



2021

ESG Report

Protecting. Expanding. Transforming.



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Inspired Packaging. Made Possible.

Graphic Packaging is a global leader providing packaging solutions for the food, beverage, household goods, foodservice, healthcare, and beauty markets. We produce the paper cup that held your coffee this morning, the microwave tray that heated your meal at lunch, and the carton that holds the craft beer or flavored, sparkling water you may enjoy tonight.



ABOUT THIS REPORT

Graphic Packaging is committed to publicly reporting on sustainability-related topics on an annual basis, discussing the opportunities and challenges that we encounter as we work to enhance performance and conduct business in the most responsible manner possible. For more information on how we prepared this report, see reporting practices on [p. 35](#) of this report.

Most of the images included in this report are of our employees and facilities from around the world, and we are proud that they can help tell our story.



CEO Message



Dear Stakeholders,

I am once again proud to share our annual sustainability report and invite you to read it and join us on our journey. At Graphic Packaging, progress in the business-critical areas of environmental, social, and governance (ESG) means delivering positive outcomes for our people, our planet, our partners, and ultimately the growth and sustainability of our Company. For this year's report we've chosen a theme that summarizes our point of view on ESG as well as our vision and progress: **Protecting. Expanding. Transforming.**

Graphic Packaging is expanding. In 2021, we completed the strategic acquisitions of AR Packaging and Americraft Carton, and we delivered 2% net organic sales growth for the year. Our growing global presence demands increased sophistication in our ESG programs and that we embed ESG more formally into our practices across our global footprint. This report reflects the steps we have taken in the last year to build a stronger foundation for Graphic Packaging and considers our impact as we transform our Company and move into the future together.

Allow me to highlight a few of the actions I'm especially proud of in 2021:

We expanded our leadership team by adding chief sustainability officer Michelle Fitzpatrick, Ph.D. We recognized that evolving ESG expectations from stakeholders requires an executive-level team member to oversee our ESG strategy. Michelle brings a wealth of industry knowledge and sustainability expertise to us. Her experience and skill sets are helping to advance our climate risk strategy and identify new opportunities in ESG. This report is just one example of the important multi-faceted work she has spearheaded alongside a wide range of cross-functional endeavors.

In November 2021, we became a signatory to the United Nations Global Compact (UNGC), committing to incorporate the 10 principles of the compact into our business. Joining the UNGC means that we are not only considering the expectations for our industry, but for all companies working to advance sustainable development globally.

We committed to developing climate goals in partnership with the Science Based Targets initiative (SBTi). By submitting our formal letter of intent to SBTi, we committed to transforming our climate strategy by setting new Scope 1, 2, and 3 carbon emissions reduction targets that are aligned with climate science. Carbon emissions reductions are the single most important goal any company can set to impact climate change and plan for a lower carbon future.

The entire Graphic Packaging team continued to demonstrate resolve in efforts to keep our operations and supply chain running smoothly amid the ongoing pandemic and global challenges in logistics, materials availability, and workforce management. I am incredibly proud our team was able to not just weather the storm but thrive and grow through adversity. Each individual at Graphic Packaging has contributed to making us a more resilient company.

We truly believe in our ability to make a world of difference through our Vision 2025 goals and the inspired packaging solutions we provide that protect essential consumer goods every day. While we still have more work ahead of us in our ESG journey, I am proud of the advancements we've made building a strong foundation for the future — one that will guide the sustainable expansion and transformation of our business.

Michael P. Doss, President and Chief Executive Officer



Our Company



Who we are

Graphic Packaging's history dates back more than 100 years, as numerous legacy companies have joined forces to create an ever-evolving corporation. In 2021, we continued expanding our Company and welcomed new colleagues from Americraft and AR Packaging onto our team. Our growth and transformation over the years reflect our deep-seated dedication to innovation, quality, service, continuous improvement, and sustainability. These priorities remain integral to Graphic Packaging's strategic focus today.

Our 130+ facilities across the globe design and produce innovative, fiber-based packaging solutions that enable

us to help customers to reach their sustainability goals, accommodate changing consumer preferences, stand apart from competitors, and achieve brand loyalty. Our product portfolio starts with renewable and recycled raw materials and emphasizes package recyclability after use. Our approach to responsible manufacturing prioritizes caring for the safety and well-being of our more than 24,000 employees and actively working to decrease our environmental footprint — ensuring a positive impact on the communities where we live and work.



THE LARGEST
FOLDING CARTON MANUFACTURER
IN THE WORLD



2,700+
PATENTS



7.2 Billion
REVENUE

1.1 Billion
ADJUSTED EBITDA

130+

LOCATIONS

22

COUNTRIES

24,000+
EMPLOYEES
WORLDWIDE



WORLDWIDE OPERATIONS

VERTICALLY
INTEGRATED
NETWORK

105+

CONVERTING
PLANTS

8

PAPERBOARD
MILLS



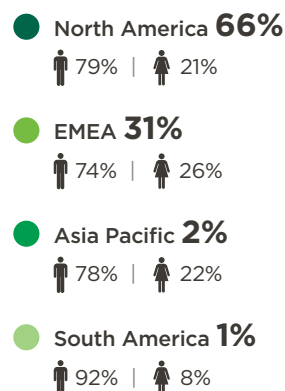
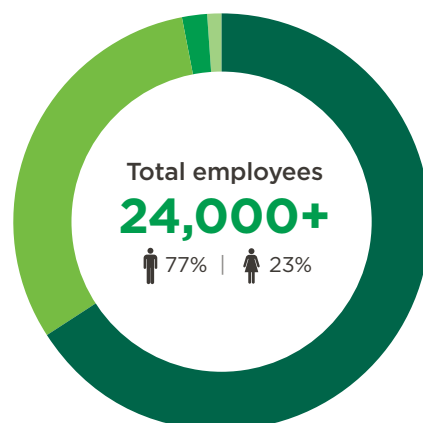
Our global reach

At Graphic Packaging, we produce paperboard at our mills. We then print, cut, fold, and glue (convert) the paperboard into folding cartons and other paperboard packaging solutions at our converting facilities, and we design and manufacture specialized, proprietary packaging machines that package bottles, cans and, to a lesser extent, non-beverage food products.

We also install our packaging machines at customer plants and provide support, service, and advanced performance monitoring of the machines. Our integrated approach to packaging solutions has strengthened our global capabilities and supply networks to both local and worldwide customers.



Employees by region



EXECUTIVE LEADERSHIP TEAM

20% Women

40% Ethnically diverse

US WORKFORCE

29% Ethnically diverse

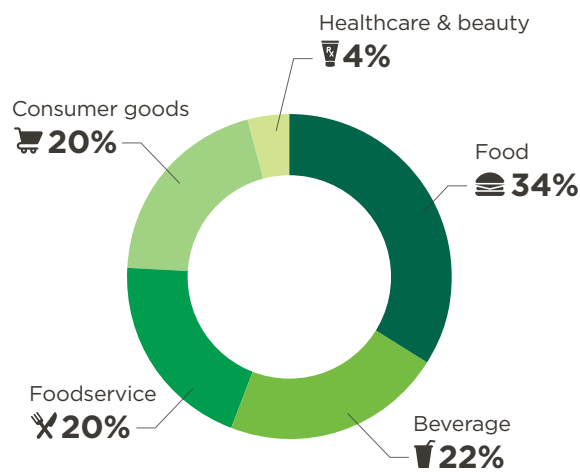


2021 BUSINESS HIGHLIGHTS

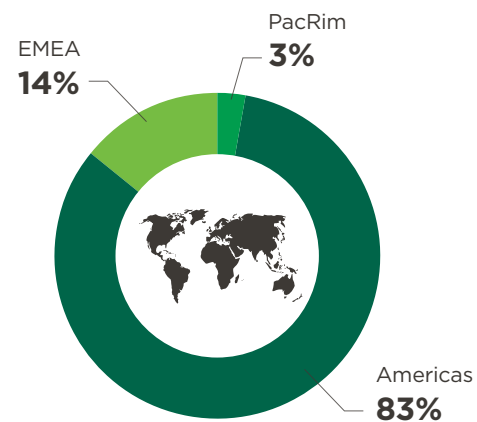
Expanding our business, market reach, and global presence

- Net sales of **\$7.2 billion** are up 9% from 2020, with 2% net organic sales growth.
- During 2020 and 2021, we returned over **\$1 billion** to stockholders through dividends, distributions, redemptions, and share repurchases.
- We completed strategic acquisitions of AR Packaging, one of Europe's largest fiber-based consumer packaging producers, and Americraft Carton, a large independent carton manufacturer in the United States.
- We commissioned our new state-of-the-art coated recycled paperboard (CRB) machine in Kalamazoo, Michigan, the largest and lowest cost machine in North America producing high-quality CRB paperboard.
- We increased our vertical integration rate by 2% and now internally convert 72% of the paperboard produced at our mills.

Net sales by market served



Net sales by region





Vision 2025

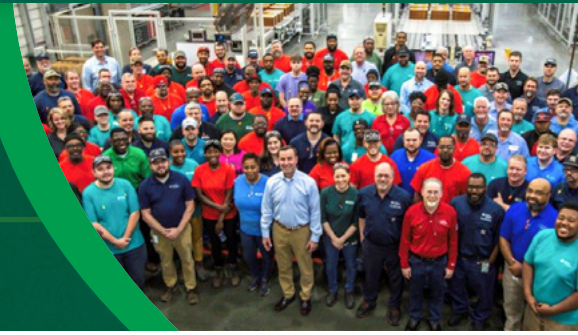
Consumers are more conscious now than ever about the products they buy and the packaging that protects those products. Graphic Packaging is investing in the future of sustainable, inspired packaging by making packaging using recycled fibers and renewable fibers from responsible sources — packaging that not only protects food and products so that less goes to waste, but also can be recycled and the fibers used again.

Our Vision 2025 outlines how we will make those investments in our products, and how we will be better stewards of our planet, supporters of our people, and allies to our partners, all while generating returns for our stockholders. Vision 2025 guides our business strategy and sets measurable goals under the pillars of **People, Planet, Partners, and Profit.**





Our Values



Graphic Packaging's culture is powered by a steadfast commitment to upholding our five core values as we work together to grow our Company and deliver on our Vision 2025 ESG goals.



Integrity

Integrity means honesty, leading by example, keeping promises, meeting commitments, and taking pride in what we do. Doing what is right — always.



Respect

We actively solicit each other's ideas and honor diverse opinions. Each person's unique skills are valued, contributions are appreciated, and accomplishments are always recognized.



Accountability

Each individual is personally responsible for doing their job to the best of their abilities and delivering results. We never quit in meeting our commitments to customers, employees, stockholders, and other stakeholders.



Relationships

We have an unwavering commitment to listen to and understand the needs of our stakeholders and to work with them to create innovative solutions that result in shared prosperity.



Teamwork

The strongest teams share common goals and work together to achieve them. We encourage everyone's involvement, support each other's ideas, and help others without being asked.



ESG at Graphic Packaging



2021 ESG highlights

“I joined Graphic Packaging because there are endless opportunities here to grow a stronger business based on contributing to a more sustainable world. As a leading packaging company, we have an important role to play in creating a sustainable future for our employees, our customers, and the communities where we operate. Our Vision 2025 goals are the first step in our journey to build a resilient company and ensure that we are taking the necessary actions so Graphic Packaging thrives as the world moves to a more circular economic system.”

Michelle Fitzpatrick,
VP & Chief Sustainability Officer



This is our **Communication on Progress** in implementing the Ten Principles of the **United Nations Global Compact** and supporting broader UN goals.

We welcome feedback on its contents.

Became a signatory of the UN Global Compact



Named one of
Newsweek's Most Responsible
Companies in the US
based on ESG factors



Named to Forbes' list of
World's Best Employers



Named to Forbes' list
of World's Top Female
Friendly Companies



Achieved EcoVadis gold rating



Became a member of the
Ellen MacArthur Foundation's
Network — the world's leading
circular economy network



Global trends — the need for transformation

Strong global driving forces are affecting the packaging industry — more goods need to be packaged, while at the same time packaging needs to be adapted so that the entire value chain generates the lowest possible carbon emissions while minimizing packaging waste. The ability to innovate commercially viable, low-carbon, and circular packaging solutions will be a key enabler for long term prosperity.



Climate change & waste management:

A warming planet and a growing awareness about climate change are driving society to reduce greenhouse gas emissions. A shortage of natural resources and a growing plastic waste problem are increasing the need for a rapid transition to a more circular economy and driving legislation promoting packaging that is recyclable or reusable.

In response, Graphic Packaging has been working to reduce our nonrenewable energy and greenhouse gas intensities and has committed to establishing climate goals in line with the SBTi. Our products are made primarily from renewable and/or recycled materials and most can be recycled after use.



Forest sustainability:

The forest is an important natural resource. We are seeing increased competition for forest materials to produce everything from energy to paperboard, as well as pressures to protect forest ecosystems and biodiversity and for carbon sequestration. Managing the forest responsibly is a prerequisite for the forest to function as a carbon sink while providing the renewable raw materials society needs.

This is precisely why Graphic Packaging is certifying all our global facilities to sustainable fiber sourcing standards and engages our wood fiber suppliers on using forest best management practices for protecting valuable ecosystems and renewing forest resources following harvest.



Urbanization and the growing middle class:

With a growing proportion of the planet's population moving from rural areas into cities, people are increasingly far removed from local food supplies. Further, increased prosperity creates a growing demand for prepackaged food, drinks, and consumer goods. With increased consumption comes the need for safe, recyclable, or reusable packaging, and for infrastructure and systems to support recycling and drive circularity.

Graphic Packaging's primary focus is to provide recyclable packaging solutions that protect products while in transit to consumers and reduce waste. New product offerings like IntegraFlute™ and other strength packaging solutions are ideal for ecommerce applications, enabling products to be shipped "as is" and avoid the need for additional shipping boxes.



Increased focus on health and safety:

Packaging needs to be durable to prevent food waste and plays an important role in meeting requirements for product safety and hygiene for food and drink and product traceability. Full traceability from raw material to food production to packaging materials is now widely expected.

Today Graphic Packaging meets this need through solutions like ProducePack™ — a line of paperboard produce packaging that protects and preserves fresh fruit and vegetables by reducing damage (e.g., bruising) during shipping and storage. Traceability and smart packaging is a current innovation focus area for future package transformation.



Vision 2025 ESG goals

Vision 2025 outlines how we will make investments in our products and be better allies to our partners, supporters of our people, and stewards of our planet, all while generating profits for our stockholders. Our ESG goals are aligned in four pillars — **People, Planet, Products, and Partners** — and map to the United Nations Sustainable Development Goals (UN SDGs). Our efforts are most closely connected with four of the goals — SDG 8 decent work and economic growth, SDG 12 responsible consumption and production, SDG 13 climate change, and SDG 15 life on land.

	VISION 2025 ESG GOALS	2021 PROGRESS	UN SDGs
People	ENGAGED EMPLOYEES GOAL Achieve top quartile employee engagement Provide 30 hours of training per employee per year	On track Progressing	3 4 5 8 10 16
	SAFETY GOAL Continue progress toward aspirational target of zero incidents	No progress	8
	SOCIAL RESPONSIBILITY GOAL 100% global converting plants in compliance with a social responsibility audit	Progressing	4 5 8 10 16
Planet	GREENHOUSE GAS EMISSIONS GOAL Reduce greenhouse gas emissions intensity by 15% (metric tons CO ₂ e/\$1,000 sales)	On track	8 12 13
	NONRENEWABLE ENERGY GOAL Reduce nonrenewable energy intensity by 15% (MWh/\$1,000 sales)	On track	7 8 12 13
	WATER CONSERVATION GOAL Reduce mill water effluent intensity by 15% (megaliters/metric ton board)	Progressing	6 8 12
	WASTE DIVERSION GOAL Drive out waste in all our operations	Progressing	8 12
Products	PRODUCT INNOVATION GOAL \$400M-\$700M net new product sales 2020-2025 included in organic growth	On track	12 13 15
	RECYCLABILITY GOAL 100% of sales are generated from products that are recyclable	On track	12 13 15
	REDUCING LDPE USAGE GOAL Reduce LDPE use by 40%	On track	12 13 15
Partners	SUPPLY CHAIN SUSTAINABILITY GOAL All global facilities will be compliant with a fiber certification standard	On track	5 6 8 10 12 13 15 16





OUR PRODUCTS

Protecting What Matters Most



A vision for innovation

At Graphic Packaging, we create innovative, fiber-based packaging solutions that make a world of difference. Our packaging safely transports food, beverages, and other essential consumer goods from our customers to consumers around the world, all while supporting a circular economy. More than 95% of our product revenues comes from fiber-based products, made from responsibly sourced, renewable virgin tree fibers or recycled fibers, that are recyclable at end of life. By working closely with our customers to understand their needs and consumers' expectations, we continue to offer the value and quality that our customers expect and packaging that helps solve the growing waste challenge.

Vision 2025 Product Innovation Goals

Goals:



\$400M-\$700M net new product sales 2020-2025 included in organic growth

Goal Progress:



On track, with **-\$300M** in cumulative revenue



100% of sales are generated from products that are recyclable



On track, with **95%** of sales



Reduce our use of low-density polyethylene (LDPE) by 40%



On track, with **19%** reduction

Our Product Lifecycle:



Managed Forests



Mill



Product Innovation



Converter



Customer Plant



Store or e-Commerce



Consumer



Recycle

2021 Highlights

Recyclable products that help reduce waste

KeelClip™, EnviroClip™, and Cap-It™ provide sustainable, fiber-based options for brands looking to replace plastic rings and shrink film in beverage and food multipacks.

ProducePack™ and ProducePack Punnet are fiber-based solutions for brands looking to replace flexible and rigid plastic produce packaging with a fiber-based alternative. They also offer a potential added protection benefit that can help decrease produce damage and waste during transportation and storage.

Reducing LDPE in foodservice packaging

OptiCycle™ is a new, innovative line of non-polyethylene (PE) coated foodservice packaging that when repulped, approximately 98% of the fiber is recovered which means that almost the entire cup can be recycled to make new paper products.





OUR PARTNERS

Expanding Our Influence



Sustainable forest management

Forests and trees are central to life on earth. They provide clean air and water, habitats for unique plant and animal species, food, and raw materials for many of the products we rely on every day.

Because of the incredible value forests provide and because many global initiatives have not proven successful in protecting the most at-risk forest ecosystems, there is increasing concern over loss of forests and the biodiversity that they support. Graphic Packaging shares these concerns. Most every product we make begins in the forest.

Our Sustainable Forest Policy is the foundation of our commitment to protect and maintain healthy forests. Our approach begins with responsible fiber sourcing, including performing due diligence, validating origin, and engaging our wood suppliers on sustainable management practices. We work directly with landowners to promote responsible forestry practices

and collaborate with conservation organizations to enhance ecologically important areas and restore forests worldwide. We also use third-party certification systems to verify our wood fiber is sourced from sustainably managed forests. We recognize that promoting sustainable forest stewardship practices will help maintain healthy, diverse forest ecosystems for generations to come.

Vision 2025 Supply Chain Sustainability Goal

Goal:



Facilities compliant with one or more fiber certification standard

Goal Progress:



On track, with **93%** facilities certified

2021 Highlights

- **100%** of Graphic Packaging's produced coated unbleached kraft (CUK) paperboard and solid bleached sulfate (SBS) paperboard met the SFI Certified Sourcing, FSC Controlled Wood standards, and Program for the Endorsement of Forest Certification (PEFC) controlled sources requirements and 25% met chain of custody standard requirements.
- More than **1.2 million** metric tons of reclaimed pre- and post-consumer recycled paper materials were used to make new paperboard products at our mills.
- **100%** of new wood suppliers were screened using the Company's due diligence process.
- **\$182 million** spent with diverse suppliers — a 3% increase from 2020.
- Eliminated **24,600** truck shipments (and corresponding GHG emissions) in 2021 using data analytics to improve logistics footprint.
- Supported work with the American Forest Foundation and Georgia-Alabama Land Trust to restore and protect native forest and woodlands ecosystems.



OUR PEOPLE

Expanding Our Impact



A team that makes A World of Difference

Graphic Packaging's collaborative, creative, and passionate team members are central to our success and to creating a culture where every employee is engaged and feels they "play on a winning team." We foster inclusion through the Company's four employee-led business resource groups (BRGs). Our BRGs honor the unique cultural experiences of groups within our employee population. By offering a venue for conversation and connection, these groups build communities within our Company, allowing members to share experiences and resources and pursue personal and professional development. Each group sponsors events and initiatives to build awareness and value for our unique talents and cultural backgrounds, supports community engagement, and celebrates our diversity.



WOMEN@GPI

AAPI+
Asian American,
Pacific IslanderALIANZA
LATINX+BEGN+
Black Employee
Global Network

Vision 2025 People Goals

Goals:

Achieve top quartile employee engagement

Provide 30 hours of training per employee per year



Goal Progress:

On track, with **70%** employees responding to the engagement survey

Progressing, with **6** hours average training per salaried employee



Continue progress toward aspirational target of zero incidents

No progress with **10** LIFE injuries

No progress with LTIR of **0.41**



100% global converting plants will be in compliance with a social compliance Sedex Member Ethical Trade Audit (SMETA)

Progressing, with **71%** of facilities audited

2021 Highlights

- Established an Inclusion Council, made up of diverse leaders from across the Company, and an Inclusion Index to measure employee sentiments on belonging and their belief in our commitment to diversity.
- 24%** of frontline and mid-level leaders participated in leadership development training programs.
- Launched our women in leadership development experience with **25** participants in our inaugural program.
- The Macon, Georgia mill received the Pulp and Paper Safety Association Award of Safety Excellence.
- 30** Graphic Packaging operations locations had **0** recordable injuries in 2021.
- Launched global safety leadership training program and deployed at **90** locations.
- Graphic Packaging with our employees donated more than **\$724,000** to community organizations, veterans' groups, and educational activities.



OUR PLANET

Transforming the Future



Focus on fiber recovery

Our Vision 2025 planet goals challenge us to reduce our use of natural resources, greenhouse gas emissions, and operations environmental footprint while increasing fiber recovery and paperboard circularity. As demand for recycled fiber packaging increases, there is a need to further close the fiber loop by increasing paper recovery rates. This means sources of paper-based materials, like foodservice packaging and paper cups, will need to be increasingly accepted and recovered to supply the growing demand for recycled fiber feedstocks. Graphic Packaging is actively working with the Paper Cup Alliance and other alliances in the US and Europe to help address this need by increasing community acceptance for recycling paper cups and other food packaging items. We are engaged at both ends of the recovered material value stream — improving fiber circularity by promoting paper recycling and then using recovered materials to reduce dependence on virgin fiber in our products.

Vision 2025 Planet Goals

Goals:



Reduce operations GHG emissions intensity by 15%



Reduce nonrenewable energy intensity by 15%



Reduce mill effluent intensity by 15%



Drive out waste in operations

Target 1: Percent converting plants engaged in a waste diversion program

Target 2: Percent global waste paperboard recovery

Goal Progress:

On track, with **14%** reduction in intensity

On track, with **9%** reduction in intensity

Progressing, with **5%** reduction in intensity

Progressing, with **89%** converting plants participating

On track, with **95%** paper waste recovery

2021 Highlights

- Renewable fuels represented **~70%** of the fuel mix consumed in our mills and converting operations and **66%** of our global energy needs was supplied by renewable energy.
- Began installing advanced energy management automatic process control system modules at our five largest mills to reduce operation variability and improve power generation equipment efficiency.
- Achieved an **“A-”** rating for the second year in a row from CDP on our climate management approach.
- Completed the installation of third-party solar panels at the Sneek site in the Netherlands. The installation will supply approximately 10% of the site's power needs with renewable electricity.
- 91%** of converting plant waste was successfully diverted to recycling/beneficial reuse and away from disposal via landfill, incineration, or other disposal method.
- 95%** of reported paper waste generated by Graphic Packaging facilities was recovered and recycled.



