languages is available.

Training & Development: A robust selection of courseware, executive summaries and videos on a range of skills and desktop applications. Thousands of assets are available to all PCA employees.

PCA Learning Library: Custom content developed by PCA Subject Matter Experts on a variety of topics. In 2017, over 4,000 PCA employee's recorded 7,450 hours of eLearning training.

2017 eLEARNING

Resources	Total
Books Available	16,804
Skillsoft Courses Available	1,935
Custom Courses Available	376
Other Resources Available	3,487
Videos Available	8,198

Activity and Results	Female	Male	Total
Participating Users	1,157	2,945	4,102
Course Completions	1,874	4,372	6,246
Training Time (hours)			7,450

Career Currency and Development

Online Maintenance Training (TPC): Available for maintenance teams to enhance and develop their skills.

Dimensions of Professional Selling (DPS): A four-day course held in two sessions two to three months apart.

Dimensions of Professional Selling Coaching (DPS Coach): A two-day course for sales managers and general managers to institutionalize the concepts into the culture of PCA.

Leadership Development

Multiple programs have been developed internally to grow the leaders of tomorrow and improve the strengths of our current front-line, functional and general management leaders.

Leadership Excellence and Professionalism (LEaP): Intended for all managers at all plants.

Leadership Development Training (LDT): Intended for those currently demonstrating deep initiative, engagement and promise. Positioned for individuals that may report to GM-level within 2-5 years.

Generational Investment for Tomorrow (GIFT): College recruits or others deeply engaged and demonstrating leadership potential.

Educational Assistance

PCA has established the Educational Assistance Program to support salaried employees develop their capabilities through reimbursement of costs incurred in degree-pursuit programs.

2017 EDUCATIONAL ASSISTANCE

Degree Pursuit	Female	Male	Total
Participation	41	35	76
Contribution			\$374,400

PERFORMANCE AND CAREER DEVELOPMENT REVIEWS

PCA utilizes various formal and informal performance management processes, trainings and development programs to build competence among employees. Employees are evaluated on job performance, including performance against the expected standards of conduct.

405 | DIVERSITY AND EQUAL OPPORTUNITY

PCA's objective is to succeed through our people; doing so requires a successful, engaged, collaborative and productive workforce. Individual, as well as collaborative work and contributions, are essential. We achieve these objectives by developing, promoting and maintaining a culture and environment of respect and inclusion. These principles, as well as our environment, are designed to develop and promote strong and increasing engagement of all PCA employees.

PCA is an equal opportunity workplace and is an affirmative action employer. We are committed to equal employment opportunity regardless of race, color, gender, sexual orientation, gender identity or expression, national origin, religion, age, disability, marital status, veteran status, genetic information or any other status protected by law. Equal Opportunity at PCA

DIVERSITY OF GOVERNANCE BODIES AND EMPLOYEES

2017

			
Board of Directors	Total	Female	Male
30-50 years old	1	0	1
Over 50 years old	10	1	9
TOTAL	11	1	10

PCA's board of directors recently adopted a policy under which it would actively seek out qualified diverse candidates for consideration when seeking new directors.

2017

Officers	Total	Female	Male
	26	4	22
Employees	Total	Female	Male
Under 30 years old	2,341	374	1,967
30-50 years old	7,023	1,123	5,900
Over 50 years old	5,267	843	4,424
TOTAL	14,631	2,340	12,291

PCA maintains policies prohibiting discrimination or harassment on the basis of race, color, age, national origin, ancestry, religion, religious creed, sex, sexual orientation, gender, gender identity, gender expression, physical or mental disability, medical condition, genetic information, marital or military status or other characteristics covered by applicable law. PCA policy also prohibits retaliation against any

individual who has complained of harassment or discrimination or who has cooperated with an investigation of any such complaint.

Please refer to page 4 of our Statement of Business Principles and our annual Equal Opportunity statement.

413 | LOCAL COMMUNITIES

PCA operates in more than 90 communities in the USA. We seek to be a good neighbor in those communities we operate in, as well as the larger, global community. Being a good neighbor is the right thing to do and it fits with our business philosophy of fostering a Golden Rule work environment within all PCA operations. Working collaboratively and driving shared value benefits all.

In many of the communities where our plants and mills are located, PCA is the leading employer, tax payer and customer of local businesses. We also recruit from and contribute back to a range of colleges and universities. PCA engages with and recruits from more than 30 degree-granting institutions including:

Michigan State University	Virginia Tech	University of South Alabama	
North Carolina State	Washington State University	North Dakota State University	
Clemson University	Georgia Tech	Louisiana Tech University	
Miami University of Ohio	University of Tennessee, Knoxville	University of Idaho	
University of Maine	Louisiana State University	University of Duluth, Minnesota	
University of Wisconsin, Stout	Mississippi State	Tennessee Tech University	
Texas A&M	Auburn University	University of Wisconsin, Platteville	
University of Florida	Indiana State University	McNeese State University	
University of Washington	Michigan Tech University	Grand Valley State University	
Florida State University	Central Michigan	College of Lake County	
University of Alabama	University of Louisiana at Lafayette	Lamar University, Texas	
Iron Range Engineering at Minnesota State			

OPERATIONS WITH LOCAL COMMUNITY ENGAGEMENT

Beyond our impact on employment and support of local commerce, PCA (and our people) wish to give-back to our communities. PCA supports a charitable contributions program, as authorized by our chairman and CEO. We support a wide variety of organizations and initiatives including in the areas of education and research, civic and social, health and hospital as well as art and culture.