General Disclosures

IN THIS SECTION

Forward Looking Statement

Governance

Organizational Profile

Stakeholder Engagement

Strategy

Reporting Practices



GRI General Standard Disclosures



Forward looking statement

This environmental, social, and governance (ESG) report contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934, which involve risks and uncertainties. Forward-looking statements provide current expectations of future events based on certain assumptions and include any statement that does not directly relate to a historical or current fact. The words “believe,” “expect,” “will,” “will be,” “will continue,” “will likely result,” “anticipate,” “plan,” “strategy,” “estimate,” “target,” “outlook,” “seek,” “project,” “should,” “would” and similar expressions and variations or negatives of these words or phrases, generally identify “forward-looking statements,” which speak only as of the date such statements were made. These forward-looking statements may address, among other things, business plans, prospects, targets, goals, plans, commitments or estimates with respect to progressing ESG programs; capital investments, projects and target capital expenditures; the commencement, outcome or resolution of any regulatory inquiry, investigation or proceeding; the outcome or resolution of any pending or future environmental liabilities; the initiation, outcome or settlement of any litigation; changes in environmental regulations in the United States (US) or other jurisdictions that affect demand for, or adoption of, our products; anticipated future operating and financial performance for our segments individually and our Company as a whole; sufficiency or longevity of intellectual property protection; cost reductions or savings targets; plans to increase profitability and growth, our ability to make acquisitions, integrate acquired businesses or assets into our operations, and achieve anticipated synergies or cost savings; all of which are subject to substantial risks and uncertainties that could cause actual results to differ materially from those expressed or implied by such statements.

Forward-looking statements are based on certain assumptions and expectations of future events that may not be accurate or realized. These statements are not guarantees of future performance. Forward-looking statements also involve risks and uncertainties that are beyond Graphic Packaging’s control. Additionally, there may be other risks and uncertainties that Graphic Packaging is unable to identify at this time, or that Graphic Packaging does not currently expect to have a material impact on its business. Factors that could cause or contribute to these differences include the risks, uncertainties and other factors discussed in our filings with the US Securities and Exchange Commission, including in our Annual Report on Form 10-K for the year ended December 31, 2021. Undue reliance should not be placed on such forward-looking statements, as such statements speak only as of the date on which they are made and Graphic Packaging undertakes no obligation to revise or update such statements for any reason, except as may be required by law.



Organizational profile

102-1 NAME OF ORGANIZATION

Graphic Packaging International, LLC

102-2 ACTIVITIES, BRANDS, PRODUCTS AND SERVICES

Graphic Packaging International, LLC (Graphic Packaging or the Company) is a leading provider of fiber-based packaging solutions that serve the food, beverage, foodservice, and other consumer products companies. Graphic Packaging operates globally as one of the largest producers of folding cartons in the United States (US) and Europe. The Company holds leading market positions in the manufacturing of coated recycled paperboard (CRB), coated unbleached kraft paperboard (CUK), and solid bleached sulfate paperboard (SBS).

Graphic Packaging produces paperboard at our mills and then converts (prints, cuts, folds, forms, glues, and seals) that paperboard into folding cartons, containers, and other fiber-based packaging at our converting plants around the world. We also design and manufacture specialized, proprietary packaging machines that package bottles and cans and non-beverage consumer products. Graphic Packaging installs its packaging machines at customer plants and provides support, service, and advanced performance monitoring of the machines.

Graphic Packaging offers a variety of laminated, coated, and printed packaging structures that are produced from its CRB, CUK, and SBS paperboard, as well as other grades of paperboard that are purchased from third-party suppliers. Key product brands by market segment include the following:

Major brands by market segment	
Market segment	Primary brands
Beverage	KeelClip™, EnviroClip™, GripClip™, Cap-It™, QuikFlex™, Marksman™, AutoFlex™
Food	PaperSeal™, ProducePack™, DesignerWare™, PaperLite™, Boardio™
Foodservice	OptiCycle™, EconoPaxx™, ecotainer™
Consumer Goods	Z-Flute™
Healthcare & Beauty	Printallic™
Paperboard	AquaKote™, PearlKote™, OmniKote™, Everest™, Fortress™, Conquest™, PaceSetter™

The Company is not aware of any brands, products, or services banned in any markets in which it operates. Management and information technology (IT) systems are in place to monitor and ensure compliance with global trade and regulatory requirements.

More information regarding our products, business segments, brands, and services can be found in our 2021 Annual Report on Form 10-K beginning on [p. 5](#) and on our [website](#).



102-3 LOCATION OF HEADQUARTERS

1500 Riveredge Parkway, Suite 100, Atlanta, Georgia 30328

102-4 LOCATION OF OPERATIONS

As of December 31, 2021, Graphic Packaging maintains a global network of machinery facility, mills, converting plants, and innovation centers located across 22 countries. We also have a joint-venture interest in converting operations located in Japan and will partner with third-party contractors as necessary to complement our global operations. Our operations are supported by a network of offices, strategically located to best serve our customers, with regional headquarters in Concord, New Hampshire; Brussels, Belgium; and Tokyo, Japan, in addition to our global headquarters office in Atlanta, Georgia.

Read more about our global locations and a list of countries where we have significant operations on [pp. 16-17](#) of our 2021 Annual Report on Form 10-K and on our [website](#).

102-5 OWNERSHIP AND LEGAL FORM

Graphic Packaging Holding Company, the publicly traded parent company of Graphic Packaging International, LLC, is incorporated in the state of Delaware and is publicly traded on the New York Stock Exchange under the ticker symbol GPK. Graphic Packaging International, LLC is the primary operating entity of Graphic Packaging Holding Company.

102-6 MARKETS SERVED

Graphic Packaging's customers include many of the world's most widely recognized companies and brands with prominent market positions in the beverage, food, foodservice, health/beauty, and other consumer products market segments. The Company strives to provide customers with innovative, sustainable packaging solutions designed to deliver marketing and performance benefits at a competitive cost by capitalizing on its low-cost paperboard mills and converting plants, proprietary carton and packaging designs, and commitment to quality and service. Currently the Company serves more than 5,000 global customers.

2021 Net sales by market served¹

Beverage	Consumer Products	Food	Foodservice	Healthcare & Beauty
22%	20%	34%	20%	4%

¹ Market information includes Americraft and AR Packaging acquisitions

Read more about our markets and customers on [pp. 7-9](#) of our 2021 Annual Report on Form 10-K, and on our website.

102-7 SCALE OF THE ORGANIZATION

- As of January 31, 2022, Graphic Packaging employs approximately 24,000 people around the world and maintains a global network of eight mills, 107 converting locations (excluding joint-venture operations), and eight innovation centers located across 22 countries. In 2021, our net revenue totaled \$7.2 billion with total assets of \$10.5 billion. We report operating results through three segments: Paperboard Mills, Americas Paperboard Packaging, and Europe Paperboard Packaging.



- The Paperboard Mills segment includes the eight North American paperboard mills and a laminating facility that produce our CRB, CUK, and SBS paperboard grades. In 2021, 72% of our board was consumed internally to produce packaging, and the remaining paperboard was sold externally to a wide variety of packaging converters and brokers.
- The Americas Paperboard Packaging segment produces paperboard packaging, primarily folding cartons sold to food, beverage, and consumer packaged goods (CPG) companies, and cups, lids, and food containers sold primarily to foodservice companies and quick service restaurants (QSRs).
- The Europe Paperboard Packaging segment includes paperboard packaging, primarily folding cartons sold to CPG companies serving the food, beverage, and consumer product markets, including the healthcare and beauty markets in Europe.

Please see our 2021 Annual Report on Form 10-K on [p. 29](#) for our revenue breakdowns by segment. Read more about where we operate on [pp. 16-17](#) and about our product segments on [p. 7](#) of our 2021 Annual Report on Form 10-K.

102-8 INFORMATION ON EMPLOYEES AND OTHER WORKERS

Total number of employees by region as of January 31, 2022					
	Total	Asia Pacific	EMEA	Latin America	US, Mexico, & Canada
Total employees	24,182	575	7,540	126	15,941
Percent employees	100%	2%	31%	1%	66%
Employee status					
Hourly	72%	74%	61%	71%	77%
Salaried	28%	26%	39%	29%	23%
Employee gender					
Men	77%	78%	74%	92%	79%
Women	23%	22%	26%	8%	21%

Graphic Packaging has and continues to grow considerably through acquisitions, including the Americraft and AR Packaging acquisitions we completed in 2021. As a result, we have multiple employee management systems in place across the Company, and individual sites have local controls for updating employee records as changes occur. We gather employee workforce data by pulling separate reports from each system and aggregating them to compile global employee demographic data. The data represent the global employee population as of January 31, 2022, and include all permanent, full-time and part-time employees from our Graphic Packaging operations and the newly acquired Americraft and AR Packaging operations. The data exclude temporary employees, interns, co-ops, and contractors, unless otherwise stated.

Our total global workforce includes both our Graphic Packaging employees and contract workers that support our manufacturing sites and other global locations. Our contract workforce provides services for facility maintenance, engineering services and construction support, ink room support, warehouse services, and other services.



As of January 31, 2022, approximately 2,562 contractors supported our operations, representing approximately 10% of the total global workforce. However, this number can vary throughout the year due to business needs and seasonal plant activities.

Graphic Packaging may also use temporary workers, including college and high school student interns and co-ops, to support specific work needs and, in the case of student workers, to develop talent for the future. The total number of temporary/contingent workers is highly variable throughout the year due to business needs and school schedules.

102-9 SUPPLY CHAIN

Graphic Packaging maintains relationships with more than 15,000 raw materials, goods, and services suppliers located in over 30 countries. In 2021, we spent more than \$4.5 billion with suppliers globally. Primary raw materials used to manufacture our paperboard products include pine and hardwood roundwood logs and chips, wood pulp, recycled paper, pulping chemicals, rosin sizes and starches, and energy. Latex, minerals, and pigments are used when coating the paperboard, while printing inks, varnishes, coatings, adhesives, and other packaging embellishments may be used in the converting processes. Plastic films and resins may be laminated or extrusion-coated on paperboard during the converting process in order to meet certain oil, grease, or moisture barrier requirements. Graphic Packaging uses both internally produced and externally purchased paper and paperboard to manufacture finished cartons and other fiber-based packaging. We distribute our finished products primarily in corrugated cases on wood pallets or corrugated slip sheets.

Read more about the supply chain for each of our business segments on [pp. 9-10](#) of our 2021 Annual Report on Form 10-K.

102-10 SIGNIFICANT CHANGES TO THE ORGANIZATION AND ITS SUPPLY CHAIN

On July 1, 2021, Graphic Packaging acquired substantially all the assets of Americraft Carton, Inc. (Americraft), the largest independent folding carton converter in North America. The acquisition included seven well-capitalized converting plants across the United States and is reported within the Americas Paperboard Packaging reportable segment.

On November 1, 2021, Graphic Packaging acquired all the shares of AR Packaging Group AB (AR Packaging), Europe's second largest producer of fiber-based consumer packaging. The acquisition included 30 converting plants in 13 countries and is reported within the Europe Paperboard Packaging reportable segment. For more information, see Note 4 — Business Combinations on [pp. 55-59](#) in our Annual Report on Form 10-K.

In late 2021, Graphic Packaging completed the construction of its CRB expansion in Kalamazoo, Michigan, transforming Kalamazoo into the Company's most advanced CRB manufacturing operation. We invested more than \$600 million in the project, adding a new CRB machine with an annual capacity of 500,000 US tons.

Throughout 2021, the COVID-19 pandemic, political instability, labor availability issues, climate/weather events, inflation, and numerous other factors caused multiple supply chain disruptions. At Graphic Packaging, we are investing in our supply chain's digital capabilities and systems integration to build a resilient and efficient supply chain — one that will enable our Company to anticipate and respond to changing disruptions with agility and decisiveness. Upgrading our supply chain management capabilities also prepares us for efficient integration and support for new capacity additions and acquisitions.

During the first quarter of 2022 we announced the planned closure of our Battle Creek, Michigan mill and the Norwalk, Ohio converting plant during 2022. These changes do not affect the information reported herein for the reporting period.



102-11 PRECAUTIONARY PRINCIPLE OR APPROACH

Graphic Packaging is committed to operating responsibly, in line with our five corporate values, [Code of Conduct \(Code\)](#), and the 10 principles of the United Nations Global Compact (UNGC). We seek to apply manufacturing processes or practices that create less environmental impact, and through our product innovation practices, manage potential risks or impacts from our products throughout their entire life cycle, from the design stage to product end-of-life.

102-12 EXTERNAL INITIATIVES

On November 2, 2021, Graphic Packaging became a signatory to the UNGC, committing to act in accordance with the 10 principles of the compact, covering human rights, labor, the environment and anti-corruption, and to take action in support of broader United Nations goals. As part of this commitment, we also agree to support the United Nations Guiding Principles on Business and Human Rights, the Organization for Economic Cooperation and Development (OECD) Guidelines for Multinational Enterprises and the International Labour Organization (ILO) Declaration on Fundamental Principles and International Labour Standards.

We are making the UNGC and its principles part of the culture and day-to-day operations of Graphic Packaging and have mapped how our Vision 2025 ESG goals can contribute towards advancing the UN Sustainable Development Goals (UN SDGs). The 17 SDGs are part of the UN 2030 Agenda for Sustainable Development and are an urgent call to action for all countries — developed and developing — in a global partnership. Both countries and companies have a role to play in achieving the SDGs. Our ESG Vision 2025 aligns most closely with four of the SDGs — decent work and economic growth, responsible consumption and production, climate action, and life on land. Read more about our connections to the UN SDGs throughout this report, in the [UN SDG index](#), and in the [UN Communication on Progress](#).



102-13 MEMBERSHIP OF ASSOCIATIONS

As a global consumer packaging industry leader committed to advancing responsible consumption and a circular economy, we openly collaborate with customers, academia, suppliers, communities, and governments. We actively work with the following industry associations and nongovernmental organizations (NGOs) by maintaining board and other leadership positions.

- 4evergreen
- American Forest and Paper Association
- American Forest Foundation
- Better Buildings, Better Plants
- Confederation of European Paper Industries
- Ellen MacArthur Foundation
- European Carton Makers Association
- European Paper Packaging Alliance
- EXTRACT
- Foodservice Packaging Institute
- Institute of Scrap Recycling
- National Association of Manufacturers
- National Council for Air and Stream Improvement
- Packaging Association of Canada
- Paper and Packaging Board
- Paper Recycling Coalition
- Paperboard Packaging Council
- Recycled Paperboard Alliance
- Recycled Paper Technical Association
- Sustainable Forest Initiative
- The Paper and Paperboard Packaging Environmental Council
- US Composting Council



The previous list provides a representative sample of the organizations with which Graphic Packaging partners. In addition to industry groups and NGOs, we may also participate in the local Chambers of Commerce and/or civic organizations in the communities where we operate. Read more about our external engagements on the [Sustainability Alliances](#) section of our ESG website.

Strategy

102-14 STATEMENT FROM SENIOR DECISION-MAKER

Read a message from our chief executive officer (CEO) on [p. 4](#) of this report.

102-15 KEY IMPACTS, RISKS AND OPPORTUNITIES

Graphic Packaging's strongest opportunities are captured in our four Vision 2025 pillars — People, Planet, Partners, Profits — which can be found in this report on [p. 8](#). For additional information describing potential opportunities and risks for our Company, refer to the following resources:

- Annual Report on Form 10-K, Item 1A Risk Factors, [p. 35](#).
- Investor materials on our Investor Relations [website](#).
- Disclosures [102-46](#) and [102-47](#).

102-16 VALUES, PRINCIPLES, STANDARDS, AND NORMS OF BEHAVIOR

Graphic Packaging's culture is powered by a steadfast commitment to upholding our five core values as we work together to grow our Company and deliver on our Vision 2025 goals. Our core values are:

- **Integrity:** Means honesty, leading by example, keeping promises, meeting commitments, and taking pride in what we do. Doing what is right — always.
- **Respect:** We actively solicit each other's ideas and honor diverse opinions. Each person's unique skills are valued, contributions are appreciated, and accomplishments are always recognized.
- **Accountability:** Each individual is personally responsible for doing their job to the best of their abilities and delivering results. We never quit in meeting our commitments to customers, employees, stockholders, and other stakeholders.
- **Relationships:** We have an unwavering commitment to listen to and understand the needs of our stakeholders and to work with them to create innovative solutions that result in shared prosperity.
- **Teamwork:** The strongest teams share common goals and work together to achieve them. We encourage everyone's involvement, support each other's ideas, and help others without being asked.

These values are reinforced through our [Code](#). The Code applies to our Board, corporate officers, and all our employees and subsidiaries worldwide, and with our values, forms the foundation for the ethical behaviors that guide everything we do. It shows us how to be responsible for ourselves and for each other, deliver on our promises, and always safeguard our personal integrity.

The Code is available in 18 different languages to enable our employees, agents, and third-party representatives around the world to fully understand the principles, policies, and laws that guide our actions. We are all expected to understand and comply with all Company policies and applicable laws, and to adhere to the guiding principles outlined in the Code. It also serves as a resource to our customers, suppliers, and other external stakeholders in understanding our Company's values and ethical standards.

Read more about our Code, business ethics, anti-corruption, and anti-competition practices in disclosures [205](#) and [206](#).



102-17 MECHANISMS FOR ADVICE AND CONCERNS ABOUT ETHICS

Our ethics and compliance engagement program shares speak-up messaging with our employees through multiple platforms, including our [Code](#), online videos and written messages, as well as in-person presentations by business leaders from throughout the Company. Our employees are our first line of defense in protecting our business interests, our Company's reputation, and each other. Employees are strongly encouraged to live our integrity values by listening, observing, and speaking up whenever an ethics questions or advice is needed, and to raise a concern or report any conduct inconsistent with our Code, our values, or the law.

Employees may ask questions or raise concerns by reaching out to their direct manager, business leadership, human resources representatives, our law department or internal audit department, or by contacting the ethics hotline at any time. The multi-lingual ALERTline is available globally by phone or online 24 hours a day, seven days a week and is advertised in posters placed on bulletin boards in high traffic areas of our facilities. In addition, the Company provides business partners information on accessing the ethics hotline during our contracting process. The ALERTline is operated by an independent company, providing a secure and confidential mechanism for raising concerns from employees, contractors, agents, distributors, business partners, and others. Graphic Packaging does not trace, track IP addresses, or use recording devices at any time. As allowed by local law, callers may remain anonymous. Employees who raise concerns about potential misconduct are respected and retaliation against anyone reporting a potential violation is not tolerated.

Graphic Packaging's trained investigators review all allegations and conduct investigations and/or direct them to appropriate functions and/or teams for follow up. Investigations are prioritized based on the potential severity of the allegation and are completed within 90 days of being reported. Confidentiality is essential to maintain the integrity of the investigation and those who participate in good faith are protected from retaliation. The investigation team, led by human resources, conducts root-causes analysis of all substantiated instances of ethical misconduct to understand underlying causes and prevent reoccurrence. Appropriate business leaders, human resources, and experienced ethics and compliance professionals review substantiated violations of the Code to ensure a fair and consistent disciplinary response to confirmed violations of the Code. These violations are also shared with the Board. Following the investigation review, an appropriate response is implemented, which could include measures such as training, policy revisions, disciplinary action, etc. Anyone found in violation of our Code or who is dishonest during an investigation is subject to disciplinary action up to and including termination and/or legal action.

Read more about our Code, business ethics, anti-corruption, and anti-competition practices and 2021 activities in disclosures [205](#) and [206](#).

Governance

102-18 GOVERNANCE STRUCTURE

Graphic Packaging recognizes that strong governance practices hold us accountable to all stakeholders while protecting the long-term interests of our shareholders. The Graphic Packaging Holding Company Board of Directors has active responsibility for and oversees broad corporate policy and overall Company performance. The Board fulfills these responsibilities through several practices, including reviewing, approving and monitoring business strategies, annual operating and strategic long-range plans, significant corporate actions, and Company financial performance. The Board has three committees:

- Audit Committee
- Compensation and Management Development Committee
- Nominating and Corporate Governance Committee



Because sustainability matters are of high importance to Graphic Packaging, a two-tiered level of oversight is believed to provide the best structure to integrate consideration of ESG risks and opportunities into our overall business strategy and help us meet the changing demands of our stakeholders — stockholders, customers, employees, and communities. Our full Board is responsible for the oversight of our sustainability strategy, governance standards, goals, and performance and has assigned principal oversight of our sustainability policy and practices to the Nominating and Corporate Governance Committee (NCGC). In addition, oversight of governance matters such as enterprise risk management (ERM), financial matters, and cyber security risk is assigned to the Audit Committee, while oversight of a wide range of human capital and social matters — such as the effective attraction, development, and inclusion — is the responsibility of the Compensation and Management Development Committee.

The Board and NCGC receive regular updates from senior management on potential environmental, social, and economic risks and opportunities, including climate; water; health, safety, and environmental (HSE); human capital and social issues; regulatory actions; and product stewardship matters. The NCGC also considers current and emerging social and environmental trends, as well as major legislative and regulatory developments and other public policy issues that may impact our business operations or stakeholders. The Committee reviews the Company's policy and practices for consistency with its ESG and climate commitments, including goals, performance metrics, mitigation plans, and public reporting, and makes recommendations to the Board and management. In addition, the Committee reviews the Company's ESG report each year and makes recommendations for its approval to the Board. The Committee also assesses the qualifications of directors and potential directors, including with respect to relevant ESG matters, and how those qualifications can be leveraged to allow the Board to better evaluate and address evolving ESG matters.

Under Board oversight, senior management develops and advances progress on our Vision 2025 ESG goals for climate change, water stewardship, waste management, human capital, safety, and product sustainability. We are continuing to advance sustainability practices and further embed them in our business processes, guiding how we manage and operate our manufacturing sites and inspiring the new products and offerings we bring to market. Our Vision 2025 growth strategy is directly linked to sustainability, providing us a roadmap to responsibly grow our Company.

Read more about our governance structure on our investor relations [website](#) and on [pp. 4-10](#) in our 2022 Proxy Statement.

102-19 DELEGATING AUTHORITY

The Board delegates authority for day-to-day management of economic, environmental, and social risks and opportunities to the CEO and members of the executive leadership team (ELT). Together, the CEO and ELT are responsible for embedding sustainability and ESG opportunities into our business strategy, plans and budgets; our mergers and acquisitions decisions; and achieving our Vision 2025 goals. Our CEO serves as chief executive sponsor and the ELT serves as our steering team for sustainability at Graphic Packaging. The CEO and ELT are dedicated to accelerating our sustainability journey — growing our Company by driving a sustainable product portfolio, effectively managing all our resources and enhancing social and environmental value.

The ELT operationalizes governance of ESG matters through the newly appointed VP, chief sustainability officer (CSO). The CSO works with the ELT and senior leaders from each of our business segments and major corporate functions (e.g., operations, research and development, finance, legal, HR, investor relations, procurement, HSE, marketing, etc.) to advance ESG initiatives and progress toward our Vision 2025 ESG goals. The CSO reports to Graphic Packaging's executive vice president, general counsel (EVPGC), and corporate secretary. Together they are accountable for aligning the ELT and other Company leaders on strategic ESG decisions, such as mitigating climate risks, enhancing our reputation, and positioning the Company for future success.



The CSO and ELT work together to:

- Develop our sustainability purpose, strategy, standards, and goals.
- Stay current on emerging economic, environmental, social, and governance trends.
- Identify and assess ESG risks and opportunities, including human rights, anti-corruption, climate change, resource management, and employee engagement.
- Drive the implementation of our Vision 2025 ESG program and make recommendations for short-, mid- and long-term action.
- Ensure continued progress is made toward achieving the Vision 2025 ESG goals.
- Track and report our progress to the Board, Graphic Packaging employees, and external stakeholders.

For each of our Vision 2025 ESG goals, we are establishing a leadership structure that includes an ELT sponsor who is accountable for goal strategy, execution, and resource allocation; a goal leader who is responsible for achieving the goal; and a team of cross-functional subject matter experts. The goal leaders with their teams are responsible for developing the enterprise-wide plans to achieve their goal; establishing performance metrics, tracking and reporting progress to the CSO and ELT; and working with our business segments to identify and pursue short-term and mid-term opportunities to achieve our Vision 2025 ESG goals. Additionally, each goal leader will support business team leaders, as needed, in establishing business-specific plans and/or teams for meeting business-level annual Vision 2025 ESG performance targets. Ultimately, business and function leadership, with assistance from the goal leaders, are accountable for successful goal program execution and all employees are responsible for advancing our sustainability ethos at Graphic Packaging.

102-20 EXECUTIVE-LEVEL RESPONSIBILITY FOR ECONOMIC, ENVIRONMENTAL AND SOCIAL TOPICS

See disclosure [102-19](#).

102-21 CONSULTING STAKEHOLDERS ON ECONOMIC, ENVIRONMENTAL AND SOCIAL TOPICS

Shareholders and others interested in communicating directly with the Board, Chairman of the Board or other outside director may do so by writing in care of the corporate secretary at:

Graphic Packaging International, LLC
1500 Riveredge Parkway, Suite 100
Atlanta, GA 30328
Attention: Corporate Secretary

The Board's independent directors have approved procedures for handling such correspondence received by the Company and addressed to the Board.



102-22 COMPOSITION OF THE HIGHEST GOVERNANCE BODY AND ITS COMMITTEES

We publish the governance structure for Graphic Packaging, including Board membership, the committees of our Board, committee charters and committee membership, on our investor relations [website](#) and on [pp. 4-16](#) of our 2022 Proxy Statement. All Board committee members are independent directors.

See disclosure [405-1](#) for a summary of our Board demographics.

102-23 CHAIR OF THE HIGHEST GOVERNANCE BODY

Our independent chairman, Mr. Philip R. Martens, leads the Graphic Packaging Board of Directors. In addition, all other members of our Board (except our CEO) are independent and have no material relationships with the Company other than as a Graphic Packaging director.

We are committed to Board independence, have a strong independent lead director with clearly defined responsibilities and all our Board committees are composed of independent directors.

102-24 NOMINATING AND SELECTING THE HIGHEST GOVERNANCE BODY

The Nominating and Corporate Governance Committee has responsibility for reviewing the composition of the Board and recommending refreshment to meet the evolving needs of the Company and maintain an appropriate balance of 1) qualifications and experience 2) ethnic and gender diversity and 3) tenure of longer-serving directors with continuity and depth of Company knowledge and new directors with fresh perspective. The Nominating and Corporate Governance Committee reviews the annual Board and committees' self-evaluations to identify additional director qualifications, skills, experience, attributes, and diversity that would enhance overall Board effectiveness. Age-based retirement practices also help the Board prepare for turnover and engage in succession planning.

The Nominating and Corporate Governance Committee nominates directors based on their independence, as well as their experience and expertise in a variety of areas, including climate, environmental, safety, diversity, equity and inclusion, and other sustainability topics. In evaluating each candidate, the committee considers factors such as integrity and character; sound, independent judgment; breadth of experience, insight and knowledge; business acumen; significant professional accomplishment; specialized skills (e.g., cyber and financial experts) and individual qualities and attributes, including diversity in experience, gender, and ethnicity. Graphic Packaging is highly intentional when identifying and nominating directors to ensure we benefit from a broad and new set of perspectives, which is critical to our long-term competitiveness.

We present director nominations to our shareholders as part of our annual shareholder meeting process. Additional information describing our Board members' expertise and diverse experiences and a review of the process for nomination and selection of directors may be found in our 2022 Proxy Statement on [pp. 11-16](#) and on our investor relations website.

102-25 CONFLICTS OF INTEREST

The Board adopted the Corporate Governance Guidelines, a Policy Regarding Related Party Transactions, and the Graphic Packaging [Code](#) applicable to all Graphic Packaging directors and employees. These documents describe the processes and policies for avoiding or managing conflicts of interest.

Additional information may be found in our 2022 Proxy Statement on [p. 10](#) and on our investor relations website. Other public company Board memberships, supplier/purchaser relationships, and related party disclosures are disclosed in the relevant US Security and Exchange Commission (SEC) filings for Graphic Packaging, including the 2022 Proxy Statement, and 2021 Annual Report on Form 10-K and quarterly 10-Q reports, as appropriate.



102-26 ROLE OF THE HIGHEST GOVERNANCE BODY IN SETTING PURPOSE, VALUES AND STRATEGY

See disclosures [102-18](#) and [102-19](#).

102-27 COLLECTIVE KNOWLEDGE OF THE HIGHEST GOVERNANCE BODY

The Company's Directors are active and engaged beginning at their onboarding. New directors participate in an orientation process to become familiar with the Company, its strategic plans and businesses, significant financial matters, significant environmental and social matters, core values including ethics, compliance programs, corporate governance practices, and other key policies and practices through a review of background materials, meetings with senior executives, and visits to Company facilities.

In addition, our Board continually develops and enhances its knowledge of ESG impacts (e.g., climate change, deforestation, circularity, cybersecurity, diversity, equity, and inclusion, etc.) through activities such as:

- Reviewing economic and ESG impacts at Board meetings and Board committee meetings as part of integrated discussions on Company and business unit strategy, priorities, opportunities, and performance.
- Receiving reports from our CEO and other executive leadership team members regarding Vision 2025 strategies, priorities, goals, performance, and impacts.
- Overseeing efforts by Graphic Packaging management to develop, approve, and update our vision, strategies, policies, and goals related to economic and ESG impacts.
- Reviewing the contents of the Graphic Packaging ESG report each year and any internal assessments of ESG program maturity.
- Overseeing ERM efforts at Graphic Packaging, including ensuring that risks and opportunities associated with economic and ESG impacts are assessed and managed.
- Exposure to ESG matters and best practices through other corporate business and/or board affiliations.

The NCGC is responsible for providing guidance on directors' continuing education, and actively monitors and encourages director education opportunities, including expanding knowledge of evolving environmental, social, and governance matters.

102-28 EVALUATING THE HIGHEST GOVERNANCE BODY'S PERFORMANCE

The NCGC oversees the annual self-evaluation process of the entire Board of Directors, the Board committees and our management. The NCGC establishes the evaluation criteria, implements the evaluation process, and reports its findings on the process to the Board of Directors. The Board and each committee review the results from the evaluations and take appropriate actions to address any areas of concern, including addressing opportunities to improve the integration of economic, environmental, and social topics into Graphic Packaging's governance and business processes.

The self-evaluation process is an effective tool in ensuring sound corporate governance practices, which are important to the success of Graphic Packaging's business and in advancing stockholder interests. The self-evaluation process provides valuable insight regarding areas of effectiveness and opportunities for improvement.

102-29 IDENTIFYING AND MANAGING ECONOMIC, ENVIRONMENTAL, AND SOCIAL IMPACTS

We identify potential impacts from economic, environmental, and social topics using input from internal business and function leaders, internal and external stakeholder input collected through the ESG topic prioritization process delineated in disclosure [102-46](#) and through our stockholder engagement process as described in disclosure [102-37](#).



Collected information is used to update our ESG materiality assessment and is provided to our Enterprise Risk Team for consideration in the ERM process. Risk management is a strategic activity within Graphic Packaging, and our ability to identify and manage risk creates opportunity as well.

The ELT reviews major risks identified through the risk assessment and management process to ensure alignment and communicates those risks to the Board. Responsibility for managing risk rests with the CEO and the ELT, while the committees of the Board and the full Board oversee the process. Specifically, the Board oversees the strategic planning process and reviews and monitors management's execution of the corporate and business plan. Each Board standing committee oversees specific risk areas relevant to their respective charters. This process includes an ongoing review of Graphic Packaging's comprehensive cybersecurity and information security programs and financial report.

In fulfilling its oversight responsibility, the Board receives various management and Board committee reports and engages in periodic discussions with the Company's officers as it may deem appropriate. This enables the Board and its committees to effectively coordinate risk oversight and the relationships among the various risks faced by Graphic Packaging. The Audit Committee ensures the quality and implementation of the ERM process and accurate risk disclosures during their annual review. For more information about our ERM processes, see [pp. 8-10](#) in our 2022 Proxy Statement and our [2022 CDP climate change response](#).

102-30 EFFECTIVENESS OF RISK MANAGEMENT PROCESS

The Board is responsible for overseeing overall risk management for the Company, including review and approval of the ERM approach and process implemented by management to identify, assess, manage, and mitigate risk. Each committee is responsible for oversight of specific risk areas relevant to their respective charters. The risk management approach and process are reviewed at least annually, with key risks regularly evaluated at meetings of the Board and its committees, including risks with economic, environmental, social, and governance impacts.

See disclosure [102-29](#) and our 2022 Proxy Statement pp. 8-10 for discussions of our risk oversight processes for economic, environmental, social, and governance matters.

Business continuity

While the Company cannot predict when a crisis event may occur, our organization is prepared to have the strategic, operational, and financial resiliency to recover from global and emerging risks. Crisis management is organized under a single enterprise management approach, led by our EVPGC, to improve enterprise accountability, governance over business plans, and sharing key learnings across the organization. We are positioned to respond and minimize potential impacts to our personnel and operations.

Our integrated approach prepared us for and to successfully respond to 2021 events such as the continuing COVID-19 pandemic, winter storm Uri, supply chain disruptions, and the recent evolving geopolitical events. We kept our employees safe and ensured continuity of operations.

We continue to evolve and improve our business continuity approach by designing resiliency into our normal operations. We have developed plans and strategies to address risks and opportunities to support a coordinated response and recovery to a wide variety of threats. These strategies and plans include:

- Immediate response to life and safety incidents.
- Overall response and recovery guidance, direction, and oversight.
- Communications with internal and external stakeholders.
- Recovery of critical processes and resources (i.e., people, technology, physical assets, and relationships).
- Restoring operations quickly and safely following an event.
- Recovery of critical IT infrastructure, applications, and data.
- Financial matters and control environment.



102-31 REVIEW OF ECONOMIC, ENVIRONMENTAL, AND SOCIAL TOPICS

Our Board of Directors receives regular updates on our economic, environmental, social, and governance topics through active engagement with management in oversight and stewardship of the Company's strategy, risk management, and overall performance. Committees composed of independent directors assist the Board in carrying out its responsibilities. Committees operate pursuant to a written charter with clearly defined areas of responsibility and risk oversight.

Although each committee is responsible for its key areas of risk and oversight, the full Board is regularly informed by a report of each committee's chair on the topics discussed and actions taken at each committee meeting. This enables the Board and the committees to coordinate oversight and the relationships among the various objectives and risks faced by Graphic Packaging.

Read more in disclosures [102-18](#) and [102-27](#).

102-32 HIGHEST GOVERNANCE BODY'S ROLE IN SUSTAINABILITY REPORTING

The Graphic Packaging annual ESG report is reviewed and approved by the executive leadership team, Board, and NCGC prior to publication.

102-33 COMMUNICATING CRITICAL CONCERNS

Should a critical concern arise regarding economic, social, environmental, or governance matters, the Board of Directors would receive a report via the executive leadership team, which communicates with all business units and major corporate functions and is responsible for addressing and resolving such concerns.

102-34 NATURE AND TOTAL NUMBER OF CRITICAL CONCERNS

See disclosure [102-33](#). In 2021, there were no critical concerns communicated to the Board outside of the regular communications related to corporate risks.

102-35 REMUNERATION POLICIES

The NCGC, which consists solely of independent directors, reviews and considers any revisions to directors' compensation. The NCGC retains an independent compensation consultant to benchmark compensation data from peer companies and make a recommendation on director compensation. The Compensation and Management Development Committee (CMDC) reviews and approves compensation for the Company's executive officers, establishing the performance goals on which the compensation plans and programs are based, and setting the overall compensation principles that guide the committee's decision-making. The CMDC recommends the compensation for the CEO, which is approved by the Board. [Pages 21-43](#) of the 2022 Annual Proxy Statement describe the Company's executive pay philosophy and practices.

The CMDC annually engages an independent compensation consultant to make recommendations concerning Board and executive compensation, including benchmark market compensation data from our peer companies and input on trends that may be important to investors. The consultants have multiple safeguards and procedures in place to maintain the independence of the consultants in their executive compensation consulting practice. These safeguards include a rigidly enforced code; a policy against investing in client organizations; and separation between their executive compensation consulting and their other administrative and consulting business units from a leadership, performance measurement, and compensation perspective.



102-36 PROCESS FOR DETERMINING REMUNERATION

Graphic Packaging provides total compensation packages targeted to be competitive with the markets in which we compete for talent, while allowing individual employee pay to vary based on performance, skills, and experience. We globally align our compensation programs and, where possible, our total rewards plans include base salary, incentives (short- and long-term), financial, physical and mental well-being programs, and monetary and social recognition. We routinely review total rewards practices in the markets in which we compete to ensure the plans are competitive and allow us to recruit and retain the talent we need to be successful.

Employee compensation includes base salary and, for some employees, annual incentive pay. We review the base salary of each employee annually through the annual compensation planning cycle. During the compensation planning cycle, the global compensation team provides base salary increase guidelines based on country and/or local market pay ranges by function and level. This ensures that pay is both competitive externally and fair and consistent internally. Leaders make compensation decisions for their employees using the guidelines and assess the employee's overall contribution and success completing individual annual performance goals, including performance on corporate ESG goals when applicable to an employee's individual role. Second-level leaders and functional leadership review all compensation decisions for equity and consistency. Recommendations are ultimately reviewed by the executive leadership team for their organizations and then by the CEO and EVPHR. These results include reviews for pay equality.

The annual incentive plan reinforces our philosophy to pay for performance and our belief that individual performance has a collective impact on our success as a Company. We define metrics each year ensuring focus on the critical metrics — including some linked to our Vision 2025 goals — that reward our colleagues for achieving the Company's objectives. Colleagues who make greater contributions to our collective success have more opportunity for rewards. Additionally, we reward some colleagues with equity plans to create a greater link to longer-term objectives of the organization. Performance stock units (PSUs) and restricted stock units (RSUs) are used as vehicles for these awards.

Graphic Packaging is firmly committed to paying employees in a fair and equitable manner. We have implemented global total rewards tools to promote equitable remuneration regarding race, ethnicity, and gender. We routinely review the position of employee rewards versus our standards to ensure individual employee compensation is aligned with these standards, and we are committed to promptly fixing any issues that we discover to assure salary and benefits equity among all employees. Periodically, Graphic Packaging contracts with a third-party to conduct a global pay equity analysis that allows us to identify and correct for any potential unequal treatment. We are committed to providing a fair or living wage for all employees. Our remuneration practices comply with all applicable laws and regulations.

102-37 STAKEHOLDERS' INVOLVEMENT IN REMUNERATION

Graphic Packaging maintains a very active and broad-based investor relations outreach program to solicit input from, and to communicate with, stockholders on a variety of topics related to current business conditions and our business strategy. We also speak to stockholders about governance matters, including our corporate governance structure and our Vision 2025. Throughout the year, our Investor Relations team, which includes our vice president of investor relations, and some of our executive officers, and other designated spokespersons for the Company speak with stockholders and prospective investors at investor conferences, at in-person meetings, and in phone conversations. The Board and management team carefully consider the feedback from these meetings, as well as stockholder feedback when reviewing the business, corporate governance, and executive compensation profiles.

Our most recent "Say on Pay" vote took place on May 24, 2022, and stockholders approved our proposal with more than 90% of the votes cast in support of the executive compensation program. The "Say on Pay" proposal allows stockholders to vote, on an advisory basis, on whether they approve the compensation of our executive officers as disclosed in our proxy statement. The CMDC regularly reviews the program in the context of our compensation philosophy and continues to consider shareholder input in evaluating executive compensation program design and decisions. Read more in the Compensation and Management Discussion section of our [2022 Proxy Statement](#).

**102-38 ANNUAL TOTAL COMPENSATION RATIO**

In 2021, the ratio of CEO pay to the median worker pay was 136:1. For more information on how the CEO total compensation ratio was determined, see [p. 38](#) of our 2022 Proxy Statement.

102-39 PERCENTAGE INCREASE IN ANNUAL TOTAL COMPENSATION RATIO

Graphic Packaging evaluates annual total compensation on a role-specific basis, aligning pay to the market and reflecting performance and progression over time. In the interest of confidentiality and competitiveness, Graphic Packaging does not report ratios based on individual compensation or make pay decisions based on these ratios. See disclosure [102-36](#) for a description of the process for determining remuneration.

Stakeholder engagement

102-40 LIST OF STAKEHOLDER GROUPS

We regularly engage with a variety of stakeholders to shape our Company's sustainability strategy. Our key stakeholders include:

- Communities in which we operate
- Current employees
- Customers
- Government
- Individual stockholders
- Investment community
- NGOs, academia, and think tanks
- Suppliers

102-41 COLLECTIVE BARGAINING AGREEMENTS

In 2021, approximately 52% of Graphic Packaging global employees were represented by unions or collective bargaining agreements. Management believes that its relations with employees and labor organizations are good. Graphic Packaging implemented a cross functional Labor Council in 2021 to enhance its focus on these critical relationships.

For more information on our labor practices see disclosures [402](#) and [407](#).

102-42 IDENTIFYING AND SELECTING STAKEHOLDERS

Stakeholder engagement is an important component of corporate governance. Each of our business segments, functions, and locations is expected to effectively engage its stakeholders, whom we identify as those entities that can affect or be affected by our actions, objectives, and policies. Regular dialogue with our stakeholders is essential to conducting our business, as well as developing and implementing our sustainability strategies.

102-43 APPROACH TO STAKEHOLDER ENGAGEMENT

We actively engage with stakeholders — including those who may be critical of us — through formal and informal channels to better understand outside perspectives and priorities about our Company and products, the communities in which we operate, and emerging sustainability topics. We conduct our engagement efforts on an ongoing basis for sharing information, participating in active dialogue and collaborating on topics of mutual interest. Through open and direct communication, we work to develop trusted relationships with our stakeholders, and these conversations shape how we define and execute our sustainability strategy, including ESG topic prioritization, risk management, and new business opportunities.

See disclosure [102-46](#) for more information.

**102-44 KEY TOPICS AND CONCERNS RAISED**

The following table provides an overview of how we establish and maintain productive relationships with our key stakeholder groups and the topics of interest for each group. Having ongoing, transparent conversations establishes trust, strengthens relationships, and helps us prioritize areas where we can have the greatest impact and that are most important to our stakeholders. Additional information on specific stakeholder engagement activities can be found throughout this document.

Key stakeholder relationships		
Stakeholder groups	Typical engagement activities	Key topics of interest
Communities	Meetings, media, social media, events, mill and plant tours, community support and volunteerism, state and local civic associations.	Local site financials and employment trends, shipments and traffic, environmental impacts, community health impacts and needs, Vision 2025 goals progress.
Current employees	Town hall meetings, emails, global employee engagement surveys, business resource groups, recognitions, daily intranet postings, social media.	Company strategy, competitive pay and benefits, career and growth opportunities, work environment, Vision 2025 goals progress.
Customers	Events, meetings, innovation sessions, emails, calls, surveys, trainings, technical support, media, social media.	Market trends, new product development, product composition and quality, product footprint, recyclability, fiber certification, value chain collaboration, Vision 2025 goals progress.
Government	Meetings, emails, calls, mill and plant tours and site visits, reporting activities to select state and federal agencies, industry and trade association involvement.	Key industry issues and opportunities, Company environmental and social impacts.
Investment community	Calls, emails, meetings, conference appearances, press releases, media, social media, SEC filings, surveys.	Market trends, Company financial performance, risk management, continued investment in growth opportunities, transparent reporting with credible data, Vision 2025 goals progress.
NGOs, academia, and think tanks	Visits, events, meetings, research projects, emails, calls, social media.	Industry issues, opportunities, collaboration and partnership opportunities, research.
Individual stockholders	Meetings, press releases, mail, media, social media.	Company financial performance, risk management, Company sustainability performance.
Suppliers	Events, meetings, calls, emails, surveys, supplier relationship management, supplier recognitions.	Value chain insights, expectations, limitations, opportunities, payment, value chain collaborations, Vision 2025 goals progress.



Reporting practices

102-45 ENTITIES INCLUDED IN THE CONSOLIDATED FINANCIAL STATEMENTS

See our 2021 Annual Report on Form 10-K Note 1 [p. 46](#) and Exhibit 21 to the [10-Q](#) filed on April 26, 2022, for descriptions of entities included in the consolidated financial statements.

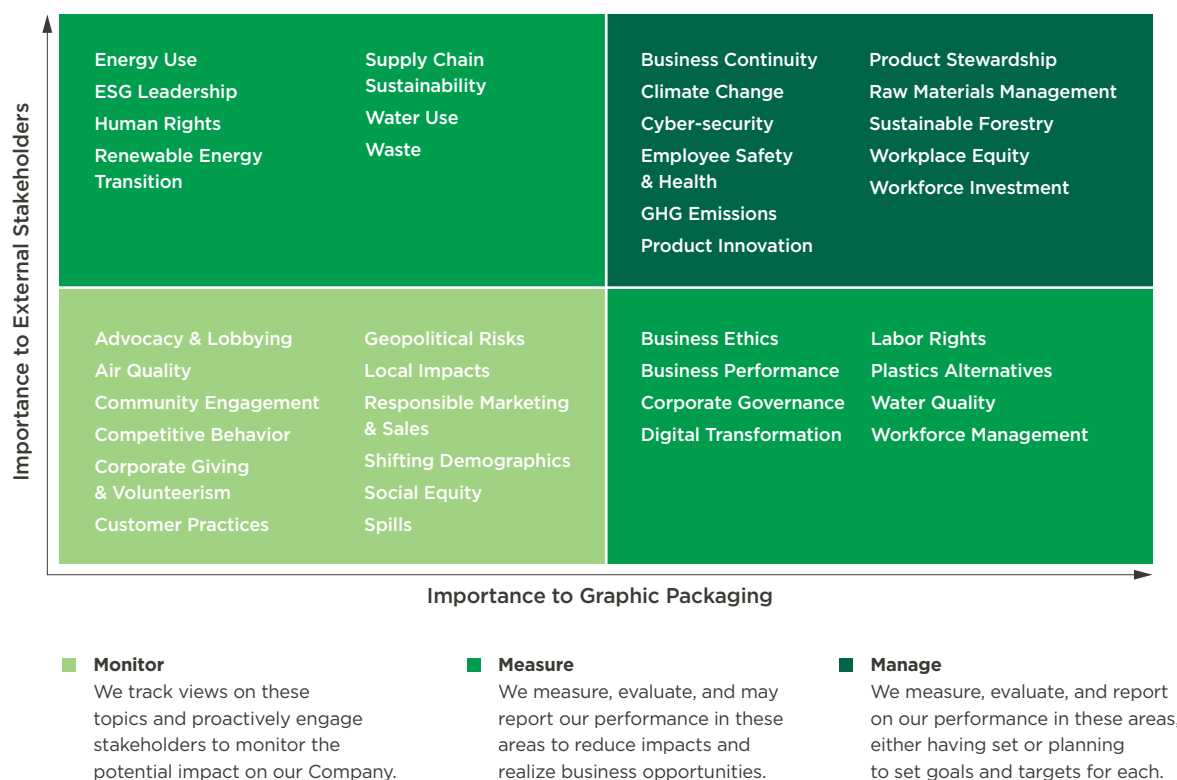
102-46 DEFINING REPORT CONTENT AND TOPIC BOUNDARIES

Our ESG topic assessment, also known as a sustainability materiality assessment, helps Graphic Packaging recognize and assess the ESG topics that influence the judgment and decisions of, or have an impact on, our internal and external stakeholders (described in disclosures [102-40](#) and [102-44](#)). We use the results of the assessment as critical input for our sustainable growth strategy to identify and manage the ESG opportunities and risks aligned with what is most important to our stakeholders and to our Company's success. We worked with third-party experts to conduct our first formal ESG topic assessment last year using the following three-step process and plan to repeat this exercise every three to five years. In early 2022, we refreshed our analysis using a business intelligence tool and feedback from ongoing stakeholder engagements.