We are certainly proud to support our communities in a financial sense—in terms of both initiative and effort, but we are most proud of the people of PCA. Employees at virtually every location we operate have taken it upon themselves to initiate or support activities in their local communities.

While it is not possible to list all, what follows is a sampling of where our people have made a difference:

YOUTH

Education

Lake Forest, IL Headquarters supports Ravinia Festival's Reach-Teach-Play Program

Newark, OH Plant participates in "STEMfest!" by showing how STEM topics are applied in industry

I-Falls, MN Mill works with local High School Robotic Team, Partners in Ed., Relay for Life

Newark, OH Plant educates students about CAD Technology at the Ohio State Fair

PCA contributes to AdoptAClassroom.org, Reading Is Fundamental and ProLiteracy America.

Sports/Recreation

Tomahawk, WI Mill hosts annual summer cookout to benefit local youth mentoring program

DeRidder, LA Mill donated \$2150 to the Little League Association

DeRidder, LA Mill participated in Educational Tour Day showing students the paper making process

Counce, TN Mill sponsors local Hall of Fame outreach event

Boise Paper sponsors Project UP™ transforming abandoned urban spaces into community parks.

Under-Resourced

I-Falls, MN Mill assisted Koochiching County schools with Box Tops for Education

I-Falls, MN Mill provides Koochiching County schools with an ongoing contribution of BOISE® paper Counce, TN Mill donates to local schools for various events

Boise Paper supports Box Tops for Education™ to help local schools get needed supplies.

Special Needs

Counce, TN Mill contributes to The Sheltering Tree (a school for autistic children)

Career

Roanoke, VA Plant participated in Virginia Tech Career Day, encouraging University Co-op employment Vincennes, IN Plant provided "Opportunity Knocks - Tour of Opportunity" showing career opportunities

HIGHER EDUCATION

Tomahawk, WI Mill annually provides two \$2,000 UW Stevens Point Pulp and Paper Scholarships Roanoke, VA Plant hosts students from Virginia Tech for annual tour/social day Golden Valley, MN Plant awards five \$1,000 scholarships for Stout, WI to local students Counce, TN Mill donates \$32,000 to Pulp and Paper Foundation Fund at North Carolina State DeRidder, LA Mill donates scholarships to six local high schools

DISASTER RELIEF

DeRidder, LA Mill assists with Hurricane Harvey relief

CHARITABLE ORGANIZATIONS

Huntsville, AL Plant donates to American Red Cross

Boise Paper provides office paper to the Red Cross so donations can be used for humanitarian efforts.

Boise Paper partners with Arbor Day

PCA annual fundraising for Toys-for-Tots through employee activities and corporate gifts

Lake Forest, IL Headquarters raises money for breast cancer awareness

lacksonville, FL Plant works closely with Rotary International

Tomahawk, WI Mill donated \$15,000 to local charities with their Stainless Steel Recycling Program

I-Falls, MN Mill employees and families raised \$2,480 for Salvation Army, PCA donated \$5,000 match

DeRidder, LA Mill hosted United Way event

Counce, TN Mill annually funds Christmas gifts for underprivileged children

COMMUNITIES (GENERAL)

Huntsville, AL Plant takes part in Tinsel Trail: promoting local cultural, social and economic vitality Chicago, IL Plant donates corrugated board to Glen Ellyn Park District Cardboard Boat Regatta Edmore, MI Plant partners with MMI to teach manufacturing skills to workers

Filer City, MI Mill had two young engineers participate in the Manistee Area Leadership Program Counce, TN Mill sponsors school and church outreach events

OPERATIONS WITH NEGATIVE IMPACTS ON LOCAL COMMUNITIES

PCA is not aware of any current operations that pose actual or potential, material negative impact on the communities in which we operate in.

416 | CONSUMER HEALTH & SAFETY

A significant amount of packaging that PCA creates goes to contain, protect and distribute food, beverage, personal care and pharmaceutical products. We believe serving our customers and the consumers who purchase from them comes with significant responsibility. First and foremost, that we do everything we reasonably can to support the health and safety of the ultimate consumer of the products carried in PCA packaging.

We have invested early on and significantly to assure that our products, as well as the feedstock and processes used to produce them, are safe. This began nearly 10 years ago with PCA's move to implement and to inspect to good manufacturing processes at all full-line plants. As early as 2011, we committed ourselves to developing and implementing an end-to-end product safety management system. We determined that the Global Food Safety Initiative (GFSI) would provide an opportunity to build management systems that would be not only be effective but also externally assured, credible and universally accepted.

PCA implemented SQF (one of the GFSI-benchmarked standards), in a proof-of-concept, at our Colby WI location. Over the next four years, we researched and created management systems and support procedures so best practice could be replicated and assured to be self-regulating at each of our operations, regardless of geographic location, markets or customers served; we chose to audit to the FSSC22000 standard. By January 2017 we had successfully implemented these systems and had audited to the rigorous FSSC22000 standard for packaging at each of our full-line (combining and converting) plants, with the exception of then, recent, acquisitions.

In doing so, PCA became the first North American Integrated Corrugated Packaging producer with a large number of combining locations to have accomplished FSSC22000 GFSI certification system wide.