Step 1: Identify topics. We review the priority topics publicly reported by our peers and customers, topics included in major sustainability reporting and third-party rating frameworks, topics included in the UN SDGs, audit topics trending with our external stakeholders, and insights from our business leaders. We compare these topics with our enterprise risk assessment and risk inventory to ensure all relevant topics have been captured from a materiality and/or risk and opportunity perspective. During our original topic assessment, we identified around 100 potentially relevant topics and selected and clustered them into 30 unique topic groups for Graphic Packaging to monitor and manage. As part of our refresh, we refined our topic mapping by redefining a few of our clustered topics as separate focused topic groups to better track shifting external stakeholder priorities. Our revised assessment is now tracking the relative importance for the 39 unique topic groups most applicable to our Company and sector.

Step 2: Prioritize topics. We use a multi-pronged approach to prioritize identified topics, considering both the potential impact on stakeholder decisions and the impact on our business segments. We survey global employees from our business segments and functions and external stakeholders to curate relative importance for each topic. To further vet the prioritized topics identified by the survey results, we conduct detailed interviews internally with global employees and externally with a broad cross-section of stakeholders who have a holistic ESG understanding and knowledge of our Company and industry sector. We then combined the results of the external and internal assessments to build the prioritization matrix. In early 2022, we updated our external stakeholder prioritization using Datamaran — a business intelligence tool that harvests information from millions of data points from various public information sources, including annual financial reports, sustainability reports, SEC filings, regulatory initiatives, accredited media, and social media. This approach helps us monitor temporal changes in perceived external stakeholder topic importance and adjust our ESG strategy and reporting if necessary.

Step 3: Validate and act. Our ELT and leaders from our extended leadership team provide feedback on the prioritized topics and validate the results of the research, survey, interview, and data analytics processes. The ELT then reviews and approves the final assessment results. We combine the results from the topic prioritization assessment with other business inputs to identify areas of focus and refine our commitments and disclosure practices.



102-47 LIST OF MATERIAL TOPICS

The manage quadrant in our current topic prioritization matrix illustrates the 11 ESG topics that are the most important, or material, to our stakeholders and to the Company. This matrix reflects the relative importance of topics, and lists topics in alphabetical order within each quadrant. Prioritization and effective management of potential opportunities and risks related to these topics are integrated into our strategy, business models, risk management, and governance processes to drive continued commercial success. We consider the prioritization results when determining the information included in our public disclosures, including this ESG report, and in how we drive progress advancing sustainability within the Company.

102-48 RESTATEMENTS OF INFORMATION

Each year, Graphic Packaging reviews the ESG materiality assessment and Vision 2025 ESG goals to ensure priority topics remain of relevant to our annual reporting process. No significant changes were identified in 2021.

102-49 CHANGES IN REPORTING

This year, we made several changes to our reporting, including:

- Updating the format of the report to improve alignment with the GRI reporting standards.
- Enhancing the management approach discussions and data disclosures for our Vision 2025 ESG goals and other disclosures.
- Integrating information from 2021 acquisitions for 2021 reporting to provide a holistic view of our Company. Future reporting will consider updates to historical information and restating 2016 ESG goal baselines.
- Updated our reporting boundary to operational control from financial control for environmental performance reporting.



- Refining our ESG materiality assessment to reflect changes in the definition and evolving relative priority of topics that are of interest to society and/or may impact our businesses. No significant changes were identified to our topics prioritized for action.
- Sunsetting prior ESG goal to achieve 70% industry recovery of paper and paperboard by 2020. See our 2020 ESG report for final reporting on industry progress achieving this 2020 timebound goal.
- Enhancing ESG employee engagement, safety, and product innovation goal discussions to include Vision 2025 content shared in investor communications.
- Updating forest certification and social responsibility audit goals to measure progress using all Graphic Packaging facilities at year end versus only for facilities owned one year or longer.
- Including content on cyber security, tax practices, and expanded discussions on human rights and political policy to address specific stakeholder interests.
- Environmental data and other key performance indicators (KPIs) are reported rounded to the nearest 1,000, and where applicable historic data were updated to this new format.

102-50 REPORTING PERIOD

This 2021 ESG report presents data and information for the calendar year January 1 to December 31, 2021. Significant policy or program activities occurring before or after calendar year 2021 may also be included. In addition, some social metrics may be reported using 2022 data due to our intent to present an integrated report that includes newly acquired operations.

Graphic Packaging reports annually on the environmental, social, governance, and economic performance of our Company, with regular updates to external stakeholders in the interim. Our business segments and corporate functions provided the content and data contained in this ESG report. Financial data included in the report are taken from our 2021 Annual Report on Form 10-K as filed with the SEC. The environmental data were collected through several information management processes, including instrumentation, monitoring, sample collection and analysis, engineering estimates, material balances, and other methods. Measurement of certain data includes estimates and assumptions that are subject to inherent measurement uncertainty resulting, for example, from accuracy and precision of conversion and other factors. The data represent global operations within our operational control at year-end December 31, 2021, and, where indicated include data for the Americraft and AR Packaging entities for the portions of the year they were part of Graphic Packaging.

We have not included information and data for contract manufacturers or joint ventures not operated by Graphic Packaging, nor for providing services to site tenants where applicable. Stand alone office locations, technical centers, and warehouses are also not included in environmental metrics, as these locations are either de minimis or not under Graphic Packaging's operational control. Where applicable, these locations are included in our Scope 3 greenhouse gas data reporting. Data from remediation sites managed under regulatory compliance programs are also not included in our operation's environmental footprint. We are committed to fully including information on newly acquired sites within two years of acquisition.

102-51, 52 DATE OF MOST RECENT REPORT AND REPORTING CYCLE

We issue our ESG report on an annual basis. Our previous report was published on August 5, 2021 and presented data from the 2020 calendar year. Previous reports may be viewed [here](#).

102-53 CONTACT POINT FOR QUESTIONS REGARDING THE REPORT

Feedback on this ESG report or its contents and our sustainability performance can be provided via email at sustainability@graphicpkg.com.



102-54 CLAIMS OF REPORTING IN ACCORDANCE WITH GRI STANDARDS

We prepared this 2021 report in accordance with GRI Standards: Core option.

Refer to <https://www.globalreporting.org/standards> to learn more about the GRI framework.

102-55 GRI CONTENT INDEX

This document, the 2021 Graphic Packaging International ESG Report, serves as our GRI content index.

102-56 EXTERNAL ASSURANCE

Graphic Packaging follows a rigorous internal assurance and disclosure approval process to ensure the reported content is accurate, complete, and fairly represents our Company's performance. Management is responsible for the collection, quantification, and presentation of the sustainability disclosures and for the selection of the criteria, which management believes provide an objective basis for measuring and reporting on the sustainability disclosures. We currently do not seek external assurance or third-party verification for our entire ESG report, as the scale of our operations and the resources required are prohibitive at this time. We will continue to explore external assurance options for the report as our program evolves.

However, we have undertaken a limited level of assurance for our 2021 Scope 1, 2, and 3 greenhouse gas emissions data and 2021 water data. The assurance statement can be found [here](#).



Product Innovation



Product Innovation



Product strategy

103-1 EXPLANATION OF THE MATERIAL TOPIC AND ITS BOUNDARY

At Graphic Packaging, we create innovative, fiber-based packaging solutions that make a world of difference. Our packaging safely transports food, beverages, and other essential consumer goods from our customers to consumers around the world, all while supporting a circular economy. More than 95% of our product revenues comes from fiber-based products that are made from responsibly sourced, renewable virgin tree fibers or recycled fibers and can be recycled at end of life. By working closely with our customers to understand their needs and consumers' expectations, we continue to offer the value and quality that our customers expect and packaging that helps solve the growing waste challenge.

End consumers are concerned about two overarching trends, they want the convenience packaged goods and e-commerce offer, but they are concerned about the amount of packaging waste that is being generated. In addition, the COVID-19 outbreak has heightened consumer awareness of the role packaging plays in maintaining product safety and hygiene. As global e-commerce grows, the need for convenience and the desire for safe, sustainable packaging converge as consumers increase the amount of shipped packaging they use, while seeking lower waste options from the brand owners and retailers they trust. Consumers count on brand owners to make changes that make their life easier while reducing their impact on the environment.

At Graphic Packaging, we work to develop resource-efficient and easily recyclable packaging solutions, understanding packaging must shift away from the traditional take-make-waste model and use natural resources responsibly. Consumers are more aware today than ever before of the potentially negative impact plastic and certain chemicals can have on the environment and consumer health. They care about climate change and want to reduce waste, particularly fossil fuel-based plastic waste and pollution. We strive to be a partner for our customers, enabling them to shift toward more circular packaging and shaping how they think about their packaging products.

Consumer brands around the world are making impactful voluntary commitments and pledges to reduce their use of single-use plastic packaging and are setting ambitious goals to make their packaging 100% recyclable, reusable, or compostable. Initiatives such as the Plastic Pacts unites businesses, government institutions, NGOs, and citizens alike behind [a common vision](#) of transitioning away from unnecessary and problematic non-recyclable plastics in countries around the world, including in the US. In Europe, the Green Deal delivered many new regulations that create the framework for the transition to a circular, low-carbon economy aiming for climate neutrality on the continent by 2050. Regulatory impacts on packaging include:

- Requirements for 100% recyclable or reusable packaging by 2030.
- Redefining requirements for classifying packaging as recyclable.
- Bans on certain single-use plastic under the Single-Use Plastic Directive.
- Incentives for reusable packaging.
- Taxes on non-recycled plastic.



103-2 THE MANAGEMENT APPROACH AND ITS COMPONENTS

For Graphic Packaging, our Vision 2025 product innovation goals serve as a north star guiding product development and stewardship. By 2025, we are working to:

- Deliver **\$400-700 million** in net new product sales.
- Generate **100%** of sales from recyclable products.
- Reduce our use of Low-Density Polyethylene (LDPE) by **40%**.

To achieve these goals and ensure we meet regulatory requirements, we use a series of key processes including:

- **Scoping Ideas, Opportunity Development, Align Expectations, Release to Market (SOAR) process:** The SOAR innovation process is a product development roadmap that uses a stage-gate review of innovation projects to ensure success from concept to market, with a focus on improved decision-making, efficiency and speed. New product development leaders work with sales and marketing to gain insights, develop new solutions, and incorporate them into portfolio planning. At each gate review, metrics are evaluated to determine whether or not to move the project forward to the next stage and assign resources for the project. The SOAR process ensures innovation-related activities are strategically aligned with business growth objectives, coordinated enterprise-wide, and supported by the appropriate resources.
- **Design for the Environment (DfE):** With DfE, which is being integrated in our SOAR innovation process, we consider how to reduce environmental impacts throughout a product's life cycle. This includes increasing circularity in fiber-based packaging, increasing renewable content to support the transition to a post-fossil fuel economy and designing packaging to be easily recyclable. DfE also considers material safety and the packaging's carbon footprint when selecting raw materials and managing the impact of our operations.
- **Voice of the Customer (VOC):** Collecting feedback from customers (e.g., VOC) ensures we understand the needs of our downstream partners and informs how we develop new packaging innovations or improve existing products. We include scoping consumer and customer insights at the early product development stages to gain insights related to quality needs, desired sustainability attributes, and market expectations to inform the innovation process. VOC is also used in periodic quality reviews for existing products to improve packaging quality and/or identify new market needs.
- **Quality Management System (QMS):** Graphic Packaging considers safety, food safety, and product quality as core components of the Company's continuous improvement strategy and culture. We follow a quality management system that works to meet customer and regulatory requirements by improving internal quality and food safety programs. Operations management provides the resources necessary to manage and implement the QMS.

The [Ellen MacArthur Foundation's first principle](#) notes that a product's environmental impact and its fitness for the circular economy is primarily determined during the design phase. We are working to incorporate formalized sustainability criteria across our product development and innovation pipeline processes and in our design decisions. To that end, we have developed a set of 15 performance indicators that guide new product development and characterize progress in line with circularity and environmental sustainability targets. Indicators include carbon footprint, fiber and plastic content, bio-based and recycled content, exclusion of toxic/persistent chemicals, circularity indicator, reusability, recyclability, compostability, and others. Beyond these criteria, on a project-by-project basis we may consider other indirect influences on the supply chain including efficiency, functionality, shelf life, and other topics. This complexity means there may sometimes be trade-offs to finding optimal solutions that align with our customers' priorities. There is no universal solution that will address all sustainability needs. Thus, we approach each new product idea holistically, seeking to find the best solution.



In addition to following DfE principles, our design and innovation teams seek to find a balance across a broad spectrum of considerations crucial to the success of all our products including:

- Choosing appropriate materials to enable the most effective “fitness for use” in the packaging application.
- Designing structural enhancements to improve consumer experience.
- Optimizing selected substrate use to not over-engineer a package.
- Selecting suitable inks and coatings to provide the required performance characteristics, meet safety requirements, and enable package recyclability.
- Improved manufacturing efficiency.
- Enhanced performance along the value chain.
- Convenience for the consumer and retailers.
- Providing customer branding opportunities.

Graphic Packaging has a global innovation team, with eight innovation centers located in the US and Europe. In 2021, our product innovation team was very busy expanding our team resources. In addition to launching the SOAR process, we upgraded the raw material approval processes and made improvements to our team knowledge sharing platforms. This worked to harmonize our processes for data sharing and increase global team collaboration. As well in 2021, we invested in new processing and characterization equipment and grew our multi-disciplinary team focused on marketing, research and development, design, and business development.

To extend and complement our internal innovation capabilities and accelerate our innovation roadmap, we collaborate with suppliers, academic researchers, and customers across our innovation function. In 2021, collaborations focused on exploring next generation barrier technologies and molded pulp solutions as part of our plastic substitution program. We also launched two collaborative research and innovation projects funded by the European Commission: [Preserve](#) and [BioSupPack](#), as well as a project under Swedish funding ([Vinnova](#)).

103-3 EVALUATION OF MANAGEMENT APPROACH

We evaluate and continuously improve our processes across innovation, product stewardship, and quality. Our VP, global quality formally convenes a team of quality system leaders and other relevant parties at minimum once per year, to review the current state and effectiveness of the QMS. Monthly reviews are held with production locations to review quality metrics and ensure any issues have prompt corrections. We also stay abreast of new issues and customer concerns by participating in industry working groups including AF&PA, Recycled Paperboard Technical Association (RPTA), European Carton Makers Associations (ECMA), and others. Read more about external engagements on our [website](#).

We measure the effectiveness of our product innovation approach by tracking progress moving products through the SOAR product development pipeline and through progressing our Vision 2025 product innovation goals. The innovation team has been highly successful introducing new products and has delivered ~\$300 million in new product revenue since this goal was launched in 2020. New product innovations include products with improved recyclability performance, lower LDPE usage and other enhanced performance attributes.

Progress advancing our Vision 2025 Product Innovation Goals		
	2021 result	Progress toward Vision 2025
Deliver \$400-700 million in net new product sales	~\$300M ¹	On track
100% of sales from products that are recyclable ²	95%	On track
Reduce LDPE use by 40% ³	19% reduction	On track

¹ Measured versus January 1, 2020 starting point. Cumulative progress as of Dec 31, 2021.

² Includes sales from products defined as widely recycled, regionally recycled and conditionally recycled.

³ Measured versus 2018 baseline usage.



Product innovation: New products launched in 2021 contributing to our growth goal

Customers utilizing our innovative solutions include many of the world's most widely recognized companies and brands in beverage, food, foodservice, and other consumer products. With the recent AR Packaging integration, we have expanded our market presence further into pharmaceutical/healthcare, beauty, tobacco, and homecare products, among others. We take pride in being part of the daily life of billions of consumers. To accomplish our growth goal from new products, we are committed to constantly innovating to develop new sustainable packaging solutions with enhanced sustainability attributes, convenience, and performance. The following are some of our most recent innovations for 2021, aligned with our innovation platforms: plastic substitution and reduction, strength packaging, and cooking solutions.

Plastic substitution and reduction packaging solutions



KeelClip™, EnviroClip™, Cap-It™

KeelClip™ provides a sustainable, fiber-based option for brands looking to replace plastic rings and shrink film for beverage multipacks. In 2021, KeelClip adoption expanded beyond Europe into new geographies including Canada and Brazil. We also extended our multipack portfolio in 2021 by launching the Cap-It™ system, a fiber-based clip solution for polyethylene terephthalate (PET) bottles, and EnviroClip™ a can clip packaging solution that is free of glue and plastic laminations, uses the least amount of material in our can clip portfolio, and is easy to recycle after use.

OptiCycle™

OptiCycle™ is a new, innovative line of non-PE coated foodservice packaging that provides an alternative to traditional LDPE and polylactic acid (PLA) coated products. When repulped, approximately 98% of the fiber is recovered, which means that almost the entire cup can be used to make other paper products. In addition, OptiCycle hot cups have received BNQ certification in Canada, which certifies our products as compostable to BNQ standards, and have also passed the Compost Manufacturing Alliance (CMA) test for compostability.



ProducePack™

Fresh produce is an area under intense scrutiny in terms of single-use plastic, with legislation already being introduced in France (and forthcoming in Spain) to address it. We have a range of fiber-based produce packaging solutions which can provide both an alternative to conventional plastic packaging and a potential added protection benefit to decrease produce waste during transportation and storage.



Our punnet tray solutions were designed and developed as a new portfolio of sustainably sourced fiber-based tray solutions to replace plastic trays and clamshells. The ProducePack Punnet can be top sealed at speeds equivalent to traditional plastic punnets. Its compatibility with existing filling lines ensures a low barrier to entry. ProducePack Punnet is available in a range of tray sizes, as well as board and barrier options which have been selected to ensure the package remains robust in cold storage and throughout the supply chain. It can achieve a 100% reduction in plastic if a barrier coating is not required.



Boardio™

Boardio™ is a fiber-based rigid container that can work as an alternative to plastic, glass, and metal containers. It is made of more than 80% renewable fiber and incorporates different barrier layers depending on the needs of the product, affording a plastic reduction of up to 83% of the package's content. Boardio can be recycled as verified by Western Michigan University (WMU) repulpability test in the US and the European Suez assessment. It is delivered flat to the customer, which minimizes the costs and space requirements for transport and storage. Based on cradle-to-grave LCA assessments, Boardio has demonstrated potential reductions of 60-75% in CO₂-equivalents (CO₂e) compared to tin cans or blow molded packs.¹ In 2021, we launched the first high-barrier, widely recyclable fiber-based Boardio pack in North America. The Boardio pack used for Club Coffee received several awards, including an Ameristar award and two Worldstar awards. We also launched a standard barrier Boardio pack designed for confectionery packaging use in the US and in Europe.



Cooking solutions



PaperSeal™ Cook

PaperSeal™ Cook is a 2021 innovation in the PaperSeal tray product portfolio. Designed to be taken from the fridge or freezer to a conventional oven or microwave, PaperSeal Cook delivers an approximate 80% reduction in plastic content versus traditional trays and is suitable for a wide range of ready-to-cook applications. PaperSeal Cook can be easily recycled by the consumer as the film liner is designed to be manually separated from the paperboard tray, allowing the paperboard tray to be recycled through normal paper waste streams.

Along with the fiber-based tray design improving the product's circularity index, external studies have highlighted that replacing the plastic tray with a fiber tray packaging solution can reduce the packaging's carbon footprint (these results may vary depending on the assumptions, supply chain and specific comparison framework and should be verified on a case-by-case basis).

Strength packaging solutions

Graphic Packaging engineers enhanced-strength, reduced-weight packaging solutions that maintain the required structural integrity and keep with the demand from club stores and mass retail applications for evolving performance throughout their rigorous supply chain. Additionally, these solutions may incorporate recycled paperboard and can be easily recycled. We continue to expand our strength packaging offerings with innovations like:



Z-Flute™

Z-Flute™ laminated folding cartons are engineered through a process that involves strategic lamination to the inside load-bearing areas, providing the compression strength performance of a corrugated box in a paperboard carton. In 2021, we introduced Z-Flute Recycled in the club store channel with a large customer in the ready-to-eat cereal segment. Z-Flute Recycled incorporates recycled paperboard into the z-flute package design, providing extra strength where needed while optimizing material use.

¹ The LCA was conducted using the LCA application SimaPro 9 following the ISO 14040, ISO 14044, and ISO 14047 standards.



IntegraFlute™

In 2021, IntegraFlute™ completed successful e-commerce distribution testing which led to a commercial launch in 2022. The package is a hybrid structure which combines a flexible element with the structural protection and presence of a fluted carton. IntegraFlute palletizes directly and can be conveyed then shipped without additional packaging. The inner bag is specified to the barrier requirements of each product, and the outer carton is Graphic Packaging's LithoFlute which keeps contents safe while looking good at the same time. The carton and bag are reclosable for storage and, since its more compact than a large format bag and oversized shipper, IntegraFlute is easy to store. Finally, the inner bag can be easily removed for recycling.



Improved circularity solutions

We have a range of paper-based and flexible plastic films with different barrier levels tailored to different applications.

Flexible Packaging Innovations



Flexible packaging materials are traditionally well known for their low packaging-to-product ratio. They are key to delivering resource-efficient and lightweight packaging, often also leading to a lowered greenhouse gas footprint due to lower use of materials and energy. We consider recyclability-by-design requirements wherever possible. We also have goals to increase the amount of renewably or circularly sourced materials in our flexible portfolio — for example, using fiber substrates and recycled and biobased polymers where they do not have a detrimental effect on consumer safety, product quality or food waste. We are experienced in incorporating both post-consumer recycled (PCR) and post-industrial recycled (PIR) PET in our HiLite™ range to reduce our reliance on virgin raw material and the CO₂e footprint of the packaging material.

Following the plastic reduction trend, we collaborated with an Italian customer to replace traditional APET/PE laminated trays with recyclable Paperlite™ 300/30 HB as tray material for sliced meat products. By achieving 83.5% renewable (paper) content, this new structure meets design for recycling criteria in the target country of sales allowed the MAP barrier level to be maintained and so did not lead to a compromise in shelf life, and delivers an estimated carbon footprint reduction of 75% (internal ISO-compliant LCA).

Galaxy

Some surface finishes are known to create difficulties in recycling, which can lead to reduced acceptance for recycling. Our Galaxy product line was developed to create metallic looks with printing inks and thereby address this recycling challenge. Graphic Packaging provides various metal effect technologies, spanning from inline applied cold-foil, sheet to sheet or reel to reel hot-foil and transfer metallization to our unique Galaxy metallic printing technology. This metal printing solution creates an attractive, metallic finish while using a process with a reduced environmental impact when compared to traditional metal containing technologies. No foil, laminates, or plastic is required during printing, and there is no foil waste. In addition, the final package is recyclable and repulpable.



To learn more about our packaging solutions, visit [Graphic Packaging Products](#).



Award-winning new products

In 2021, Graphic Packaging was honored to receive supplier of choice recognitions from several of our customers, as well as 44 individual awards that recognized 27 of our packaging innovations. Highlights included:

European Carton Excellence Awards

- PaperSeal MAP burger tray for Swedish retailer ICA Gruppen — Save the Planet
- Mergulo plant-based butter pack — Virgin Fiber Carton of the Year

UK Packaging Awards

- Mergulo plant-based butter pack — Best Packaging of a New Product

Liderpack Awards

- Estrella Damm Rounded Corner multipack carton for beer cans — Best In Show: Packaging and Best Beverage Packaging
- PaperSeal MAP tray — Best Food Packaging

PPC Awards

- Heineken Fully Enclosed Wrap with Flap — Gold Award in Outstanding Sustainability
- The Tomato Stall tomato punnet — Gold Award in Outstanding Sustainability

AmeriStar and WorldStar awards:

- Belle Harvest Sustainable Apple Packaging in Saves Food (agriculture)

Product innovation goal: Recyclable products

Graphic Packaging became a member of the Ellen MacArthur Foundation (EMF), a leading, global circular economy network, in 2021. This membership supports advancing our long-standing commitment to provide recyclable products that enable the circularity of fiber-based packaging. Graphic Packaging follows DfE principles throughout SOAR and designs packaging products to maximize recyclability. In 2021, we refined our approach for how we define product recyclability and completed a comprehensive review of our packaging solutions and applicable conditions to classify them using the following recyclability categories:

- **Widely recyclable products:** We define widely recyclable products as those that meet criteria for technical recyclability, as well as criteria to demonstrate recycling in practice and at scale following Federal Trade Commission (FTC) requirements for recyclability (60% community access in US) and/or EMF's [global commitment definition](#) requiring an actual recycling rate greater than 30% for a population over 400 million people or in the countries of sale. Technical recyclability was also evaluated, using recyclability test results or by following well-recognized circularity-by-design guidelines (e.g., as defined by organizations such as AF&PA or 4evergreen for fiber-based packaging, CEFLEX for flexible packaging or other applicable guidance) that consider packaging structure/composition to assess recyclability.
- **Locally recyclable products:** We define locally recyclable products as those that are technically recyclable, but for which the access to recycling is limited due to lack of local infrastructure to properly collect or recycle the packaging materials. FTC requirements were used to assess recyclability in the US, and in Europe, this category would apply when products meet only specific EU countries requirements.



- **Conditionally recyclable:** We define conditionally recyclable products as those which require sorting towards specialized recycling technologies not commonly available, or products which require the consumer to separate package components for recycling. We also included in this category certain products which we believe could be recycled and/or have been considered recyclable in certain conditions, but require further analysis or validation testing to confirm broader product recyclability claims.
- **Not recyclable:** We define not recyclable as those products that do not meet technical recyclability criteria, may have contamination issues due to their applications, or may have such a limited access to recycling in practice that they would neither meet FTC regional recyclability, nor EMF global commitment criteria or equivalent in countries of sales.

Graphic Packaging measures total revenue from recyclable products as the sum of revenues from the widely recyclable, regionally recyclable, and conditionally recyclable product groups. In 2021, 95% of revenue was from products meeting these recyclability criteria. The slight change relative to 2020 is due to improvements in our product classification for recyclability, changes in our product portfolio resulting from the AR Packaging acquisition, and expanding the scope of our analysis to include additional products such as external board sales, mill by-products sales, and machinery products revenues.

Progress advancing our Vision 2025 Product Recyclability Goal			
Percent global revenues from products categorized as:	2019	2020	2021
Widely recyclable	81%	79%	66%
Regionally recyclable	16%	18%	15%
Conditionally recyclable	-	-	14%
Not recyclable	3%	3%	5%
Percent revenue from recyclable products¹	97%	97%	95%

¹ Includes products categorized as widely recyclable, regionally recyclable, and conditionally recyclable.

Approximately 66% of Graphic Packaging's revenue is from products that are classified as widely recyclable. Currently, most fiber-based packaging sold in general retail environments are considered widely recyclable and are actually one of the most recycled packaging materials, with 82.9% recovery in EU-28 (Eurostat 2018) for fiber-based packaging and 68% recovery in US (AF&PA 2021) for all paper and paperboard. Some foodservice and flexible packaging products are also classified as widely recyclable depending on their composition. In addition, machinery products are considered recyclable, due to their long lifetime and ability to be refurbished or recycled at end-of-life.

Foodservice packaging represents approximately 13% of our revenues and is typically considered to have localized recyclability due to some challenges with wide-scale material collection. This category mainly applies to our recyclable fiber-based packaging as well as to a few plastic lids/cups. Since most foodservice sales are in the US, recyclability status was assessed using the "2021 AF&PA Access to Recycling Study: Tracking Consumer Access to Community Paper Recycling" which estimates 13% community access to collect foodservice paper/paperboard packaging, therefore meeting the condition for localized and limited access according to FTC guidelines.

Products categorized as conditionally recyclable represent approximately 14% of our revenue and include those with plastic content that may be above a defined content threshold, making them less suitable for collection and recycling at standard paper mills. This category also includes products which require the consumer to separate package components for recycling or products that need to be sorted towards specialized recycling technologies that are not widely available. Board sold on the external market and mill by-products that could be used in undetermined final products by our customers are also considered conditionally recyclable.



Products categorized as not recyclable (5% of revenue) include wax coated cartons and disposable frames for air filters, as well as a few plastic lids/cups and some flexible packaging, depending on the composition.

In 2021, Graphic Packaging brought several innovations to the market aligned with increasing packaging recyclability, such as Opticycle dispersion coated foodservice packaging with enhanced recyclability versus LDPE coated counterparts, Galaxy metallic printing, monomaterials multilayer, or paper-based flexible solutions. Further developments and innovations — for example, focusing on alternative barrier technologies — are in the pipeline to address products in categories not yet meeting optimal recyclability. We are actively collaborating with value chain partners to identify new materials, such as alternative coatings to improve the recyclability and circularity of our packaging. Our broader circularity partnerships are listed on the [Sustainability Alliances](#) section of our website and discussed in disclosure [306](#).

Product innovation goal: LDPE reduction goal

In 2018, Graphic Packaging established a product ESG goal to reduce usage of LDPE 40% by 2025. The goal was inspired by the need to increase recyclability of certain foodservice packaging and beverage cups and find alternative renewable materials to replace fossil derived polymer coatings. We measure progress by tracking the quantity of LDPE resin pellets per fiscal year that are extruded by Graphic Packaging to manufacture new coated packaging products. LDPE is typically applied to paper products to create a water and grease barrier.

In 2021, Graphic Packaging introduced the OptiCycle line of foodservice products (manufactured with a non-fossil-based dispersion coating) as a replacement solution for traditional LDPE lined packaging. Unfortunately, the onset of the COVID-19 pandemic has impacted adoptions and uptake of Opticycle products. Observed year-over-year reductions in LDPE usage are likely due to pandemic related impacts on in-store dining at quick service restaurants and lower demand for foodservice packaging. We expect to see a rebound in demand in 2022 for foodservice items, which we hope to fill with increased sales of new OptiCycle products and not LDPE coated counterparts.

Progress advancing our Vision 2025 LDPE Reduction Goal

	2019	2020	2021
40% reduction in LDPE usage ¹	4%	16%	19%

¹ Only includes LDPE resin we extrude ourselves.

With the AR Packaging acquisition in 2021, Graphic Packaging's use of LDPE will further extend beyond foodservice packaging items and include more polymer films and coatings either purchased as pellets and extruded in our operations or already extruded on purchased materials. We will be undertaking a detailed accounting of LDPE usage across the new broader portfolio of products and will include the results in future ESG reports.

In addition to Opticycle, we have multiple projects focused on downgauging LDPE layer thickness on trays, cups, and other products, which will improve recyclability for these items in addition to reducing LDPE use. Graphic Packaging is also engaged in different collaborations with suppliers and academia to develop new alternative, innovative barrier solutions. In line with this goal, we have also developed trays and cartons without traditional plastic barriers and windows. [PureTray™](#) plastic-free pressed board trays use a cellulose-based barrier and were launched as a replacement for some PE coated frozen food trays. Plastic-free carton windows are also being proposed using alternative window materials, such as cellulose or parchment, or with "window-free" designs that use structural design elements or prints that give the perception of a window.



GRI 416 Product stewardship

416-1 ASSESSMENT OF THE HEALTH AND SAFETY IMPACTS OF PRODUCT AND SERVICE CATEGORIES

We assess products for safety and compliance with their end use and carefully screen all process chemicals used in our paperboard production processes. Each chemical used in the paperboard manufacturing process goes through a very detailed inspection to ensure they meet applicable regulatory requirements. Chemicals used in our mills go through a comprehensive occupational safety and environmental assessment.

Since our paperboard is commonly used in food packaging applications, our products must comply with applicable food safety regulations. Our mills follow general industry good manufacturing practices (GMP), and our converting facilities are Global Food Safety Initiative (GFSI) certified where necessary. We also follow globally recognized standards including the British Retail Consortium standards (BRC, a widely used certification standards for food quality and safety developed by British retailers) and FSSC 22000 (a complete certification Scheme for Food Safety Management Systems based on International Organization for Standardization (ISO) standards) in some of our facilities. Our continuous improvement commitment to product safety and quality summarizes the Company's commitment to:

- Maintain a food safety culture.
- Continually improve the food safety management system.
- Comply with customer and regulatory requirements to supply quality products which are safe for food contact (where applicable).

Direct food contact materials are regulated throughout most of the world. Corporate product stewardship reviews the product safety properties, striving for material compliance with relevant regulations in the main markets where Graphic Packaging products are sold. Risks and recalls are monitored and reported.

The product innovation team monitors the development of relevant regulations and requirements to ensure ongoing compliance for new and existing products. The team is also responsible for systematically assessing safer raw material alternatives and eliminating hazardous substances, part of our commitment to product stewardship.

416-2 INCIDENTS OF NON-COMPLIANCE CONCERNING THE HEALTH AND SAFETY IMPACTS OF PRODUCTS AND SERVICES

In 2021, Graphic Packaging had zero non-compliance issues resulting in fines, penalties, warnings, or recalls related to product safety. Globally, there were no product safety-related recalls regarding Graphic Packaging products during 2021.



Economic Topics

IN THIS SECTION

Business Performance

Supply Chain Sustainability

Business Practices



Business Performance



GRI 201 Economic performance

103-1, 2, 3 EXPLANATION OF MATERIAL TOPIC, MANAGEMENT APPROACH, AND EVALUATION

Graphic Packaging reports on our Company's structure and financial performance through our Annual Report on Form 10-K and other required filings with the [SEC](#). These documents are available on the Investors section of our [website](#) and on the SEC's website. Our economic performance contributes directly to our ability to drive long-term, sustainable growth for our business and progress advancing our ESG initiatives. [Vision 2025](#) guides our business strategy and sets measurable goals under the pillars of People, Planet, Partners, and Profit.

201-1 DIRECT ECONOMIC VALUE GENERATED AND DISTRIBUTED

See the Financial Highlights section on [p. 5](#) in the wrap for our 2021 Annual Report on Form 10-K and also the ESG data summary on [p. 150](#) in this report.

201-2 FINANCIAL IMPLICATIONS AND OTHER RISKS AND OPPORTUNITIES DUE TO CLIMATE CHANGE

Graphic Packaging recognizes climate change is an important global issue that presents both opportunities and challenges for our Company, our partners, and our communities. Climate-related issues for our Company are likely to be driven by changes in physical climate parameters, regulations and/or public policy and changes in technology and product demand. For example, emerging global regulations restricting the use of single-use plastic packaging and recently enacted plastic bans in some US states promote the adoption and use of our recyclable, fiber-based packaging products, but also pose risks to some foodservice packaging. With this in mind, we invest in research and development (R&D) to develop innovative packaging solutions and manufacturing processes that enable our operations, customers, and consumers to reduce their greenhouse gas (GHG) emissions and carbon footprint.

In 2020, the Company completed a preliminary climate change enterprise risk assessment. Output from that assessment informs our business strategy and plans to advance our climate goals. We continue to track and manage climate-related opportunities and risks through the enterprise risk assessment and ESG materiality assessment processes (read more in disclosures [102-29](#), [102-46](#), and [102-47](#)) and through progressing our GHG and energy climate goals.

Additional information describing potential climate change related risks and opportunities for the Company is provided in the Annual Report on Form 10-K [pp. 12-16](#), the [2022 CDP climate change response](#), the Task Force on Climate-Related Financial Disclosures (TCFD) [reporting index](#), and in disclosures [302](#) and [305](#).

201-3 DEFINED BENEFIT PLAN OBLIGATIONS AND OTHER RETIREMENT PLANS

Graphic Packaging provides detailed disclosure about pension and postretirement obligations beginning on [p. 26](#) of our 2021 Annual Report on Form 10-K.



Supply Chain Sustainability



GRI 204, 308, 414 Procurement practices, supplier environmental and social assessment

103-1 EXPLANATION OF THE MATERIAL TOPIC AND ITS BOUNDARY

Graphic Packaging is committed to operating responsibly and recognizes that actions across our supply chain can positively or negatively influence a wide range of stakeholders, potentially creating social, environmental, or economic impacts. Responsible procurement of wood fiber and other goods and services necessary for our operations is the foundation of our approach to supply chain sustainability. A responsible and resilient supply chain allows us to reliably manufacture and deliver packaging products and solutions that meet our customers' needs.

We work to choose suppliers and other third-party partners who share our commitment to operate responsibly and generate value for our customers. In 2021, Graphic Packaging spent more than \$4.5 billion with over 15,000 suppliers globally. We manage product shipments, using all modes of transport, to more than 5,000 customers. We operate an extensive, integrated global supply chain that includes suppliers for raw materials, energy, freight carriers, warehousing, and other goods and services — and we are working towards making it more sustainable.

103-2 THE MANAGEMENT APPROACH AND ITS COMPONENTS

Our global sourcing organization plays a critical role in delivering on our vision and commitment to sustainability. Our sourcing teams are engaged in efforts around supply chain transparency, supplier compliance, risk management, and collaboration opportunities. Our global team structure supports career growth and mobility, as well as leadership and professional development — building capabilities and knowledge in core critical areas.

Our procurement principles are formed based on our ongoing commitments to key stakeholders and internal standards outlined at Graphic Packaging. They include:

- Source for the lowest total cost of ownership.
- Meet business requirements legally and ethically.
- Provide equal opportunity to potential suppliers.

We expect our suppliers to consider potential environmental impacts in daily business decision-making processes and actively find opportunities to reduce their impact by:

- Conserving natural resources.
- Recycling and reducing material use.
- Implementing pollution controls in their operations.

We build a sustainable supply chain through a responsible procurement structure that allows for a holistic view and broader buy strategy by focusing on three discrete buy areas:

- Direct procurement (e.g., wood fiber, recovered fiber, external paperboard, chemicals, inks, adhesives, etc.).
- Indirect procurement (e.g., pallets, fuel, electricity, manufacturing parts, services, etc.).
- Logistics procurement (e.g., transportation and warehouse services).



Global Supplier Code of Conduct

Inspired by the 10 principles of the UNGC and the UN Guiding Principles on Business and Human Rights, our [Global Supplier Code of Conduct \(GSCOC\)](#) establishes clear expectations for upstream supply chain partners and invites them to join us in our commitment to work responsibly, with the needs of our stakeholders as our focus. We expect our suppliers (including vendors, contractors, agents, and other providers of goods and services) to fully comply with applicable laws and to adhere to internationally recognized ESG frameworks and standards covering ethical business practices, labor and human rights practices, and environmental stewardship. Our GSCOC also defines our supplier expectations for handling confidential information and for complying with conflict minerals laws and certifications. We expect our suppliers to use their best efforts to implement the standards outlined in our GSCOC with their suppliers and subcontractors throughout their own supply chain, and to seek our approval when they use subcontractors on our behalf.

Given that most of our procurement spend is in North America, we are focused on developing and implementing our supply chain sustainability programs first in this region, and once established will leverage them to other global regions. We strive to include our GSCOC and certain ESG requirements in all new US supplier agreements and in newly updated agreements with existing US suppliers. The GSCOC and other sourcing documents are also provided to suppliers during the onboarding process in the US and are available through our external supplier portal. A signed acknowledgment, or approved waiver by the vice president, procurement (VPP), is required of all new suppliers to demonstrate understanding of our expectations. We are also engaging our larger existing US suppliers to share our GSCOC with them and request their acknowledgment of our expectations. A supplier's compliance with the GSCOC — or with its own code of conduct if it contains similar ethical principles — is an essential factor in our decision to begin or extend a business relationship with the supplier. If a supplier fails to comply with the law or does not address contractual non-compliance in a timely manner, we reserve our contractual rights to terminate the relationship. Thoughtful, clear, and consistent communication helps ensure understanding of our expectations, and is critical to building strong relationships with our suppliers.

Supplier management

By partnering with our suppliers, we can make collective changes that benefit our businesses, people, and the planet. From our suppliers, we expect reliability, quality, and service as well as innovation, flexibility, a partnership mindset, alignment with our values, and a commitment to operate safely and responsibly. Our aim is to choose suppliers that add value in a way that contributes to the Company's long-term success and sustainable growth.

Sourcing wood fiber is an important part of supply chain management at Graphic Packaging, and we choose suppliers who operate responsibly and share our commitment to respect our natural resources. Our supply chain team has developed and adopted programs and procedures which guide our North America wood fiber procurement and supplier management activities. Our [Sustainable Forestry Policy](#) describes expectations for wood buyers and suppliers regarding how they source, harvest, and deliver wood fiber to our mills. In addition, contracts with wood and wood chip suppliers require their commitment to avoid highest risk and most controversial virgin wood sources.

Graphic Packaging helps develop wood supplier knowledge and awareness of sustainable forest management practices by financially supporting logger training and continuing education programs for our wood suppliers. These trainings are offered through independent third parties in coordination with individual state Sustainable Forestry Initiative Implementation Committees (SICs). Training records are maintained and verified on the respective organizations' websites. Our wood procurement professionals serve on individual state SIC teams to stay informed of current and evolving forest management issues and remain prepared to update our wood supplier management practices.

We assess wood supplier conformance to our Sustainable Forestry Policy using supplier risk assessments and field audits. Our Due Diligence System (DDS) provides the framework for completing risk assessment evaluations on each supplier that delivers wood fiber to our facilities. The risk assessment considers the material supplied (e.g., roundwood, wood chips, pulp, etc.), harvested tree species, country and state of harvest, current complaints



against the supplier, and if an individual management plan is needed to control risk for a particular supplier. We also complete field tract inspection audits on suppliers during harvesting activities to verify supplier compliance with our Sustainable Forestry Policy and local best management practices. The tract inspection audits focus on wood origin, presence of non-native species, legal right to harvest timber, risk of conversion to other land uses, threats to high conservation values, risk of violation of traditional and civil rights, evidence of genetically modified trees, labor, certification, and whether state timber harvesting best management practices are being followed. We complete risk assessments on all new wood suppliers and target and have set a target of auditing 50% of our existing wood suppliers each year, with a goal of having all suppliers audited at least once every two years.

Our Sustainable Forestry Policy and Vision 2025 sustainable supply chain goal represent our commitment to maintaining healthy and abundant forests through responsible wood-fiber procurement practices. Our Vision 2025 supply chain goal is:

- **All global facilities will be compliant with a fiber certification standard.**

To achieve this goal, we pursue certifications for our facilities under the Sustainable Forestry Initiative® (SFI®) Standard: SFI 2022, Section 4 (Chain of Custody), SFI 2015-2019, SECTION 3, APPENDIX 1 — CERTIFIED SOURCING LABEL, Program for the Endorsement of Forest Certification (PEFC ST 2002-2020 (Chain of Custody)) and the Forest Stewardship Council® (FSC®-STD-40-003; FSC-STD-40-004; FSC-STD-40-005; FSC-STD-40-007). The certification standards set expectations for sustainable forest management, harvesting practices and sourcing practices with the common objective to protect sensitive ecosystems, preserve biodiversity, and prevent forest loss. Learn more about our sustainable forest management approach and wood fiber use in disclosures [301](#) and [304](#).

Supplier diversity, equity, and inclusion

Our procurement team considers both environmental and social impacts in its purchasing decisions and is committed to increasing diversity within our supplier base. We define diverse suppliers as those that are minority-owned, woman-owned, LGBTQ-owned, service-disabled/veteran-owned, disabled-owned, or businesses with owners from other diversity groups. Our Global Procurement Policy describes our approach and provides direction to our North America buyers to include diverse suppliers in our sourcing events where there is alignment with our business needs. Promoting the growth and development of diverse suppliers increases competition, which can lead to lower costs and improved quality of purchased goods and services.

Another benefit is that many diverse suppliers are also small, local businesses. Growing a diverse supplier base allows us to contribute to the economic well-being of the communities where we live and work, providing value to our Company and throughout our value chain. We set annual, internal targets to increase year-over-year spend with diverse suppliers, and identify new diverse suppliers to include in our supplier database. We action these targets by leveraging memberships in various diverse supplier focused organizations, including the Women's Business Enterprise National Council (WBENC), the National Minority Supplier Development Council (NMSDC), The Food and Beverage Group, and others. Our procurement team participates in sourcing events with these and other diverse supplier organizations. Our procurement team attends conferences with WBENC, Michigan Diversity Council (MiDiCo) and WEConnect International, and participates in supplier diversity forums hosted by our customers. Through participation in these and other groups, we engage not just with suppliers, but also with our customers and industry peers to identify best practices and share successes and recommendations. Our supply chain team works directly with the innovation team and regularly participates in new product development sessions, ensuring diverse supplier options are considered during product development.

Supplier recognition

Graphic Packaging chooses partners who are committed to improving their sustainability performance and helping to improve ours in turn. We recognize companies who share our ethos and who have become valued partners beyond the supply of goods and services during an annual supplier recognition charity event.



Supply chain governance and buyer training

Our senior vice president, supply chain (SVPSC) and VPP work directly with the CSO and the executive leadership team (ELT) in setting our sustainable supply chain strategy, guiding our approach and reporting on progress to the Board. The SVPSC, VPP, CSO, and our global procurement leaders work together to establish supplier engagement processes and define our expectations for responsible supply chain operations. Our [GSCOC](#) and Global Procurement Policy underpin our approach. These documents reflect our values and align with the Company's broader [Code](#). Together the policies guide the supply chain team and buyers in conducting their work and advancing a sustainable supply chain.

Graphic Packaging global buyers receive training each year on business ethics, anti-bribery awareness, preventing forced labor and child labor, export restrictions, and other topics through our annual ethics training. In the US, all prospective buyers are required to complete the Company's Procure to Pay (P2P) training prior to the assignment of the buyer role. They participate in monthly roundtables conducted with P2P champions from plants and mills to provide training and updates. We also support existing buyers, as well as those joining Graphic Packaging through acquisition or mergers, with ongoing training opportunities.

Additional specialized training is provided to targeted supply chain employees based on their roles. For example, annual fiber Chain of Custody (COC) awareness training is provided to procurement, operations, and commercial team employees who play a role in selling certified COC materials to our customers. This training is an important element for maintaining an effective fiber certification program.

Read more about our values and policies in disclosures [102-16](#), [205](#), and [206](#), our ESG governance process in disclosures [102-18](#) and [102-19](#), and employee business ethics training in disclosures 205 and 206.

103-3 EVALUATION OF MANAGEMENT APPROACH

Internal assessments

We assess our sustainable supply chain programs using stakeholder feedback, management reviews, industry benchmarking, and internal audits. The Graphic Packaging internal audit team routinely audits the supply chain function as well as our sustainability program. Identified improvement opportunities and timing to implement are agreed upon during the audit closing meeting and tracked through completion by the internal audit team. In addition, we leverage third-party supply chain sustainability management system maturity frameworks to self-assess our program and prioritize improvements to align with industry best practices.

External assessments and feedback

Supply chain partners and other stakeholders are welcome to ask questions or report concerns through the ALERTline ethics hotline (read more in disclosure [102-17](#)) or during routine business review meetings with supply chain team members. Our supply chain leaders combine this feedback with the results from internal assessments of our supply chain management processes to evaluate our performance, identify opportunities to improve our program, and discuss emerging risks and opportunities.