PCA Supports the Global Food Safety Initiative





Colby, WI (SQF) Morganton, NC Denver, CO Grandville, MI Honea Path, SC Syracuse, NY Los Angeles, CA Marshalltown, IA Reading, PA Lancaster, PA Jackson, TN Garland, TX Plano, TX San Lorenzo, CA Milwaukee, WI Arlington, TX Harrisonburg, VA Salt Lake City South, UT Waco, TX Ashland, OH Jacksonville, FL Winter Haven, FL Gas City, IN Lithonia, GA Seattle, WA

Golden Valley, MN Richmond, VA Chicago, IL Newberry, SC Atlanta, GA Omaha, NE Salem, OR Phoenix, AZ Salisbury, NC Nampa, ID Northampton, MA Middletown, OH Burley, ID Trexlertown, PA Plymouth, MI Burlington, WI Pearl, MS Salt Lake City North, UT

Wallula, WA

Vincennes, IN

Newark, OH

Cheswick, PA

Minneapolis, MN

Denver East, CO

New Oxford, PA

ASSESSMENT OF THE HEALTH AND SAFETY IMPACTS OF PRODUCT AND SERVICE **CATEGORIES**

As mentioned earlier, we view our role in the health and safety of the consumer purchasing the packaged products to be of the utmost importance. This begins with assuring that the materials we produce are compliant with statutory and regulatory law and are fit for intended use. PCA invests in a robust product stewardship function to assure these objectives. This ensures the cleanliness, health and safety of the materials we combine and convert into packaging.

A crucial second component of our strategy is our product safety management systems, established and maintained at each full-line packaging operation. The foundation of these systems is based on hazard analysis and critical control points (HACCP) driving us to review and understand every process we employ, relative to the safety of our products. End-to-end, all encompassing and exhaustive efforts go into identifying any potential hazards and subsequently into quantifying any risks present in our processes. The ultimate objective being to remove or to well-manage any risk. The end result is assurance that we have built health and safety expectations into our products. By doing so, both our customers and the consumer know that every effort has been made to support food safety.

INCIDENTS OF NON-COMPLIANCE CONCERNING THE HEALTH AND SAFETY **IMPACTS OF PRODUCTS AND SERVICES**

PCA did not have any incidents of non-compliance with product safety regulations or material instances noncompliant with voluntary product safety codes in 2017.

Economic Performance 201 Procurement Practices 204

ENVIRONMENT

SOCIAL

ECONOMIC

201 | ECONOMIC PERFORMANCE

PCA strives to generate industry-leading returns and maintain a balanced and disciplined capital allocation strategy for the benefit of its shareholders. PCA has a history of strong financial performance and encourages all stakeholders of PCA to read our annual reports which are available at PCA Annual Reports. We believe that strong financial controls policy and execution are essential and have included key policies following:

Financial Controls and Records Policy

PCA's principal executive officer and principal financial officer must certify guarterly in PCA's periodic financial reports as to PCA's financial statements, internal controls and disclosure controls and procedures, including as to the fair presentation of the financial information included in those reports. PCA maintains a system of internal controls over financial reporting that 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 its assets; (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 are being made only with proper authorizations; 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. PCA's internal policies are also designed to ensure the timely reporting of material information.

Executive officers of PCA and the primary individuals at PCA directly responsible for financial reporting, must comply with the Code of Ethics for Executive Officers and Principal Accounting Personnel. Our Code of Ethics can be accessed at **Executive Ethics**.

DIRECT ECONOMIC VALUE GENERATE AND DISTRIBUTED

All information presented below is derived from PCA's audited financial statements included in PCA's 2017 Annual Report 10-K.

Economic Performance

(dollars in millions)

ITEM	2017	2016	2015
Direct Economic Value Generated			
Net Sales	6,444.9	5,779.0	5,741.7
Economic Value Distributed			
Cost of Sales, including Wages	(4,972.7)	(4,503.3)	(4,533.7)
Selling, Administrative and Other Expenses	(541.0)	(495.4)	(458.0)
Payments to Providers of Capital - Interest	(102.6)	(91.8)	(85.5)
Payments to Providers of Capital – Dividends ¹	(237.6)	(216.1)	(200.8)
Payments to Governments – Income Taxes ²	(298.7)	(222.1)	(238.3)
Economic Value Retained	292.3	250.3	225.4

¹Reflects actual dividends paid during the year

² Reported on a cash basis to exclude the effect of deferred taxes.

FINANCIAL IMPLICATIONS, RISKS AND OPPORTUNITIES DUE TO CLIMATE CHANGE

We recognize and appreciate our stakeholders' concerns regarding climate change and risks that companies may face. A preliminary investigation and analysis on the subject leads us to believe that any risks to PCA in the short and intermediate term are not material. Despite our not having identified material risk, PCA has made significant investments in use of renewable feedstocks and manufacturing with renewable energy. Detail on the investments and the advances that have come from them are detailed in the Emissions section.

DEFINED BENEFIT PLAN OBLIGATIONS AND OTHER RETIREMENT PLANS

PCA operates several retirement plans for the benefit of its salaried and hourly employees. They include defined benefit plans and defined contribution plans.

Defined Benefit Plans

PCA has defined pension benefit plans for both salaried and hourly employees. The plans covering salaried employees are closed to new entrants with only certain current active grandfathered participants still accruing benefits. The plans covering certain hourly employees are closed to new participants.

Obligations and Funded Status of Defined Benefit Pension and Other Postretirement Benefits Plans: The funded status of PCA's plans change from year to year based on the plan asset investment return, contributions, benefit payments, the discount rate used to measure the liability and expected participant longevity. For additional information regarding the obligations and funded status of our plans, please see the Employee Benefit Plans and Other Postretirement Benefits footnote included in our annual report's Benefit Plans and Postretirement Benefits.