We also self-assess our performance using the [EcoVadis](#) platform and, upon request, will share our EcoVadis scorecard with our customers and suppliers. Throughout 2020 and 2021, we addressed several improvement opportunities identified in our prior assessment, and in 2021, we improved our EcoVadis sustainable procurement rating by 60% and our overall sustainability rating by more than 50%, achieving gold certification for our efforts. Demonstrating strong sustainability performance through the EcoVadis assessment is important to many of our customers and is an integral part of their supply chain sustainability programs.



Advancing our Vision 2025 sustainable supply chain goal

In 2021, we continued to make progress towards achieving our Vision 2025 sustainable supply chain goal. At year-end, 93% of Graphic Packaging global mills and converting plants were certified to at least one virgin fiber certification standard (certified sourcing and/or COC) and 74% of global sites were certified to at least one of the COC standards. The decrease in certification percentage relative to 2020 is largely due to the Americraft and AR Packaging acquisitions we completed in 2021. Historically, we reported progress only for facilities owned by the Company for one year or longer. Starting with 2021, we are simplifying our reporting methodology and will be measuring progress considering all facilities at year-end, regardless of acquisition date.

Progress advancing our Vision 2025 Supply Chain Goal		
	2021 result	Progress toward Vision 2025
Facilities compliant with one or more fiber certification standard ¹	93%	On track

¹ Facilities includes mills, converting plants, and Atlanta HQ and Japan sales offices.

In 2022, we will be working towards certifying all North America mills and converting facilities, including the newly acquired Americraft facilities, on our journey to achieve 100% certification compliance for all global facilities. We will also be developing our plan to address certifications for converting facilities in other global regions, including the newly acquired AR Packaging facilities. We are investing in our team and streamlining our global certification processes.

Additional highlights from 2021 include:

- Successfully responded to multiple 2021 supply chain challenges (including winter storm Uri, the Suez Canal blockage, continuing COVID-related supply chain pressures, etc.) with minimal business disruptions.
- Eliminated 24,600 truck shipments (and corresponding scope 3 greenhouse gas emissions) in 2021 using data analytics to improve logistics footprint.
- 100% of in-scope Graphic Packaging managers and salaried professionals in North America who have responsibility for administering the COC program completed their annual fiber certification COC training. These leaders are accountable for training and ensuring their staff comply with the COC program requirements.
- Facilitated in-person professional logger training sessions in Macon, Georgia and Farmerville, Louisiana (a total of 81 loggers were trained during three different sessions) and sponsored additional professional logger training through SFI state implementation committees.
- Continued to increase year-over-year spend with diverse suppliers, with 2021 spend 3% higher than 2020 spend.
- In September 2021, we hosted our annual supplier recognition event to bring together approximately 30 top suppliers that exemplify our values and model our GSCOC.

As our procurement sustainability strategy matures, we will work on standardizing supplier risk assessment, due diligence, qualification, and onboarding processes to include additional raw material categories and evaluations of supply chain partners. We plan to investigate various third-party supplier sustainability assessment tools for screening for environmental and social risks across our supply chain, enabling improved reporting on supplier risk and performance management to the ELT and Board. Our efforts to establish a broader supplier risk assessment process were delayed due to ongoing COVID-19 related challenges throughout 2021 and supply chain issues created by winter storm Uri.

**204-1 PROPORTION OF SPENDING ON LOCAL SUPPLIERS AND DIVERSE SUPPLIERS**

Graphic Packaging is committed to supporting businesses in the local communities in which we operate. We currently track local supplier spend using small businesses as a surrogate for local suppliers. Due to their scale, many small businesses operate locally, supporting other businesses within the communities where they are based. In addition, many diverse suppliers are small business and/or operate locally. Spend with these supplier groups can also be used as an indicator for spend with local suppliers.

Graphic Packaging tracks diverse supplier spend across a subset of diverse suppliers in support of customer supply chain diversity initiatives. This supplier group includes women-owned, minority/ethnically diverse, and disabled-owned suppliers. Spend in 2021 for this subgroup of suppliers was \$182 million across 295 suppliers, representing a 3% increase in spending above 2020 spend with this supplier group. We credit our year-over-year increases in diverse supplier spend to the dedication and commitment of our supply chain team and leadership to advance inclusion and equity principles in how we source goods and services for our operations.

When looking across all diverse and small business supplier groups, the Company spent approximately \$260 million across 661 diverse suppliers on quality goods and services to support our operating sites in the US and Canada. To date, our supplier diversity efforts focus on our US and Canada spend, which represents ~80% of our total global spend. As supplier diversity practices evolve in other global regions, we will evaluate adjusting our approach.

2021 North America diverse supplier spend¹

	Spend (\$million)	Percent total NA spend¹
Defined diverse supplier group ^{2, 3}	182	5.4%
Ethnically diverse suppliers ³	78	2.3%
Women-owned suppliers ³	71	2.1%
Disabled/disabled veteran-owned suppliers ³	33	1.0%
Other diverse supplier groups ^{3,4}	12	0.4%
Small businesses	66	2.0%
All diverse supplier groups ³	260	7.8%

¹ Defined as US and Canada addressable spend, excluding spend for capital projects.

² Includes women-owned, ethnically diverse and disabled-owned suppliers.

³ Includes both self-declared and certified diverse suppliers.

⁴ Includes veteran, LGBTQ+ and other diverse supplier groups.

308-1, 414-1 NEW SUPPLIERS SCREENED USING ENVIRONMENTAL OR SOCIAL CRITERIA

In 2021, 100% of new wood suppliers were screened using the Company's PEFC/SFI/FSC due diligence process. This screening process includes:

- Verifying whether threatened or endangered species are present in the geographic regions where the supplier operates as defined by Convention of International Trade in Endangered Species or Wild Fauna and Flora (CITES).



- Verifying the proposed wood material type (e.g., log versus wood chips), tree species and wood harvest country/region/state to confirm no controversial wood sources are harvested.
- Evaluating the risk level for sourced wood materials.
- Checking for any substantiated complaints against the supplier related to environmental or social practices in the prior calendar year.

We are proud that in 2021, all new wood suppliers were determined to be low risk suppliers based on these criteria, and no risk remediation plans were required. In addition, 10% of new suppliers were also audited as a part of our regular supplier tract inspection process.

308-2, 414-2 **NEGATIVE ENVIRONMENTAL OR SOCIAL IMPACTS IN THE SUPPLY CHAIN AND ACTIONS TAKEN**

We identify supplier sustainability issues through ethics hotline reports, industry sources, or those self-reported by suppliers. We thoroughly review significant supplier sustainability issues within our supply chain to identify root causes and develop effective remediation actions to prevent recurrence. Examples of potential significant supplier sustainability issues may include unsafe work conditions, child or forced labor, bribery and corruption, regulatory violations, environmental damages, etc. In 2021, no significant supplier environmental or social incidents were reported.

In addition, we target auditing 50% of our wood suppliers each year to assess compliance with our Forest Sustainability Policy and local forestry best management practices. In 2021, we completed audits with 112% of targeted wood suppliers (56% of total wood suppliers were audited versus the 50% target). No significant supplier environmental or social concerns were identified during the audits.



Business Practices



GRI 205, 206 Business ethical conduct

103-1, 2 MANAGEMENT APPROACH

At Graphic Packaging, we operate with integrity, and everyone in our Company is expected to comply with all applicable laws in the regions where we operate. While we each are held accountable to high ethical standards, setting the tone so that every decision and action is taken with integrity starts at the top of our enterprise. Our executive vice president, general counsel (EVPGC) and our compliance and risk committee are responsible for providing company-wide direction and oversight for our ethics program to ensure that all our employees exhibit behavior consistent with our core values. They establish appropriate ethics and compliance policies and procedures for the Company, which includes maintaining our [Code](#). The Code was last updated in May 2022 and compliance with the Code is regularly reviewed by the Graphic Packaging ELT and the Board. Our top leaders, including our Board, are committed to helping every Graphic Packaging employee act with integrity — whether they be full-time, part time, temporary employees, or interns.

Our Code reflects our core values and is our guide to acting ethically wherever we do business. It prescribes expected behavior, covering areas such as maintaining a respectful workplace; protecting human rights; non-retaliation; protecting Company assets, trade secrets and data; receiving and giving gifts; preventing conflicts of interest; making political contributions; preventing fraud and money laundering; insider trading; and complying with antitrust and competition laws, anti-bribery laws, anti-corruption laws, global trade compliance laws and regulations and insider trading laws; and more. This is how we ensure a culture of respect and support building strong relationships with our value chain partners.

In addition to the Code, our Company policy statements guide us in maintaining ethical business practices and complying with national laws, local laws, and regulatory requirements. In some cases, our Code and Company policies may be stricter than the applicable local laws. When this happens, we follow our Company policies, including but not limited to the following:

- [Anti-Bribery and Anti-Corruption Policy](#)
- [Anti-Harassment Policy](#)
- [Anti-Slavery and Human Trafficking Policy](#)
- [Child Labor and Remediation Policy](#)
- Confidential Information Policy
- [Conflict Minerals Policy Statement](#)
- Conflicts of Interest Policy
- Disability Accommodation Policy
- Disclosure Policy
- Electronic Information Privacy and Security Policy
- [Equal Employment Opportunity and Non-Discrimination Policy](#)
- Financial Reporting Policies and Procedures
- Global Procurement Policy
- [Global Supplier Code of Conduct](#)
- [Human Rights Policy](#)
- Information Technology Use and Security Policies
- Policy on Trading in Securities
- [Privacy Policy](#)
- Recording and Camera Equipment Policy
- Records Management Policy
- Related Party Transactions Policy
- Religious Accommodations Policy
- Security Policy
- Social Media Policy
- [Sustainable Forestry Policy](#)
- Travel and Entertainment Policy
- Workplace Violence Policy
- [Worldwide Policy for Health, Safety, and Environment](#)



Links to publicly available policies can be found in the [report resources section](#) (note: not all policies listed are made public for confidentiality reasons). For each global policy, a named subject matter expert is responsible for reviewing and updating their assigned policy to ensure it remains current, relevant, and compliant with evolving laws and regulations globally. Policies are reviewed regularly, updated as necessary and approved by senior management, and our Board of Directors when appropriate. Our [Code](#) and corporate policies reflect our commitment to uphold the 10 principles of the UNGC and to advance the objectives of the UN SDGs, in particular SDG 16 Peace, Justice and Strong Institutions.

Ethics training

Each year, we use our on-line GPI University (GPI U) training platform to train our salaried employees on our Code, reminding them of our core values, policies prohibiting discrimination and harassment, and other business ethics policies. Code training for our hourly workforce is conducted in-person at our facilities, and training records are maintained locally. Additional ethics training is provided to employees, based on their job profile, to provide more comprehensive knowledge on potential risks related to individual job responsibilities (e.g., anti-corruption, antitrust, anti-harassment, anti-slavery/human trafficking awareness, human rights, etc.).

New employees are provided a copy of our Code during onboarding and are required to acknowledge receipt of and compliance with our policies. They may also receive relevant ethics training, including anti-bribery training, based on their role in the Company. In addition, we review the Code and other relevant policies (e.g., insider trading, related party, the corporate governance guidelines, etc.) with all new Board members as part of their onboarding process.

Ethics risk assessments and audits

Graphic Packaging conducts multiple risk assessments each year on enterprise, financial, and operational site systems to determine potential overarching risks to the Company and aligns the scope of assessments, reviews, and/or audits over the quality of compliance and risk management programs with identified higher risk areas. These risk assessments include risks from corruption, bribery, and other ethical business practices. In addition, a fraud risk assessment is performed no less than every three years, and the Fraud Risk Management Program is updated based on its results. Risk assessment results are used by internal audit to prioritize the plan for operational audits, audits of the internal controls over financial reporting, and regulatory/compliance audits, which is shared with and approved by senior management and the Board Audit Committee. Audits have been performed over corruption, bribery, fraud risks, and other ethical practices. All audit activities resulting in observations are tracked to closure. In addition, key strategic areas or risks identified in the enterprise risk assessment are owned by a senior executive, along with action plans and due dates that are monitored throughout the year.

The financial risk assessment includes assessing 100% of the operating locations and processes quantitatively and qualitatively for financial impact to determine the highest risk financial areas and in scope financial process for control environment testing. The operating locations are assessed to determine overall risk based on financial, compliance, operational, and strategic factors. Elements of these factors include sales, volume, working capital, time since last audit, last audit report rating, overall prior audit results, fraud allegations activities, compliance history, key management turnover, new information systems or modifications, business process changes, time since acquisition, system architecture, corruption perception index, regulatory risks, and complexity of operations. The element scores are weighted and result in an overall site risk rating.

The EVPGC and compliance and risk committee regularly review our global operations footprint to evaluate potential corruption or fraud risk across our operations. This is an ongoing process conducted through quarterly committee reviews and an annual formal compliance assessment led by the EVPGC and presented to the Board. Internal audit conducts annual risk reviews that evaluate corruption risk, select audit targets, and include corruption control assessments in regions deemed higher risk and for newly acquired commercial entities. Internal audit also provides oversight for our fraud management program with oversight from the Board Audit Committee. Graphic Packaging has certification processes in place through internal/external audit processes, as well as robust internal controls to ensure accurate accounting practices.



We also have specific internal procedures and controls to guard against corruption in our value chain, including a risk-based, third-party, due diligence process, our [GSCOC](#), and contractual obligations requiring our relevant business partners to comply with anti-bribery laws. Internal audits are regularly performed to monitor and validate suppliers. Supplier due diligence is conducted on new suppliers including financial, Office of Foreign Assets Control (OFAC), legal, privacy, cyber security and contractual risks through questionnaires, analysis, and required documentation.

The Company developed and implemented a fraud risk management program to proactively address potential internal and external fraud vulnerabilities. The program was also designed to improve compliance with regulatory requirements and professional standards. The program is structured on the five components of the Committee of Sponsoring Organizations of the Treadway Commission Framework and tailored to Company specific needs and goals. These five components are: control environment, risk assessment, control activities, information & communication, and monitoring activities. A committee of key knowledgeable individuals reviews and approves changes to the program each time a fraud risk assessment is performed.

Ethics governance

Accountability and transparency are core components of the Company's ethics and compliance program. Our EVPGC and the compliance and risk committee — composed of the EVPGC and executives in human resources, legal, IT, health and safety, and internal audit — are responsible for developing and administering the ethics and compliance program. Together they regularly monitor developments in applicable legal and regulatory standards, industry practice and general best practices as part of assessing and improving the compliance program and processes. They are also responsible for ensuring our ethics and compliance investigation processes meet high standards for responsiveness and adherence to compliance policies. The committee periodically reviews Company ethics and compliance statistics, conducts periodic risk assessments and internal audits, monitors trends, and assess the effectiveness of our ethics and compliance programming.

The EVPGC reports monthly on legal and compliance matters to the executive leadership team and quarterly to the Audit Committee on the Company's ethics and compliance initiatives and related metrics, including reports on all alleged material violations of the [Code](#). Each November, the EVPGC (on behalf of the compliance and risk committee) reports to the Board on all aspects of the compliance program, including progress made on goals set the prior year as well as planned activities and goals for the coming year.

All Graphic Packaging directors and certain officers are required to complete an annual Directors and Officers Questionnaire. This includes reviewing potential conflicts of interest. The EVPGC reviews responses and reports any material potential conflicts to the Board and external auditors as appropriate.

Read more about our ethics commitments and governance process in disclosures [102-12](#), [102-16](#), and [102-17](#).

103-3 EVALUATION OF MANAGEMENT APPROACH

We measure the effectiveness of our ethics and compliance (E&C) management approach by tracking the annual completion rates for assigned ethics trainings (see disclosure [205-2](#)) and by tracking investigation completion rates for calls to our ALERTline. In addition, we have internal controls to audit and assess our E&C processes, and we look for opportunities to improve our systems and compliance performance. Improvement opportunities and/or corrective actions identified through audits and/or incident investigation processes are documented and tracked through completion. We believe our internal controls are effective in maintaining and advancing a robust E&C management system and, as such, we do not currently seek external certification of our system.

In 2021, 97% of global salaried employees completed Code training, 97% completed the anti-harassment training, 89% completed the anti-bribery training, and 90% completed modern slavery training, demonstrating good reach across our global salaried employees. Completion rates for hourly employees were lower (39% for Code and 36% for anti-harassment training) due to challenges administering the in-person trainings



during the COVID-19 pandemic and to limitations in aggregating local training records. We are planning to include our hourly employees in future deployments of the GPI U training platform, which will improve our ability to offer and track training compliance with this employee group. Antitrust training was provided in-person to our global commercial teams during their annual sales team meetings. We are exploring adding antitrust training to our on-line training program in the future.

Ethics and compliance training ¹			
	2019	2020	2021
Code of Conduct — global salaried employees	89%	94%	97%
Anti-harassment — global salaried employees ²	96%	94%	97%
Anti-bribery/anti-corruption — global salaried employees ³	92%	87%	89%
Preventing modern slavery in the supply chain — global salaried employees ⁴	97%	NA	90%
Data protection and privacy — global salaried employees ⁵	NA	NA	89%
Trade sanctions compliance memo — global salaried employees	99%	42%	100%

¹ Training data for legacy Graphic Packaging employees only. Employees from the Americraft and AR Packaging acquisitions will be included in 2022 training events.

² Training in 2019 and 2020 was US only. Global salaried employees trained in 2021.

³ Training assigned to global senior level managers and all global salaried employees in finance and accounting roles.

⁴ Training in 2019 assigned to UK and supply chain employees. 2021 training assigned to all global employees. No training assigned in 2020.

⁵ New training for 2021.

100% of calls made to the ALERTline in 2021 were investigated and closed on time, with 98% of investigated calls closed by December 31, 2021. For total investigated cases, 8% of matters were substantiated (in whole or in part) and the remainder were either unsubstantiated or not related to policy violations. Types of issues reported to the ALERTline in 2021 included conflicts of interest; health, safety, and environmental issues; misconduct; and others. All reported substantive issues were investigated and closed within 30 days or less following our prioritization hierarchy, and appropriate corrective action was taken for substantiated matters.

In 2021, we implemented the following enhancements to our ethics and compliance program:

- Revised our [Code](#) and translated it into multiple new languages to make it accessible for our ~5,000 new employees across Europe and Asia.
- Expanded our global privacy policy and completed training initiatives.
- Developed new Human Rights Policy and distributed to all global managers.
- Continued to address moderate- to low-risk improvement opportunities identified in the General Data Protection Regulation (GDPR) audit.
- 100% of global business operations sites are risk assessed concerning business ethics issues.
- Conducted in-person training with commercial teams on email best practices.
- Completed enterprise fraud and cybersecurity risk assessments.
- Established a third-party risk management committee comprised of Legal, IT, Cyber Security, Supply Chain, Internal Audit, HSE, Procurement, and business representation.



205-1 OPERATIONS ASSESSED FOR RISKS RELATED TO CORRUPTION

Our commitment to integrity means we all play a part in the effort to eliminate bribery and corruption worldwide. We follow anti-bribery and anti-corruption laws and expect our business partners to do the same. Our [Code, GSCOC](#), and [Anti-Bribery and Anti-Corruption Policy](#) reflect the principles set forth in the UN Convention against Corruption and the UNGC. Our Anti-Corruption Policy provides definitions on what constitutes a bribe, discusses the ways employees may encounter demands for bribes and/or extortion, makes clear to employees that we do not engage in bribery under any circumstances, and assures employees that they will not suffer negative consequences for refusing to pay a bribe. These expectations are reinforced through targeted ethics training.

The Corruption Perception Index is used annually to risk rank all operating locations for compliance risks. Locations ranked with higher corruption risk are audited by Internal Audit. When a country is flagged based on screening indices, a focused review is conducted using both quantitative and qualitative factors. The internal audit team then determines the need to perform audit activities. Audit activities over corruption and bribery have been performed at locations in China, Mexico, Indonesia, Nigeria, Brazil, and Poland.

205-2 COMMUNICATION AND TRAINING ABOUT ANTI-CORRUPTION POLICIES AND PROCEDURES

The Company provides focused training on anti-corruption/anti-bribery topics to all salaried employees, including our ELT and top 100 company leaders on a regular basis. In 2021, 89% of salaried employees completed the training, with good coverage across our global regions.

2021 Anti-corruption/anti-bribery training by region

	Americas	EMEA	APAC
Targeted employees completing training	93%	73%	91%

The Company also shares our expectations to operate ethically with our suppliers through our GSCOC and contractual obligations requiring our relevant business partners to comply with anti-bribery laws. The GSCOC is made available to all suppliers through our [supplier portal](#), and we include our expectation to comply with the GSCOC during the supplier onboarding process and in contract terms and conditions for our North America suppliers. Read more in disclosure [204](#).

205-3 CONFIRMED INCIDENTS OF CORRUPTION AND ACTIONS TAKEN

Employees who have ethics concerns or want to report a possible violation can anonymously contact the ALERTline via web reporting, email or phone 24 hours a day, seven days a week. In 2021 there were no confirmed cases regarding bribery that involved employees or business partners.

Information on litigation matters involving Graphic Packaging is provided in our 2021 Annual Report on Form 10-K, [p. 18](#) and [80](#).



206-1 LEGAL ACTIONS FOR ANTI-COMPETITIVE BEHAVIOR, ANTITRUST, AND MONOPOLY PRACTICES

Our business leaders believe in the free-market system and are committed to Graphic Packaging fully complying with antitrust and competition laws. We typically do not discuss with our competitors any topics related to costs, inventories, pricing policies, products, product development, promotion, marketing, sales activities and goals, market studies, or other proprietary or confidential information about a competing product or territory or market activity. However, in some situations, our competitors may be our customers and vice versa. When this happens, we have appropriate internal controls in place to prevent internal sharing of sensitive information that could lead to anti-competitive practices.

The Graphic Packaging [Code](#) outlines expected behaviors for our employees to comply with antitrust and competition laws, import/export laws, and any relevant, applicable anti-boycott laws. Employees whose roles require them to engage with customers, competitors, and other industry representatives (e.g., trade publications) receive regular mandatory electronic and/or live awareness and compliance training, which includes competitor interaction guidelines. Our employees understand the importance of speaking up and excusing themselves from inappropriate conversations with competitors or industry representatives, and to report any incidents to our legal department. All salaried employees also receive an annual electronic memo outlining current trade sanctions that are in place. They are required to acknowledge they have reviewed the memo and will comply with the current trade sanctions requirements. In 2021, live antitrust training was provided for our global sales teams during annual team meetings, and 100% of assigned salaried employees completed their acknowledgment of the trade sanctions memo.

We conduct risk assessments through required legal department vetting of all trade associations and by closely monitoring antitrust controls at trade associations we engage with. When necessary, we will withdraw from an association when our standards are not met. Our internal counsel consults with outside antitrust experts as needed for advice on specific matters and for leveraging best practices to improve our program.

In 2021, there were no legal actions against the Company regarding anti-competitive behavior, antitrust, or monopoly practices. An application was filed in Australia in 2020 seeking to impose duties on Graphic Packaging for alleged dumping of paperboard. The Australian Anti-Dumping Commission found no basis for imposing any dumping duties on Graphic Packaging and terminated its investigation in 2021.

Information on litigation matters involving Graphic Packaging is provided in our 2021 Annual Report on Form 10-K, [p. 18](#) and [80](#).

GRI 207 Tax

207-1, 2 TAX STRATEGY, GOVERNANCE, AND RISK MANAGEMENT

The responsibility for tax risk management and governance lies with the chief financial officer, with oversight by the Company's Board of Directors. Day-to-day responsibility is delegated to the vice president, tax, who is supported by the tax function and certain personnel in the wider finance community (collectively, the tax team).

Our approach to tax risk management follows the same principles that we apply to other business risks by giving consideration to the following:

- Observation of applicable laws, regulations, and disclosure requirements.
- Application of professional care and judgment to arrive at well-reasoned conclusions.
- Ensuring that decisions are taken at an appropriate level and are supported with documentation that evidences the facts, conclusions, and risks involved.