Defined Contribution Plans

Some of our employees participate in contributory defined contribution savings plans; available to most of our salaried and hourly employees. The defined contribution plans permit participants to make contributions by salary reduction pursuant to Section 401(k) of the Code. PCA makes employer matching contributions and additional contributions to the plans of employees who are not eligible to participate in the defined benefit plans. PCA made contributions of \$65.2 million, \$55.3 million and \$50.3 million in 2017, 2016, and 2015, respectively. For additional information regarding our defined contribution plans, please see the Employee Benefit Plans and Other Postretirement Benefits footnote included in our annual report's Benefit Plans and Postretirement Benefits and our SEC Form 11-K's [PCA Form 11-K].

FINANCIAL ASSISTANCE FROM GOVERNMENT

The Company received \$3.6 million in tax credits in 2015. For additional information, please see the Other Expense, Net footnote included in our annual reports [PCA Form 11-K].

204 | PROCUREMENT PRACTICES

PCA seeks to purchase on value; as this in turn best enables us to provide the value in our products that our customers both seek and appreciate. PCA recognizes the value of long-term sound business relationships with its vendors. Through this relationship, vendors are expected and required to provide quality goods and services which meet business requirements at a fair competitive price. We seek relationships with our suppliers based on mutual benefit, high and dependable performance and a joint commitment to continuous improvement. PCA will ensure that all purchased goods and services meet our business requirements.

We expect ourselves and our suppliers to operate ethically and to comply with all applicable laws and regulations.

In carrying out their duties and responsibilities, PCA employees are expected to promote fair dealing by PCA and its employees and agents with customers, suppliers, competitors and employees. No one should take unfair advantage of anyone through manipulation, concealment, abuse of privileged information, misrepresentation of material facts or any other unfair-dealing practice. See page 8 of our Statement of Business Principles. All PCA employees (not just those in the purchasing function) involved in the purchasing decision must maintain professional integrity in their dealings with qualified PCA vendors. See page 12 of our <u>Statement of Business</u> Principles.

PCA recognizes that the California Transparency in Supply Chains Act of 2010 requires manufacturers and certain others that do business in California to publicly disclose their efforts to eradicate slavery and human trafficking from their supply chains. Most of our raw materials are sourced in the United States of America and almost all of our manufacturing activities are conducted in the U.S. We believe the risk of slavery or human trafficking in our supply chain is low and we have taken various steps to assess and reduce risks in our supply chain including: risk assessment, further risk monitoring (ongoing) and additional efforts. [Transparency in Supply Chains Act]

PROPORTION OF SPENDING ON LOCAL SUPPLIERS

PCA operates a vertically integrated nationwide network of mills, converting facilities and related sales and support functions. We provide containerboard, business paper and packaging solutions throughout the country. PCA defines all mills and all domestic plants to be significant locations of operation. As such, we consider the contiguous 48 states to be "local" for purposes of the activities of our "significant locations of operation."

We estimate PCA's spend on suppliers that are domestic/local to our significant locations of operation to be in excess of 94% for 2017.

PCA's Expectations of our Direct Suppliers

PCA is firmly committed to the fair and equitable treatment of all its employees within a safe, healthy and harassment-free work environment. We also expect ethical treatment of all who work for PCA's direct suppliers. PCA has published expectations, makes them available to all suppliers and incorporates them into our purchasing terms. See <u>PCA's Expectations of Direct Suppliers</u>.

Once we determine a good fit with a supplier or business partner, we execute an agreement that not only provides the key commercial requirements but also specifically incorporates our social responsibility and sustainability expectations. For example, we include provisions on child labor and worker safety. We will work toward having these responsibility and sustainability expectations present in all agreements with suppliers and business partners. By inclusion in our agreements, we may also conduct compliance audits. We will apply a riskbased approach to determine which (if any, and when) suppliers are subject to audit by our internal procurement or other audit resources.

Social Responsibility and Sustainability Expectations (Supply Agreement Provisions)

In addition to complying with all laws and regulations, suppliers must comply with our requirements on the following key concerns in connection with the goods and services provided to PCA. Please read the following document for complete requirements and expectations. PCA's Expectations of Direct Suppliers

Forced Labor Harassment and Abuse Disciplinary Procedures Child Labor

Third-Party Representation **Business Integrity**

Discrimination Working Hours and Compensation Environmental Sustainability

Safety and Health

For more information on PCA's approach to further assuring a legal, sustainable and equitable supply chain, please see PCA's Expectations of Direct Suppliers.