Our tax team works to build and maintain cross-functional relationships spanning the entire global business. Through this process, the team promotes the tax strategy and seeks to identify and manage tax risk, by using its knowledge of the Company's operations and the principles set out above.

The tax team works to ensure that informed tax decisions are taken with respect to our business operations, both from a local country and a cross-border perspective. It provides advice that is consistent with and reflects the Company's commercial activities. The Company does not engage in tax planning or tax structures that lack appropriate business substance.

The tax team consists of qualified tax and finance professionals who are required to operate with integrity and professionalism. They operate under the principle of continuous improvement and maintain an appropriate depth of tax knowledge through access to a variety of ongoing training resources. The tax team maintains broad oversight of all tax compliance activities and ongoing examinations by local tax authorities for all its subsidiaries across the globe, with active management of tax compliance obligations and ongoing tax examinations and any potential disputes regarding tax matters for material jurisdictions. The Company seeks advice from external advisors where appropriate on a regular basis to ensure compliance with changes in tax law and that non-routine transactions are appropriately considered.

Our approach to tax planning, reporting, and risk

Our tax strategy is aligned with the Company's overall business strategy and the Company's approach to corporate governance and risk management wherever we operate. In making commercial decisions, we take tax into account in the same manner as any other cost. Where there is more than one way of structuring a commercial business arrangement we take a holistic view considering all factors, including tax.

The Company is committed to complying with all relevant tax rules and regulations in a responsible manner and with due regard to governmental and broader stakeholder requirements. We intend to pay the legally required amount of tax at the right time and to comply fully with our tax compliance obligations in all territories in which we operate. We recognize there is always some level of tax risk inherent in operating our businesses due to the general complexity of taxes, frequency of law change, scope for differing interpretations of tax law, and the breadth of taxes related to the Company's activities. The level of tax risk that the Company may accept is consistent with its overall objective of achieving certainty in the group's tax affairs. As noted above, the Company seeks to comply fully with its regulatory and other obligations and to act in a way that upholds its reputation as a responsible corporate citizen. In relation to any specific issue or transaction, the tax team is responsible for identifying any tax risks which need to be addressed and for determining what actions should be taken to manage those risks having regard to the materiality of the amounts and obligations in question.

We may implement an alternative with a lower tax cost, providing it is compliant with relevant tax laws and regulations. However, we will not enter arrangements in order to defeat the stated purpose of the relevant tax rules. It is our intention to comply not only with the letter of the tax laws but also with the underlying tax policy intent.

The tax team is consulted on significant potential transactions, including acquisitions and dispositions, providing advice on the available preferred routes to minimize potential tax risk and cost. In connection with any acquisition, new legal entities or operations are incorporated within the existing governance, controls, and risk management environment that are currently in place for existing operations as soon as practical following the acquisition. The Company strives to ensure that all operations acquired comply with the tax principles and approach to tax planning that is followed by the Company from the date of the acquisition.

The Company uses external tax advisors where appropriate as determined by the tax team. The vice president, tax is responsible for the appointment of external advisors (in conjunction with local finance teams for foreign subsidiaries) and agreeing to the terms of engagement approved by the Company's legal and procurement departments, if appropriate. Such terms must adhere to the Company's corporate governance and risk management policies, including the Company's [Code](#). External advisors are used in a supporting capacity to provide additional guidance around particular risk areas, but the tax team reviews all advice and is ultimately responsible for any conclusions.



Where the Company outsources tax work to external tax advisors (including elements of compliance), the vice president, tax, and/or the appropriate local finance leader, in the case of certain international subsidiaries, should approve and ensure that the principles in this document are adhered to. The Company recognizes that external tax advisors add value, particularly with respect to new legislation or where a potential transaction is of significant size or complexity.

207-3 STAKEHOLDER ENGAGEMENT AND MANAGEMENT OF CONCERNS RELATED TO TAX

The Company seeks to have a transparent and constructive relationship with tax authorities in all jurisdictions in which we operate. We support a relationship with the tax authorities, based on mutual trust and respect which enables constructive dialogue and responsiveness by all parties. When submitting tax returns and supporting calculations to the taxing authorities, the Company discloses all relevant facts and identifies transactions or issues where it considers that there is a potential for the tax treatment to be uncertain as required. Any material errors discovered in tax returns already submitted are fully disclosed and/or corrected as soon as reasonably practical after they are identified.

207-4 COUNTRY BY COUNTRY REPORTING

In 2021, the Company recognized an income tax expense of \$74 million. The effective tax rate for 2021 is different from the statutory rate due to the tax effect of income attributable to noncontrolling interests, as well as the mix of earnings between foreign and domestic jurisdictions.

Consolidated income tax expense (\$million)			
	2019	2020	2021
Income tax expense	\$76	\$42	\$74
Effective tax rate	21.6%	17.0%	25.7%

We advocate for tax policies and principles on our own behalf and through trade organizations. Our engagement with trade organizations and policymakers is based on the drive for sustainable tax policies that avoid disadvantaging certain taxpayers to the benefit of others. Our overriding goal is a level playing field for all taxpayers, no matter the jurisdiction or taxpayer size.

We do not disclose country-by-country information, but rather aggregated numbers for our global Company. We will continue to assess additional disclosure on an annual basis.

Read more about the Company's tax reporting practices in Note 9 on [p. 72](#) in the 2021 Annual Report on Form 10-K and in our [UK Tax Strategy Policy](#).



GRI 415 Public policy

103-1 EXPLANATION OF THE MATERIAL TOPIC AND ITS BOUNDARY

Government policy is one of the most powerful external forces affecting Graphic Packaging today. New laws and changes to existing laws can fundamentally impact our operations and the markets in which we do business. Evolving laws and regulations can also impact our bottom line, thereby affecting our employees, retirees, suppliers, customers, communities, and stockholders.

Because the impact of government policy is so critical to the Company's success, we actively participate in both policymaking and political processes, through legally allowed advocacy efforts and by making political contributions to candidates, parties, and causes. In addition, Graphic Packaging employees in the United States are active in both policymaking and political processes by contacting their legislators through grassroots campaigns and contributing to the Graphic Packaging International Political Action Committee (GPI-PAC). Graphic Packaging supports these activities to promote open and transparent civic engagement.

103-2, 3 THE MANAGEMENT APPROACH AND EVALUATION

Public policy and legislation at all levels of government can have a significant impact on our Company, employees, industry, and stakeholders. Therefore, Graphic Packaging stays informed on significant domestic and foreign policies, regularly meets with public officials and policymakers, and engages trade and business associations, customers, suppliers, employees, communities, and non-governmental organizations on issues of mutual concern. Active engagement in the political and regulatory processes is an important means of protecting our commercial, employee, and stakeholder interests.

Public policy focus areas

Carbon neutrality of biomass

Energy generated from biomass residuals is integral to manufacturing our products and biomass residuals are the primary source of energy in our virgin mills. In addition, energy generated from biomass represents over 65% of our global energy. We urge policymakers and regulators to recognize biomass as a renewable energy source that is carbon neutral. Biomass residuals are a byproduct of the harvesting process and a part of sustainable forest management, where we use all parts of the tree, from the stump up. We view sustainable forest management as an important lever for mitigating climate change through carbon storage in forests and products.

Combating illegal logging

We are a strong proponent of global efforts to suppress illegal logging and trade. We support the forest sustainability language included in United States-Mexico-Canada Agreement (USMCA) and will work to ensure the inclusion of similar language in future trade agreements.

Energy diversity and efficiency

We support policies that promote energy diversity and economic development, consistent with our principles of responsible, efficient, and sustainable use of natural resources.

Extended producer responsibility

We are committed to market-driven paper and paper-based packaging recovery and recycling efforts. We oppose government mandates that place fees on producers for managing waste and recycling of paper and paper-based packaging, or policy or regulation that require manufacturers to take back products and packaging introduced into the marketplace.

Infrastructure

We support government and private investments to upgrade energy, water, and transportation infrastructure where we operate.



Product bans	We oppose policies that limit consumer choice by placing a ban or fee on paper-based packaging and products.
Recycling	As a large user of recycled paper and manufacturer of recycled packaging, we focus on ensuring that legislation and regulation does not hinder our ability to purchase or process recycled materials.
Transportation	As a leading shipper of freight, we support policies that make our truck, port, and rail shipments more efficient and competitive.
Workforce	We support diversity and inclusion as well as efforts at both the state and federal levels of government to focus on, fund, and implement programs that address workforce education, the skills gap, and training opportunities.

We engage with public officials through several platforms, including industry associations, professional lobbyists grassroots lobbying communications, and political donations. Our employees and third parties who undertake political engagement on our behalf are required to comply with all US and international laws and our [Code](#). We act with integrity and take our role in the process seriously because of its direct impact on our ability to compete in today's marketplace.

Political contributions

The GPI-PAC is a voluntary, non-partisan political action committee (PAC) registered with the US Federal Election Commission. It provides employees and members of our Board of Directors with a legal and ethical way to pool personal financial donations to contribute to worthy candidates for federal and state offices in the US who support issues important to our business, our employees, and other stakeholders.

The GPI-PAC is a separate segregated fund that complies with the Federal Election Campaign Act, as amended, and all state and federal election laws and regulations, including disclosure requirements. Every dollar contributed to GPI-PAC goes directly to supporting candidates either directly or through payments to industry trade associations' PACs. The GPI-PAC is independent of any political party, candidate, or organization, except that Graphic Packaging defrays all costs and expenses, as allowed by law, associated with operating GPI-PAC. A Board of Directors made up of Graphic Packaging executives provides oversight for GPI-PAC and reviews and approves all political contributions and other payments.

The GPI-PAC Board evaluates candidates on a bipartisan basis, based on the following criteria:

- Reputation, integrity, and a demonstrable commitment to ethical political conduct.
- Position and voting record on issues that matter most to the Company and our industry.
- Represents a Graphic Packaging facility or employee center.
- Leadership position and committee assignments.
- Potential for election success.

All financial contributions strictly adhere to federal and state laws regarding contribution limits on amount and source, criteria, and reporting requirements. Contribution information is a matter of public record and readily available to interested parties through the [Federal Election Commission \(FEC\)](#), IRS, and Secretaries of State. GPI-PAC files reports, as required, of receipts and disbursements with the FEC. Graphic Packaging does not make "independent expenditures", nor does it contribute to so-called "Super PACs," 527 groups, 501(c)4, or for any election ballot measure. On rare occasions, we may use corporate financial resources to support our position on important public policy issues. Corporate contributions follow the same rigorous process as the GPI-PAC.



Trade association & civic organization engagement

Graphic Packaging participates in many trade and business associations, whose purpose is to promote common business interests. Engagement with these associations assists us in managing priorities relevant to Graphic Packaging and the paper-based packaging industry. Trade associations support member companies by:

- Advocating company and industry positions
- Building critical relationships
- Educating the public
- Supporting informed, sound public policy decisions

Many trade and business associations have diverse memberships and diverse member views on matters of public policy. Graphic Packaging endeavors to participate actively in the leadership of its key trade associations. However, we may from time to time find ourselves in disagreement with the prevailing views of the association's membership. It is our practice, and our preference, to work within the association policy process to assure that our views are adequately communicated and represented in association policy, strategy, and tactics. In all cases, any Graphic Packaging position on a matter of public policy is the prevailing Company position, irrespective of any trade association position to the contrary.

Graphic Packaging has also developed partnerships with civic leagues and social welfare organizations (as qualified under Section 501(c)(4) of the US Internal Revenue Code) that play an important role in public policy debates. These non-governmental organizations sometimes engage in advocacy-related activities, as well. Memberships in and contributions to trade associations and civic organizations are reviewed by our vice president of government affairs (VPGA) and follow the same authorization process as for political spending activities.

Graphic Packaging receives information from trade and business associations as well as civic leagues and social welfare organizations in the US regarding the portion of our dues or contributions that are used for lobbying expenses and political expenditures. We include this information in the aggregate in our quarterly lobbying activity reports filed with the US Congress, as required by the Lobbying Disclosure Act (LDA).

Governance

Graphic Packaging is committed to the highest standard of ethical conduct in its involvement in the political process as outlined in our [Code](#). Our VPGA directs our public policy strategy as well as oversees corporate political activity and spending/political contributions via the GPI-PAC and participation in trade associations and civic organization engagement. Our activities undergo periodic audits to ensure that contributions are made in accordance with the law and Company policies. Our VPGA provides regular updates to the executive leadership team and the Board on our public policy activities. Read more about our ESG governance structure in disclosures [102-18](#) and [102-19](#) and about our policies in disclosures [102-16](#), [205](#), and [206](#).

We complement oversight of our overall government affairs program with external consultants, outside legal counsel, and periodic audits. In 2021 we transferred management of our PAC contributions to Aristotle International, a global leader in non-partisan political technology, consulting, data services and analytics. Through their PAC Services platform we have enhanced our PAC execution and delivery of campaign contributions.



415-1 POLITICAL CONTRIBUTIONS

US political contributions, lobbying, and trade association expenses¹

Group/organization	2019	2020	2021
Political campaigns — PAC contributions	\$16,000	\$19,000	\$0
Political organizations	\$10,500	\$10,000	\$19,500
Lobbyists or lobbying organizations	\$505,000	\$389,000	\$492,000
Trade associations ¹	\$2,468,000	\$2,612,000	\$2,186,000

¹ Trade association expenses include annual dues, support for industry initiatives, and may include some industry lobbying costs.

US candidates or organizations¹ that received GPI-PAC political contributions

Committee name	Party	Amount
State level		
ForestPAC (GA)	NA	\$2,000
National level		
Business Industry PAC	NA	\$2,500
First State PAC	Democrat	\$5,000
American Forest & Paper Association PAC	NA	\$5,000
Great Lakes PAC	Democrat	\$5,000

¹ Political organizations qualified under Section 527 of the US Internal Revenue Code.

Trade association¹ memberships with dues exceeding \$25,000 paid by Graphic Packaging in 2021

100% Recycled Paperboard Alliance	German Folding Carton Association
American Forest and Paper Association	National Association of Manufacturers
European Carton Makers Association	National Council for Air and Stream Improvement
European Paper Packaging alliance	Paper and Packaging Board
EXTRACT	Paper Recycling Coalition
Foodservice Packaging Association, UK	Paper Packaging Council
Foodservice Packaging Institute and Paper Cup Alliance	Recycled Paper Technical Association

¹ Trade and business associations as qualified under Section 501(c)(6) of the US Internal Revenue Code.



Cyber security and customer privacy (GRI 418)

103-1 EXPLANATION OF THE MATERIAL TOPIC AND ITS BOUNDARY

Society and our Company rely on digital tools and data more today than ever before. This extensive digital exposure also increases the risk of unauthorized access to, and use of, the Company's internal systems and information, as well as information belonging to our customers and other stakeholders. With more digital exposure there is a greater risk of unintentionally having information of the Company and its stakeholders made available to unauthorized persons. Further, criminals and criminal organizations have attempted to gain unauthorized access to Company internal systems and information resources through various access points, including both systems access and through employees. Through unauthorized access to systems and information, criminals and criminal organizations can harm the Company and its stakeholders. This may involve blackmail, fraud, damage to information and fixed assets, spreading of share price-sensitive information, etc. The risk of loss of the Company's intellectual property, trade secrets or other sensitive business information or disruption of operations could negatively impact the Company's financial results.

Providing a safe computing environment protects our business, our employees and, ultimately, our customers. We employ a complex and networked system to ensure our business operations and stakeholders are protected from harm. All Graphic Packaging employees and contractors are a part of the Company's cyber security initiatives, supported by security awareness programs focused on common safe practices across the enterprise.

103-2 THE MANAGEMENT APPROACH AND ITS COMPONENTS

Graphic Packaging works diligently to provide a safe computing environment for our employees, protecting assets for all stakeholders. Wherever possible, our policies and standards follow National Institute of Standards and Technologies (NIST) cybersecurity and ISO 27000 frameworks. The Graphic Packaging High-Level Information Security Policy provides guidance and direction on protecting data, networks, applications, and assets including mobile devices and computers. This security policy also includes a summary of more than 35 sub-policies with directives on individual topics including Acceptable Use of Assets, Risk Management, Information Exchange, Physical Access Security, and more.

We allocate resources to manage IT and cyber security across the enterprise beginning in the global IT leadership team, with dedicated professionals positioned in each region. These leaders are fully supported by technical team members and, where applicable, a global managed service provider that offers 24/7 support and operations for all Company systems. Graphic Packaging's vision for enterprise cyber security is to employ a single strategy across all business units and deploy tools and processes consistent in all locations.

Our approach to cyber security is layered to address unauthorized access and disclosure. We use next generation endpoint security to protect from malware and ransomware. For servers, we employ privilege access management to control elevated access, which is recorded along with sessions and keystrokes. Secure passwords, multi-factor authentication and data encryption are used to ensure remote access is protected. Data telemetry from all systems is integrated with our security event and incident management (SEIM), which is managed by a 24/7 cyber security provider. These services govern the protection of both Graphic Packaging data and customer data.

Graphic Packaging regularly updates employees and contractors on security threats and policies through two computer-based training modules deployed within our Graphic Packaging University learning management system. The first includes general cyber security awareness for safe computing practices. The second includes IT and cyber security modules that review policies across the Company. In Q1 2022, we published fully updated IT and cyber security policies and subsequently updated our training curriculum.

We employ a multi-tiered due diligence process when considering new business relationships with third parties. All new IT vendors are vetted using proprietary, third-party screening tools, and we perform due diligence with potential third parties during the contracting process to screen their operations for safe computing practices. In addition, all third parties interacting with Graphic Packaging are required to execute non-disclosure agreements. The Company's IT Finance Compliance organization reviews and tracks these agreements before an actual



purchase agreement is approved or information is shared. If the relationship includes services, there is a Master Services Agreement with additional information protection requirements.

The Company has a defined incident response procedure in place to manage threats globally. Issues are triaged to determine the threat's extent, including classification of breach of confidential information and the availability and integrity of our systems. In the event a threat rises to the highest level of severity, we have in place a communications path from senior leadership to executive leadership, and ultimately to the Board of Directors. Incident response is supported by global team members and managed security service providers, complemented further by multiple threat intelligence sources globally.

Graphic Packaging also takes precautions to protect business operations continuity in the unlikely event that our IT systems are compromised during a natural disaster or by a cyber intrusion. We conduct annual disaster recovery testing for key systems and maintain current, encrypted full system back-ups at a secure off-site location. These actions prepare us to restore IT operations quickly and with minimal business disruption when needed.

Graphic Packaging has adopted a records management program to ensure uniform practices for creating, distributing, retrieving, preserving, protecting, storing, and disposing of Company records. The program covers all Company records (digital, paper, audio, etc.), provides guidance on record retention period by record type and is designed to ensure compliance with laws (including records hold orders) and to reduce costs for retaining unnecessary records. The records management policy is periodically reviewed and updated to reflect best practices and requirements in the global regions where we operate. Employees are trained on the policy each time the policy is updated. The program applies to all employees and is overseen by the law department and the EVPGC.

103-3 EVALUATION OF MANAGEMENT APPROACH

The Board of Directors at Graphic Packaging entrusts the Audit Committee of the Board to periodically review the cyber risk of the Company. The audit committee works with the senior vice president, chief information officer (CIO), and chief information and security officer (CISO) to review the priorities and goals of the cyber program, provide direction and guidance on perceived risk, and evaluate coverage across the enterprise. The CIO provides regular updates to the audit committee throughout the year during scheduled committee meetings. We perform detailed information security risk assessments at least annually for the entire enterprise. Our most recent assessment was completed in February 2021. Additionally, we have a vulnerability program that scans assets weekly and reports affected systems. Globally, we use comparative analysis from previous months or quarters to determine trends that indicate stronger adherence to security controls or stronger system hygiene. Learnings from these assessments are used to identify potential risks and implement opportunities to further enhance system effectiveness.

Enterprise-level IT risks are also identified within our compliance and risk organization as a part of program and technical implementation. Risks may also be identified and reported by employees directly to leadership or through the ALERTline. Substantiated risks are tracked and reviewed monthly by our compliance and risk committee, made up of senior leaders across the enterprise. This group identifies key performance indicators associated with core risk areas and adds additional KPIs as needed to track and manage potential risks.

In 2021, we implemented a new framework to address cyber risk related to automation, production systems, and technical improvements across our mill and converting plants. We also continued our work to improve intrusion detection, prevention, and effective processes to manage information security incidents. We conducted global online security training and implemented phishing and mobile device management tools. 89% of salaried employees completed their assigned on-line data protection and privacy training.

Read more about our governance and risk management processes in disclosures [102-18](#) and [102-29](#) and our Board in disclosures [102-24](#) and [102-27](#).

418-1 SUBSTANTIATED COMPLAINTS CONCERNING BREACHES OF CUSTOMER PRIVACY AND LOSSES OF CUSTOMER DATA

In 2021, there were no substantiated information security incidents or complaints received concerning breaches of customer privacy or losses of customer data.



Environmental Topics

IN THIS SECTION

Sustainable Forestry

Waste and Recycling

Climate Change

Environmental Compliance

Water Stewardship



Sustainable Forestry



GRI 301, 304 Materials and biodiversity

103-1 EXPLANATION OF THE MATERIAL TOPIC AND ITS BOUNDARY

Forests and trees are central to life on earth. They provide clean air and water, habitats for unique plant and animal species, food, and raw materials for many of the products we rely on every day. Forests also provide recreational, psychological, and spiritual values, and support the livelihoods for diverse groups of people all around the world. With their distinct ability to sequester and store carbon dioxide, they are also one of our best tools in mitigating climate change.

Because of the incredible values forests provide and because many global initiatives have not proven successful in protecting the most at-risk forest ecosystems, there is increasing concern over loss of forests and the biodiversity that they support. Graphic Packaging shares these concerns. Our entire business depends upon the sustainability of forests for us to make the fiber-based packaging solutions our customers rely upon. Similarly, our customers are concerned and are making commitments to only use responsibly produced packaging that does not contribute to deforestation or biodiversity loss. We address these concerns by working with our value chain to promote using sustainable forest stewardship practices that will maintain healthy, diverse forest ecosystems for generations to come.

103-2 THE MANAGEMENT APPROACH AND ITS COMPONENTS

Graphic Packaging's four virgin fiber mills are located in the southeastern US, a region referred to as "the woodbasket to the world" because of the abundance of forest resources, the outstanding conditions for quickly and efficiently growing trees, and its unique biodiversity values. Approximately 80% of our fiber inputs on a dry fiber basis come from virgin fiber and are the primary ingredient for our paperboard manufacturing process. Graphic Packaging does not own and manage forest lands for wood production, and instead sources nearly all the virgin wood fiber our mills use from local third-party suppliers and transforms the fibers into paperboard and other valuable by-products.

Our commitment to sustaining forests is felt throughout the Company — through the policies we set, in how we source forest materials, and through supporting forest education and stewardship. Our forest material stewardship approach includes three core principles:

- Sourcing virgin wood locally, from sustainably managed forests.
- Certifying fiber sourcing practices via credible, third-party forest certification frameworks.
- Maximizing use of recycled fiber and recovered forest materials.

Local, responsible virgin fiber

Virgin fiber is a critical raw material for Graphic Packaging, necessary for meeting specific packaging performance and durability needs due to its longer fiber lengths, and for meeting health and safety requirements for certain food packaging applications. Virgin fiber inputs are also an integral element in the fiber cycle, needed to sustain the fiber recycling loop by providing fresh material inputs to replace fiber losses. Without new virgin fiber inputs, [NCASI estimates](#) that the North American fiber cycle would run out of recycled paper in approximately six to 11 months



due to system losses from nonrecoverable paper uses (e.g., tissue papers, sanitary papers, building construction papers, etc.), contaminated materials, recycled paper exports, and fiber breakdown during recycling. Read more on paper recycling in disclosure [306](#).