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MASTER DATA TABLE

ENVIRONMENT		2017
MATERIALS - WOOD FIBER SOURCING		
Virgin Fiber Sourced for Containerboard	Green Short Tons	10,386,721
Recovered Fiber Sourced for Containerboard	Air Dried Short Tons (ADST)	861,160
Virgin Fiber Sourced for White Paper	Green Tons	3,470,698
Market Pulp Sourced for White Paper	ADST	2,664
Recovered Fiber Sourced for White Paper	ADST	190,174
Total Virgin Fiber Sourced	Green Short Tons	14,307,419
Market Pulp Sourced for All Products	ADST	2,664
Recovered Fiber Sourced for All Products	ADST	1,051,334
Percent by Weight of Containerboard Virgin Fiber Certified		31%
Percent by Weight of White Paper Virgin Fiber Certified		37%
ENERGY		
Direct Energy from Black Liquor Solids (manufacturing by-product)	million GJ	49.20
Direct Energy from Self-generated bark (manufacturing by-product)	million GJ	13.49
Direct Energy from Biogas (manufacturing by-product)	million GJ	0.14
Direct Energy from WWTP Residuals (manufacturing by-product)	million GJ	<0.01
Direct Energy from Purchased Bark	million GJ	8.53
Direct Energy from Railroad Crossties	million GJ	1.00
Direct Energy from Natural Gas	million GJ	26.50
Direct Energy from Tire Derived Fuel	million GJ	0.79
Direct Energy from Coal	million GJ	0.07
Direct Energy from Number 4 Fuel Oil	million GJ	0.07
Direct Energy from Number 2 Fuel Oil	million GJ	0.04
Direct Energy from Number 6 Fuel Oil	million GJ	0.01
Direct Energy from On Spec Used Oil	million GJ	<0.01
Diesel Used for Industrial Equipment Fuel (on-site)	million GJ	0.2
Propane Used for Industrial Equipment Fuel (on-site)	million GJ	0.12
Gasoline Used for Industrial Equipment Fuel (on-site)	million GJ	0.01
Total Manufacturing by-products fuel for Direct Energy	million GJ	62.83
Total Purchased Fuel for Direct Energy	million GJ	37.34
Grand Total of Direct Fuel Used	million GJ	100.17
Electric Power Purchased	million MWh	2.37
Steam Purchased	million MWh	0.13
Purchased (Indirect) Energy Total	million MWh	2.50
Percent of Direct Energy from Purchased Bark		8.5%
Percent of Direct Energy from Self Generated Bark		13.5%
Percent of Direct Energy from Black Liquor Solids		49.1%

Percent of Direct Energy from Natural Gas		26.4%
Percent of Direct Eergy from Self-Generated other Bio.		0.1%
Percent of Direct Energy from Purchased Bio.		1.0%
Percent of Direct Energy from Other Sources		1.3%
Percent of Indirect Energy from Purchased Electricity		53.2%
Percent of Indirect Energy from Self-Generated Electricity		43.9%
Percent of Indirect Energy from Purchased Steam		2.9%
Percent of Total Energy Consumed at Containerboard Mills		63%
Percent of Total Energy Consumed at White Paper Mills		33%
Percent of Total Energy Consumed at Packaging Plants		4%
Percent of Energy Purchased		56.10%
WATER WITHDRAWAL		
Surface Water Withdrawn for Containerboard	cubic meters	82,300,954
Ground Water Withdrawn for Containerboard	cubic meters	76,707,599
Municipal Water Withdrawn for Containerboard	cubic meters	340,990
Total Water Withdrawn for Containerboard	cubic meters	159,349,544
Surface Water Withdrawn for White Paper	cubic meters	121,589,761
Ground Water Withdrawn for White Paper	cubic meters	7,109,003
Municipal Water Withdrawn for White Paper	cubic meters	155,492
Total Water Withdrawn for White Paper	cubic meters	128,854,256
Total Surface Water Withdrawn at Mills	cubic meters	203,890,715
Total Ground Water Withdrawn at Mills	cubic meters	83,816,603
Total Municipal Water Withdrawn at Mills	cubic meters	496,482
Grand Total of Water Withdrawn	cubic meters	288,203,800
Percent of Total Water Withdrawal from Surface Water at Mills		68.2%
Percent of Total Water Withdrawal from Ground Water at Mills		31.6%
Percent of Total Water Withdrawal from Municipal Water at Mills		0.2%
EMISSIONS		
Total GHG Emissions	MTCO2-e	2,895,870
GHG Emissions at Containerboard Mills	MTCO2-e	1,631,035
GHG Emissions at White Paper Mills	MTCO2-e	924,986
GHG Emissions at Packaging Plants	MTCO2-e	339,849
Scope 1 Emissions	MTCO2-e	1,556,015
Scope 2 Emissions	MTCO2-e	1,339,855
GHG Emissions intensity for Containerboard Mills	ton of CO2-e/ton of containerboard	0.48
Air Emissions, Nitrogen Oxides at Containerboard Mills	metric tons	4,470
Air Emissions, Nitrogen Oxides at White Paper Mills	metric tons	1,341
Air Emissions, Nitrogen Oxides, all Mills	metric tons	5,811
Air Emissions, Sulfur Oxides at Containerboard Mills	metric tons	1,064
Air Emissions, Sulfur Oxides at White Paper Mills	metric tons	961

Air Emissions, Sulfur Oxides, all Mills	metric tons	2,025
Percent of Total GHG Emissions from Containerboard Mills		56%
Percent of Total GHG Emissions from White Paper Mills		32%
Percent of Total GHG Emissions from Packaging Plants		12%
Percent of GHG Emissions Scope 1		53.7%
Percent of GHG Emissions Scope 2		46.3%
EFFLUENT AND WASTE		
Effluent Flow	gallons/ton of containerboard	7,517.0
Total Planned Water Discharges at Mills	cubic meters	270,000,000
Biological Oxygen Demand (BOD) at Containerboard Mills	lbs/ton of production	1.23
Biological Oxygen Demand (BOD) at White Paper Mills	lbs/ton of production	3.01
Total Suspended Solids (TSS) at Containerboard Mills	lbs/ton of production	1.93
Total Suspended Solids (TSS) at White Paper Mills	lbs/ton of production	5.36
Total Waste Disposed at Mills	metric tons	451,236
Waste Disposed at Landfill	metric tons	201,487
Beneficial Reuse - Applied to Land	metric tons	195,775
Beneficial Reuse - Recycled	metric tons	53,975
Percent of Planned Water Discharges at Mills from Cooling		27.4%
Percent of Planned Water Discharges at Mills from Receiving		72.6%
Percent of Total Waste Disposed at Mills Sent to Landfill		44.6%
Percent of Total Waste Disposed at Mills Applied to Land		43.4%
Percent of Total Waste Disposed at Mills Recycled		12.0%
SOCIAL		2017
EMPLOYEES		
Total Employees		14,631
Total Salaried Employees		4,750
Total Hourly Employees		9,843
Total Hourly Employees Covered by Collective Bargaining Agreemen	ts (CBA)	6,652
Total Employees in Collective Bargaining		6,652
Hourly Employees in CBA as % of Total Hourly Employees		68%
Total Percentage in CBA		46%
Percentage of Female Employees		16%
Percentage of Male Employees		84%
Percentage of Full Time Employees		99.85%
Percentage of Part Time Employees		0.15%
Percentage of Employees in USA		99.74%
Percentage of Employees in Canada		0.13%
Percentage of Employees in Hong Kong		0.13%

NEW HIRES AND TURNOVER		
Total New Hires - Females		409
Total New Hires - Males		1,151
Total New Hires Under 30 Years Old		660
Total New Hires 30-50 Years Old		592
Total New Hires Over 50 Years Old		308
Grand Total New Hires in 2017		1,560
Total Turnovers - Females		371
Total Turnovers - Males		1,737
Total Turnover of Employees Under 30 Years Old		680
Total Turnover of Employees 30-50 Years Old		769
Total Turnover of Employees Over 50 Years Old	,	659
Grand Total of Employees Terminated in 2017		2,108
Employee Turnover Rate		14.50%
OCCUPATIONAL HEALTH AND SAFETY		
Total Employee Case Rate		1.57
DART		0.89
LTCR		0.37
Employee Fatalities		0
TRAINING - eLEARNING		
eLearning Books Available		16,804
eLearning Skillsoft Courses Available		1,935
eLearning Custom Courses Available		376
Other eLearning Resources Available		3,487
eLearning Videos Available		8,198
Female Participating eLearning Users		1,157
Female eLearning Course Completions		1,874
Male Participating eLearning Users		2,945
Male eLearning Course Completions		4,372
Total Participating eLearning Users		4,102
Total eLearning Training Time	hours	7,450
Total eLearning Course Completions		6,246
Female Employee Participation in Degree Pursuit Program		41
Male Employee Participation in Degree Pursuit Program		35
Total Participation in Degree Pursuit Program		76
Total Contribution for Degree Pursuit Program	US dollars	\$374,400
DIVERSITY		
Number of Female Employees Under 30 Years Old		374
Number of Female Employees 30-50 Years Old		1,123
Number of Female Employees Over 50 Years Old		843

Total Number of Female Employees		2,340
Number of Male Employees Under 30 Years Old		1,967
Number of Male Employees 30-50 Years Old		5,900
Number of Male Employees Over 50 Years Old		4,424
Total Number of Male Employees		12,291
Total Number of Employees Under 30 Years Old		2,341
Total Number of Employees 30-50 Years Old		7,023
Total Number of Employees Over 50 Years Old		5,267
Percent of Total Employees Under 30 Years Old and Female		2.6%
Percent of Total Employees 30-50 Years Old and Female		7.7%
Percent of Total Employees Over 50 Years Old and Female		5.8%
Percent of Total Employees Under 30		16%
Percent of Total Employees 30-50 Years Old		48%
Percent of Total Employees Over 50 Years Old		36%
Total Number on Board of Directors		11
Number of Female Board of Directors members		1
Number of Board of Directors 30-50 Years Old		1
Percent of Total Board of Directors who are Female		9%
Perecent of Total Board of Directors 30-50 Years Old		9%
Total Number of Officers		26
Total Number of Female Officers		4
Percent of Total Officers who are Female		15%
ECONOMIC PERFORMANCE		2017
Direct Economic Value Generated - Net Sales	millions of dollars	\$6,444.90
Costs/Wages	millions of dollars	\$(4,972.70)
Selling and Administrative Expenses	millions of dollars	\$(541.00)
Payments to Providers of Capital - Interest	millions of dollars	\$(102.60)
Payments to Providers of Capital - Dividends ¹	millions of dollars	\$(237.60)
Payments to Governments - Taxes ²	millions of dollars	\$(298.70)
Total Economic Value Retained	millions of dollars	\$292.30
Reflects actual dividends paid during the year		
² Reported on a cash basis to exclude the effect of deferred taxes.		
PRODUCTION AND SHIPMENTS	UOM	
Containerboard Production	thousand tons	3,881
Corrugated Shipments	billion square feet (BSF)	56
White Paper (UFS) Production	thousand tons	1,118

GLOSSARY

ADS Tons – Air Dried Short Tons. Pulp is generally reported as an air-dried product that is assumed to be 10% water and 90% dry pulp.

American Tree Farm System (ATFS) - A group that works with private land owners to help them be effective stewards of forests.

Biological Oxygen Demand (BOD) – The amount of dissolved oxygen needed by aerobic biological organisms to break down organic material. Used to measure water quality.

Biomass Energy - Energy derived by combusting fuel that is developed from organic material, in PCA's case pulping by-products like black liquor solids and wood waste (bark, knots, etc.). Renewable source of energy.

Black Liquor – The remaining water, after chemical reclamation processes, from kraft process pulping operations. Contains significant lignin and hemicelluloses. Typically processed to drive off water, and to combust the biogenic material remaining to provide heat, steam and electricity to power mill processes.

California Transparency in Supply Chains Act of 2010 – Requires larger manufacturers and certain others that do business in California to publicly disclose their efforts to eradicate slavery and human trafficking from their supply chains.

Carbon Dioxide Equivalent (CO,e) – Measure used to compare emissions when fossil fuels such as coal, oil, and gas are burned - in equivalence to the global warming potential of Carbon Dioxide.

Caustic Soda – Sodium Hydroxide. NaOH, a strong base used in pulping processes.

Chain of Custody - A certification that connects materials or products back to their original source. In the case of forest products, like PCA's, it requires connecting and documenting sequential steps through the supply chain, from the original procurement of fiber, whether from recycled or certified forests, through each subsequent stage of processing and distribution.

"Codex" – short for Codex Alimentarious. The Codex Alimentarius is a commission recognized by the World Trade Organization as an international reference point for the resolution of disputes concerning food safety and consumer protection. The Commission's main goals are to protect the health of consumers and ensure fair practices in the international food trade.

Containerboard - Paperboard specifically made for the construction of corrugated packaging (linerboard and corrugating medium). It is also used, to a lesser degree, in the manufacture of several other types of packaging.

Days Away Restricted or Transferred (DART) – Refers to the number of recordable (human health and safety) incidents per 200,000 hours worked that resulted in work days where the employee was assigned to a different task, restricted in their duties or transferred due to work related injuries or illness.

Direct Emissions (Scope 1) - Greenhouse gas emissions directly controlled by PCA.

Direct Energy – Derived from fuels that are combusted on-site or within a user application. Energy for this stream can be from purchased fuels, self-generated from manufacturing by-products, or with on-site generation from renewable sources like solar panels or wind turbines. The emissions from this type of energy are attributed to Scope 1.

Double-lined Kraft (DLK) - Corrugated scrap from box making. Considered pre-consumer recycled material.

"Dual-Chain" (Dual Chain-of-Custody) – PCA's Sheet Plants are certified to SFI® and PEFC™ and are thus described as dual chain of custody.

ECF (Elemental Chlorine Free) – A method of bleaching wood fiber from its natural color to white in various brightness levels. PCA manufactured bleached pulp via Elemental Chlorine Gas-Free processes at three mills in 2017 (Jackson, International Falls and Wallula) in the production of various types of paper.

First-Use (Fiber) – Fiber that has been produced (pulped) directly from wood and is being used in its first "cycle" – prior to typically being recaptured and recycled back into fiber-based products like paper, containerboard, tissue and similar.

Family and Medical Leave Act (FMLA) – US law that permits employees to take unpaid time away from work to address health and family matters.

Forest Stewardship Council (FSC®) – An international sustainable forestry Non-Governmental Organization. Known for their voluntary standards on the topic. PCA has earned chain of custody and controlled wood certifications from FSC.

Fossil Fuel – Fuels such as gas, oil, coal, petroleum, kerosene, propane etc. Naturally found, finite resources, used for energy production.

FSSC22000 - Food Safety System Certification 22000. Non-Governmental Organization that produces food safety standards, which are benchmarked and accepted by the Global Food Safety Initiative. Fastest growing standards in terms of adoption in USA and Europe. PCA's Full-Line Packaging operations are predominantly certified to FSSC22000.

Global Food Safety Initiative (GFSI) – Initiative created by food industry and retail leaders to collaboratively drive continuous improvement in food safety management systems around the world.

Green Ton – Weight of trees as they are harvested with full moisture content, about 50% water weight.

Greenhouse Gas (GHG) – Gases like carbon dioxide and chlorofluorocarbons (CFCs) that absorb and emit radiant energy like.

Indirect Emissions (Scope 2) – Emissions from the consumption of purchased electricity, steam, energy, etc. generated upstream of, but purchased by, PCA.

Indirect Energy – Energy created at a location not owned or operated by the reporting entity (PCA) before distribution. The emissions from this type of energy are attributed to Scope 2.

International Union for Conservation of Nature (IUCN) - Considers itself the global authority on the status of the natural world and measures to safeguard it.

Kraft – A paper and paperboard making process that utilizes cooking (rather than mechanical processes) to produce wood pulp from solid wood. Frequently used to produce high-strength paper and paperboard from softwood (coniferous) timber. Frequently employed to produce linerboard (the outer facings of corrugated fiberboard). PCA operated three Kraft Linerboard mills in 2017.

Linerboard - Containerboard specifically produced to be utilized as an outer-facing in corrugated fiberboard and packaging. PCA produced linerboard in 2017 at three mills (Counce, Valdosta and DeRidder).

Lost Time Case Rate (LTCR) – A mathematical calculation that describes the number of lost time cases per 100 full-time employees in any given timeframe.

Materiality – Determination of that which is relevant or significant.

MRR - Mandatory Reporting Regulation. EPA issued regulations regarding mandatory reporting on GHG, defining what must be reported and by whom.

NatureServ – A network of scientists who collect decision-quality data about species and ecosystems. Used by PCA to protect biodiversity rich areas.

NOx – Term used to refer to nitric oxide (NO) and nitrogen dioxide (NO2) that are produced when fuel is burned. It can contribute to smog and have health implications.

"Old Corrugated Containers" (OCC) – Used corrugated packaging that has been recaptured for purposes of recycling. OCC has a recapture rate of between 85 and 95% in the USA.

Occupational Safety and Health Administration (OSHA) – United States Department of Labor group

charged with assuring safe and healthy working conditions for working men and women by setting and enforcing standards and by providing training, outreach, education and assistance.

Particulate Matter (PM) – Microscopic solid particles or liquid droplets found in the air. Can impact respiratory health and air quality.

Programme for the Endorsement of Forest Certification (PEFC™) – PEFC is an international sustainable forestry standard/endorsement group and Non-Governmental Organization. PEFC writes standards on the topic and recognizes other National or Regional Standards after benchmarking to their requirements. PCA has earned a chain of custody certificate from PEFC. PEFC recognizes and endorses SFI certification of fiber sourcing.

Renewable Resources – Resources that can replenish themselves naturally over time, i.e. wood products.

Sustainability Accounting Standards Board (SASB) - Provides sustainability accounting standards. Controlled by a foundation, founded by Michael Bloomberg.

Semi-Chemical (Corrugating Medium) - Containerboard specifically produced to serve as corrugating medium (to be fluted and bonded into the center of a corrugated sheet). Produced with a combination of mechanical and chemical-cooking processes. PCA produced semi-chemical medium at four mills in 2017 (Tomahawk, Filer City, DeRidder and Wallula).

Short Ton (net ton) – A unit of weight equal to 2,000 pounds. Differentiated from the long (gross) ton which is equal to 1,000 kilograms, or 2,240 pounds.

SO₃ – Sulfur dioxide is formed when fuels like oil and coal are burned. In sufficient concentrations, can lead to the acidification of water and soil.

SOF - "Safe-Quality-Food" Initiative/Program. Non-Governmental Organization that produces food safety standards, several of which are benchmarked/accepted by the Global Food Safety Initiative. PCA Colby is certified to SQF-Level 2.

Stakeholder – An individual or entity that has a concern or interest in a business.

"Standards Act" (FLSA) US Federal Labor Standards Act – US federal law declaring the federal minimum wage and hour requirements for employees along with overtime eligibility. It also divides employees into exempt and non-exempt (regarding eligibility for overtime pay).

Sustainable Forestry Initiative® (SFI) – SFI is a North American Non-Governmental Organization that supports sustainable forestry standard and writes standards on the subject. PCA has the chain of custody and several sourcing certifications.

Title VII of the Civil Rights Act of 1964 – Federal Law that prohibits employers from discriminating against employees on the basis of sex, race, color, national origin, and religion.

Total Case Rate (TCR), officially Total Incidence Rate (TIR) – A mathematical calculation that describes the number of employees per 100 full-time employees that have been involved in an injury or illness requiring medical treatment.

Total Suspended Solids (TSS) – The dry weight of suspended particles that do not dissolve in water. These can be separated using a filter. Used to measure water quality.

"Triple-Chain" (Triple Chain-of-Custody) – PCA's Mills and Plants that are certified to all three sustainable forestry standards (SFI, PEFC, and FSC) and are thus commonly referred to as triple chain of custody.

Turnover – Percentage of employees who have voluntarily or involuntarily left employment in the reporting year.

Vertically Integrated – A strategy and corporate architecture where a company owns and operates several operations or entities in order to manufacture in several steps from raw-materials to finished/offered products. PCA is a vertically integrated packaging and paper company.

OMISSIONS

Solid Waste to Landfill (from Packaging Converting)

Solid waste to landfill was not reported for packaging converting plants in 2017 as a result of significant gaps in internally reported data. Based on available data, our current estimate is 25,000 metric tons per year. We intend, and will be prepared, to capture and report on all solid waste generation at PCA's significant operations for 2018.

Water Use (in Packaging Converting)

Water use was not reported for packaging plants because it was not tracked at all PCA plants in 2017. Based on tracking for a small subset of our sites, we estimate our packaging plants to account for less than 1% of our overall water withdrawal. We intend, and will be equipped, to capture and report on water use in substantially all PCA operations for 2018.

Emissions from Landfills (Mills)

As shared in our Effluents & Waste disclosure; our mills own and responsibly operate landfills. The make-up of landfilled waste is predominately residuals from combustion of organic material that cannot be beneficially reused. In 2017 we did not report on emissions that may be associated with landfill operation in Scope 1. We estimate those emissions to be less than 2% of our overall footprint. Emissions from solid waste sent to a municipal landfill would be tracked as a Scope 3, which we are not reporting at this time.

CITATIONS

For where space may have not permitted citation adjacent to figure:

"Industry Averages" used for safety metrics graphs in our Occupational Health & Safety disclosure are from U.S. Bureau of Labor Statistics, U.S. Department of Labor. TABLE 1. Incidence rates of nonfatal occupational injuries and illnesses by industry and case types, 2016. (Paper manufacturing industry, NAICS code 322)

"Industry Averages," "Industry Benchmarks," and "AF&PA Member Average" used in graphs throughout our Environmental topic disclosures are from the AF&PA Sustainability Report, 2016.

ACKNOWLEDGMENTS

It's required the contributions of many at PCA to make our first Responsibility Report possible. Unfortunately, it's not possible to cite each and every contributor. However, we would be remiss if we didn't acknowledge those Co-op students that logged hundreds of hours over several years, laying the foundation for this and subsequent reports. Notably: Maggie Kaczor, Austin Southwell and Emilee Brown for wrangling more than a decade's worth of data - that allowed us to accomplish analysis, and to report. Thank you! IDS, Michael Manney and Lily Barrie.

PCA is one of the largest producers of containerboard and corrugated products in the United States. We manufacture many grades of kraft linerboard and corrugating medium at our containerboard mills and produce a wide variety of corrugated containers and displays at our converting facilities.

BOISE PAPER is the third largest producer of uncoated freesheet in North America. Our team is dedicated to providing high-quality products, outstanding customer service and industry-leading supply chain performance, with a product portfolio that includes office, printing and converting, and pressure sensitive papers.