Graphic Packaging sources the virgin wood fiber materials we need from local, sustainably managed working forests where forest renewal and biodiversity are safeguarded. This approach provides additional benefits by supporting green jobs and economic opportunities in our communities and reducing our carbon footprint through a connected supplier network and shorter haul distances. We typically source wood from within an average radius of approximately 75 miles surrounding each mill, which equates to a combined woodbasket area on the order of 27 million acres of forest land. Each year, approximately 135,000 acres, or 0.5% of the woodbasket, are harvested to supply virgin wood materials for our paperboard mills. Harvest areas are scattered throughout the entire woodbasket area and are interspersed with forest stands at different growth stages. Randomly distributing the harvest locations throughout the woodbasket helps to create a patchwork of forest habitats and ages that supports a richer and more diverse community of forest dwelling species. This approach also more closely mimics natural forest decline and regeneration patterns that would follow random wildfire events prior to human fire prevention intervention.

Around 75% of the wood purchased for our mills is coniferous species, primarily loblolly pine, but also some shortleaf pine, slash pine, and longleaf pine. These trees are typically sourced from sustainably managed pine “plantations,” where the trees are planted and grown in rows and managed as a crop, replanting after each harvest. Plantations are incredibly productive and generate more wood per acre than do naturally regenerated forests, helping reduce harvest pressure on naturally regenerated pine forest stands. For example, southern yellow pine plantations occupy only 18% of the forest area of the region, but they contain 47% of the region’s live pine volume and account for 82% of annual harvested pine volumes ([USDA, 2019](#)). Trees harvested for paper production are the result of thinning activities that remove trees not suitable for lumber production, the primary end market.

Sustainably managed hardwoods, including poplar, oak, ash, and smaller volumes of other hardwood species, account for the remaining 25% of the wood flowing into our virgin mill facilities. Hardwoods may grow in groups or single species stands and in various ecosystems, from dry uplands to wet bottomlands. Hardwood renewal tends to be most successful when they regenerate naturally as opposed to managed plantings. Early successional hardwood stands, which develop first after forest harvesting, provide a particularly good habitat for a range of bird species in the Southeast including migratory songbirds ([USDA, 2012](#)). Additional details about our timber sources, [including the tree species](#) in our products, can be found on [our website](#).

Most of the wood Graphic Packaging purchases is grown in non-certified, sustainably managed forests. In the US, more than 50% of fiber supplies originate in forests owned by family landowners (sometimes called smallholders) and these landowners typically do not participate in forest certification programs due to the administrative costs and complexity of maintaining the certifications ([USDA, 2021](#)). This is not because their practices are unsustainable. In fact, the top reasons that these landowners own forest lands are to have privacy, maintain family connections, and support [nature conservation](#). Forest certification tends to align with their values, but is not a good fit for these smallholders, whose properties average [29 acres](#) in size and will harvest only once or twice in their lifetimes. Our local sourcing approach enables our team of wood procurement professionals to work directly with our wood suppliers (large and small) to ensure sustainable forest management requirements are met for every delivery of wood to our mills. It also creates economic incentives for smallholders and family tree farmers to maintain their land as working forests that sequester carbon and provide many other environmental benefits, including protection for freshwater supplies and habitats for diverse species of plants and animals. Read more on our local sourcing practices in disclosures [304-2](#), [304-3](#), and [204](#).

Forest certification and sourcing due diligence system

Since 2010, Graphic Packaging has used forest and fiber sourcing certifications combined with a due diligence system (DDS) to guide our fiber sourcing operations. We pursue both COC and fiber sourcing certifications under the [SFI](#), the [PEFC](#), and the [FSC](#) standards. All our mills are certified, via a rigorous review process conducted by accredited third-party auditors, to one or more third-party COC standards and to certified sourcing standards.



Forest certification and certified sourcing programs provide consumers confidence that the fiber-based packaging associated with the products they purchase does not contribute to deforestation or biodiversity loss. These certification programs are expansive in their reach, defining requirements for governance and management systems, personnel, contracting, supplier training, and records management. They also require a robust risk assessment to assess biodiversity, deforestation, and other forest sustainability risks in the regions where wood or wood fiber materials are sourced. The certification programs apply to both virgin and recycled fiber operations, for which there are specifically calibrated standards and requirements.

COC certification assures we can trace wood fiber from certified, sustainably managed forests to our mills and converting plants and then through the supply chain via third-party audits to the COC certification standards. For non-certified forests, the FSC controlled wood and SFI fiber sourcing programs outline necessary steps to demonstrate wood fiber is responsibly sourced from low-risk forest regions. Under these systems, we apply a multistep risk assessment and due diligence process to evaluate potential risks from sourcing wood in forests with high conservation values (HCVs) or forests with exceptional conservation value (FECVs) and imperiled species. The assessments also screen for controversial sources including areas at risk for forest conversion, species loss, corruption, impacts to sensitive ecosystems, exploitative or unfair labor practices, and more. If a risk is identified, we implement control measures to mitigate the risk when possible. For example, in some geographies, we will only source chain of custody certified material that originates in a certified forest. However, not all risks may be easily mitigated and, in those cases, we simply exclude that source to ensure risk is avoided. Read more about preharvest due diligence and supplier engagement processes in disclosures [304-2](#), [304-3](#), and [204](#).

Maximizing recovered fiber use and mill yield efficiency

The circular nature of fiber-based packaging is core to our business strategy and our forest material stewardship approach. Our application of circular economy principles to fiber-based packaging flows from our responsible forestry commitment to regenerate the natural raw materials we use to our efforts to take back and recycle fiber-based materials into new packaging products. This includes recovery and reuse of paper waste in our facilities, increasing our use of recycled materials, and promoting expanded recovery of fiber-based packaging materials through community recycling programs. Read more about Graphic Packaging's recycling efforts and collaborations in disclosure [306](#).

We produce 100% recycled board at four North America mills and have invested over \$600 million in expanding our coated recycled paperboard (CRB) manufacturing capacity at the Kalamazoo, Michigan mill. The newly commissioned K2 CRB line adds approximately 500,000 US tons per year of CRB production, enabling us to meet growing customer demand for sustainable packaging made with recycled materials. These recycled fiber mills use recovered paperboard clippings and off-spec carton products from our converting plants (read more in disclosure 306) and external pre- and post-consumer recycled materials as inputs for making new paperboard. Expanding our capacity to use more recycled feedstocks to supply CRB helps us better serve the increasing market demand for paper-based packaging products while reducing pressures on virgin forest materials.

Graphic Packaging is also actively pursuing options at our virgin mills to reduce our dependency on harvesting new trees. We work to maximize fiber recovery in the virgin mills by improving fiber yields, optimizing fiber content in our paperboard, and reusing mill scrap/wastepaper to increase mill efficiency. In addition, our virgin fiber mills are also able to process fiber waste or byproducts from other industries, including wood fiber waste from lumber yards and small diameter or rejected wood that is not suitable for the structural timber market. Our two coated unbleached kraft (CUK) mills also have installed small recycle fiber recovery process systems that enable the mills to use recycled paper feedstocks in the CUK manufacturing process. These actions together enable Graphic Packaging to create high-quality virgin paperboard products using fewer virgin natural resources.

Governance

Graphic Packaging's sustainable forestry program is supported by a robust, multilayered governance system that includes strong corporate policies and standards, clear reporting mechanisms, strict third-party reviews, transparent disclosure, effective stakeholder engagement pathways, and adherence to global laws. At the highest level,



our [GSCOC](#) and [Sustainable Forestry Policy](#) outline our commitment to uphold human, civil, and traditional rights, including those of indigenous peoples, protect rare and imperiled species and ecosystems, avoid the use of genetically modified organisms (GMOs), and avoid wood that was illegally harvested or results from conversion of forests to other land uses or nonnative plantations. These documents reflect Graphic Packaging's values, align with our company's broader [Code](#), and reinforce our commitment to uphold the US Lacey Act and the European Union Timber Regulation. These laws address illegal logging and prohibit trafficking of illegally harvested products while protecting the competitiveness of legally harvested trees.

The SVPSC works directly with the VPP and CSO in setting the forest stewardship strategy and guiding our approach for sustainable fiber procurement. The CSO and SVPSC are responsible for overseeing our sustainable forestry policies, setting expectations for sustainably sourcing wood fiber, and providing guidance to the wood procurement team. The VPP, along with the procurement sustainability manager and wood procurement director, is responsible for developing and implementing Graphic Packaging's sustainable forest fiber procurement program. The SVPSC and the CSO provide timely updates to the executive team and Board as part of broader ESG program updates. This governance approach helps ensure transparency, accountability, and strategic support for our sustainable forestry programs.

Read more about our values and policies in disclosures [102-16](#), [205](#), and [206](#); our ESG governance process in disclosure [102-18](#), [102-19](#); and our supply chain sustainability program in disclosure [204](#).

103-3 EVALUATION OF THE MANAGEMENT APPROACH

Graphic Packaging embraces continuous learning and improvement as we evolve our forest sustainability approach and drive positive impacts through our programs. Our forest fiber sourcing programs are audited annually by both internal auditors and by accredited, external third-party auditors, and audit findings are logged and tracked through completion. The results of these audits, along with our Sustainable Forestry Policy, are reviewed annually with Graphic Packaging leaders to ensure that appropriate resource allocations and investments are made to grow our sustainable forestry programs and drive positive impacts through our sourcing practices.

We independently assess our forest stewardship approach and performance through third-party evaluation using the CDP forest response. We leverage the CDP forests reporting tool as a learning opportunity and barometer to track our growth. In 2021, we received a "B" score on our response for the second year in a row and are implementing the new learnings from CDP to further refine our approach.

We also maintain a public inquiries and complaints procedure specific to our forestry certification programs, where all complaints and inquiries related to our sustainable forestry and fiber certification programs are documented, acknowledged, assessed, and resolved. As applicable, Graphic Packaging may engage certification bodies and the relevant forest certification schemes of the FSC, SFI, and PEFC to address a reported concern. No complaints were received in 2021.

Read more about our forest management approach and how we measure our progress in disclosures [204](#), [301](#), and [304](#), and in our [2022 CDP forest response](#).

301-1, 2 MATERIALS USED BY WEIGHT OR VOLUME AND RECYCLED INPUT MATERIALS USED

Graphic Packaging transforms both virgin and pre- and post-consumer recycled fiber materials into paperboard at its eight North America mills. In 2021 our mills consumed 9.2 million metric tons of virgin wood fiber and 1.2 million metric tons recycled fiber. 100% of the virgin wood we use comes from sustainably managed forests, which meet the criteria for SFI Fiber Sourcing, PEFC Controlled Sources, and FSC Controlled Wood, with approximately 24% also meeting SFI or FSC COC requirements.



2021 Purchased fiber (metric tons)		
	2020	2021
Virgin wood ¹	9,149,000	9,155,000
Sustainably sourced ² virgin fiber ¹ (excluding COC fiber)	6,823,000	6,962,000
SFI/PEFC COC	1,927,000	1,799,000
FSC COC	399,000	394,000
Recycled fiber ³	1,030,000	1,226,000

¹ Virgin wood totals presented on an as delivered "wet" basis. Includes -50% moisture content.

² Sustainably sourced fiber meets the requirements of the SFI Fiber Sourcing, PEFC controlled sources, and FSC controlled wood sourcing standards. All virgin fiber meets sustainably sourced requirements.

³ Recycled fiber qualifies for both FSC COC and RPA100 certification.

The following table summarizes 2021 papermill production by board type and saleable by-products. In addition to producing paperboard, Graphic Packaging also recovers turpentine and tall oil by-products for sale and black liqueur for fuel use in recovery boilers at the four virgin paper mills (see disclosure [302](#)).

2021 Paper mill production volumes			
	Percent total production	Percent recycled content	Total production (metric tons)
Paperboard production			
Coated unbleached kraft	43%	12%	1,516,000
Sulfate bleached substrate ¹	30%	0%	1,060,000
Coated recycled board	26%	100%	913,000
Total paperboard	100%	-	3,489,000
By-product production			
Turpentine	10%	-	6,000
Tall oil/soap	90%	-	53,000
Total by-products	100%	-	59,000
Total mill saleable products	-	-	3,548,000

¹ A limited quantity of sulfate bleached substrate board for the cup market is made with up to 10% recycled content.



100% of Graphic Packaging's produced CUK and SBS paperboard meet the SFI Certified Sourcing and FSC Controlled Wood standards, and PEFC controlled sources requirements. In addition, 100% of CRB paperboard complies with the Recycled Paperboard Alliance (RPA-100%) paperboard certification standard and the FSC COC recycled content standard. Approximately 72% of Graphic Packaging produced board was consumed internally at our converting plants, and the remainder was sold to external customers.

Graphic Packaging converts both its own produced paperboard and externally purchased paperboard into finished cartons and other fiber-based packaging solutions. The following table summarizes total consumed board by board type and source that was converted into packaging products. Recycled board represents approximately one third of the total board used to manufacture fiber-based cartons and packaging in 2021.

Total converted paperboard materials (metric tons)	
	2021
Virgin fiber board	2,147,000
Internal board	1,820,000
External board (NA source)	151,000
External board (outside NA source)	176,000
Recycled fiber board	1,064,000
Internal board	691,000
External board (NA source)	228,000
External board (outside NA source)	145,000
Total consumed paperboard	3,211,000
Percent virgin board	67%
Percent recycled board	33%

A growth path for reporting

Graphic Packaging is working to drive consistency across our global sustainable fiber sourcing program. This includes increasing visibility into our global supply chains for purchased board and other wood-fiber products and consolidating all our fiber tracking processes into one global process. At present, the focus of our program has centered on materials purchased in North America for our virgin and recycled fiber facilities and converting operations. North America represents roughly 83% of the fiber-based products the Company sells, and both fiber and board sourced in North America meet the SFI Certified Sourcing standard. Board sourcing in other global regions follows similar practices as our North America operations, with COC requirements managed on a per customer basis at the local converting plant. With the recent AR Packaging acquisition, our global purchasing footprint has grown considerably, accelerating the need to harmonize our management approach for purchased paperboard. Graphic Packaging has confirmed with board suppliers that 100% of purchased board in Europe is conflict-free.



301-3 RECLAIMED PRODUCTS AND THEIR PACKAGING MATERIALS

More than 1.2 million metric tons of reclaimed pre- and post-consumer recycled paper materials were used to make new CRB paperboard products or were blended with virgin fibers to produce paperboard at our two CUK paperboard mills. Sources for recovered fibers include reusing cuttings and paperboard scrap from our converting plants and externally purchased recovered fiber materials. Graphic Packaging has four 100% recycled board plants in the United States that produced 913,000 metric tons CRB in 2021. Graphic Packaging also purchased 373,000 metric tons of external recycled paperboard for use in its converting operations. Recycled material inputs are used to make approximately one-third of the packaging products we manufacture for sale.

In addition to paperboard packaging, Graphic Packaging manufactures and sells high-speed packaging equipment for our customers to use with our packaging products. These machines may be leased by or sold to our customers and are typically returned to us at end of life or at the end of a customer lease period. Returned machines are carefully inspected and are then either refurbished for reuse in a new packaging application or, when this is not possible, scrapped for recycling machine components.

304-1 OPERATIONAL SITES OWNED, LEASED, MANAGED IN, OR ADJACENT TO PROTECTED AREAS AND AREAS OF HIGH BIODIVERSITY VALUE OUTSIDE PROTECTED AREAS

The US has a strong and longstanding practice of land conservation and protection, with over a quarter of America's land and marine areas designated for protection, ranging from untrammeled wilderness to actively managed working lands ([Esri](#)). As a result, the American landscape is a patchwork of parcels dedicated to some sort of nature protection and conservation. Graphic Packaging recognizes the important role that protected areas play in supporting biodiversity conservation and uses the [Protected Areas Database of the United States \(PAD-US\)](#), the nation's official inventory of public open space and private protected areas administered by the US Geological Survey, to identify protected areas near our operations. The lands included in PAD-US are assigned conservation status codes that both denote the level of biodiversity preservation and indicate other natural, recreational, and cultural uses. PAD-US also includes the best available aggregation of federal lands data provided by agencies. In addition, Graphic Packaging leverages the [FSC National Risk Assessment](#) to identify areas of HCVs.

Graphic Packaging's four virgin fiber mills source wood from within an average 75-mile radius surrounding each individual facility. The corresponding wood baskets include numerous protected areas that are owned and/or managed under protection by local, state, federal, private, or conservation partners, including the Nature Conservancy and local land trusts. To see protected areas near our mills, click on the following links for [West Monroe](#), [Texarkana](#), [Augusta](#), and [Macon](#). Specific areas, levels of protection, and classification of ownership of each protected area are provided by unit.

Graphic Packaging owns approximately 2,500 acres of woodlands adjacent to its Texarkana facility. These woodlands are managed primarily for wildlife and aesthetic values. While these woodlands are not managed for timber production, small volumes of fiber may be harvested on occasion for use at our Texarkana facility.

304-2, 3 SIGNIFICANT IMPACTS OF ACTIVITIES, PRODUCTS, AND SERVICES ON BIODIVERSITY AND HABITATS PROTECTED OR RESTORED

Our business relies on maintaining sustainably managed forests in our woodbasket and we are focused on mitigating any potential impacts our fiber sourcing operations may have on forest biodiversity in the region. We accomplish this by following sustainable sourcing practices (in accordance with SFI Fiber Sourcing and FSC Controlled Wood certification programs) and through supporting biodiversity conservation efforts. In addition, we engage landowners and loggers before, during, and after harvests to promote using forest stewardship best management practices (BMPs) in our woodbaskets.



Preharvest screening

Graphic Packaging's multifaceted risk assessment and due diligence system helps us protect sensitive and high conservation value species and habitats and not contribute to their decline. Our procedures start with understanding landscape connectivity and potential risks in our sourcing regions, including an analysis of FECVs. Prior to harvesting, our fiber supply team uses geographic information system (GIS) screening tools, such as [NatureServe Explorer](#) and the [Forests in Focus](#) tools, and on-the-ground forest track inspections to ensure we do not purchase wood from illegal logging and deforestation/conversion activities or from areas with important species or high conservation value. Forests in Focus was developed (with support from Graphic Packaging) in partnership by GreenBlue, the American Forest Foundation, USDA Forest Service, and Esri to assess risks in the landscapes surrounding virgin fiber mills, identify critical ecological needs in those areas, and make measurable conservation impacts on the ground. In addition, Graphic Packaging works with local agencies in the states in which it operates — including Texas Parks & Wildlife — Wildlife Division; Arkansas Natural Heritage Commission; Louisiana Wildlife and Fisheries; and Georgia Wildlife Resources Division — to further augment and update data related to species of concern. Read more in disclosure [304-4](#). The potential presence of imperiled species or areas with high conservation values prompts a discussion within the wood procurement team to ensure any risk to those species due to harvesting activities will be mitigated, as well as to determine what forest management approaches can protect or enhance the species and/or habitat attribute. The analyses enable our fiber buyers to make informed purchasing decisions on individual forest tracts. If the risk cannot be mitigated, we do not purchase fiber from the tract.

Supplier engagement and training

Graphic Packaging works within its supply chain to train our suppliers, including both loggers and landowners, to understand and implement practices to support a range of species and habitats, in addition to engaging with NGO partners to protect rare species and ecosystems in the regions where we source. Using the analyses from the screening tools we develop data summaries, including information about high value habitats and groupings of imperiled species present in the region. We provide the data summaries to our suppliers and landowners, and the summaries are included in the logger training that we routinely conduct on use of responsible forest BMPs. Graphic Packaging also partners with the SFI State Implementation Committees (SICs) to support family landowner education to help them identify rare species and associated habitats on their land and implement practices to conserve and restore them. Read more about supplier engagement and management in disclosure [204](#).

Harvesting practices to minimize impacts

The wood procurement team works with suppliers to implement the best management approach for each tract of forest supplying our mills. Wood harvesting is planned to suit the unique characteristics and ecosystems present at each individual tract and considers the landowner's objectives for the tract, such as not disturbing old growth tree stands, maintaining a privacy barrier, etc. During harvest, the loggers, foresters, and/or natural resource professionals follow appropriate harvesting methods and BMPs to meet the aims of the landowner while protecting sensitive habitats on each tract and aligning harvest volumes with the long-term carrying capacity of the tract. Where trees are sourced from managed plantations for timber production, Graphic Packaging typically is purchasing wood from selective thinning activities that remove unhealthy and/or excess trees, resulting in a healthier tree stand and improved wildlife habitat.

Species most likely to be affected by harvesting operations are aquatic or riparian species that depend on water quality and temperature. To protect these species, Graphic Packaging requires wood suppliers to follow BMPs during harvesting, even when the BMPs are voluntary in the state. Required BMPs include using riparian buffers, i.e., leaving a several meter wide band of trees around water features to ensure streamside vegetation remains intact and the trees continue to shade the waters, keeping water temperatures cool and providing vital cover for fish, amphibians, and other species. Similarly, BMPs are also followed for planning harvest routes and building roads within forest tracts to minimize runoff and sediment deposition into water bodies.



Forest dwelling species may also be impacted by harvesting activities and have a wide diversity of habitat requirements due to different species having adapted to live in forests at different growth stages. For example, some species prefer younger, “early successional” open forest habitat with saplings and small trees that offer forage and low-level cover for ground dwelling or nesting species, such as the northern bobwhite quail. Other species thrive in middle age range or mature forests that provide habitat for cavity nesting species, such as woodpeckers. Different animal species may require mature conifers (pine trees) or deciduous trees (hardwoods or broadleaf trees) or both. The Louisiana black bear’s habitat includes older, swampy hardwood forests, often called late successional bottomland hardwoods, whereas rare species like the indigo pine snake and gopher tortoise thrive in dense, older pine forests. Many species depend on complex structural features that include different kinds of forest stands with various ages, densities, and spacing. Others, like deer, prairie warblers, and other songbirds, benefit from edges, combining forest and grass or other land types. Thus, to meet the diverse habitat requirements of forest dwelling species, a landscape “mosaic” or patchwork of different ages and kinds of forests is needed. Sustainable forest management, including tree harvesting, is a critical tool for creating these diverse habitats and supporting forest conservation goals.

Following forest BMPs and forest certification criteria during harvesting activities can support forest dwelling species by preserving and/or creating important forest landscape features to provide the diverse habitats forest dwelling species need to survive. Leaving retention trees, decaying wood, and protective thickets are important practices that support forest biodiversity. Retention trees ensure that forests have trees of various ages, and over time, they turn into sturdy decaying wood. They are usually left in bigger groups and, the undergrowth can be left in place to serve as a protective thicket. If possible, a group of retention trees is left in an area with other nature values such as decaying wood, a buffer zone for a waterway, or other valuable microhabitat with high biodiversity value (e.g., a wetland or herb-rich forest). Riparian buffers provide both edge habitat and mature forest cover for species that prefer these forest features, and leaving standing and fallen decaying wood and stumps provides habitats for species that prefer dead trees for nesting or food sources. During the harvest operations, Graphic Packaging works with its suppliers and respective state forestry commissions to implement monitoring for best management practice use. These operations are also subject to third-party audit.

Post-harvest practices

Reforestation is essential to protecting biodiversity and maintaining forest cover and is a key priority for Graphic Packaging. Managed pine plantations are typically replanted by landowners shortly after harvesting to prepare the tract for their next growth to harvest cycle, while hardwood tracts are left to regenerate naturally. Following BMPs during harvesting (e.g., leaving groups of retention trees, high biodiversity stumps, and buffer zones around natural waterbodies) can accelerate natural forest regeneration. Following harvest, measures are taken to reduce soil erosion and runoff by distributing branches and other small tree debris across the landscape to help keep soils in place. In addition, larger tree debris may be placed in small piles throughout the tract to provide habitat for smaller ground dwelling species to nest or hide. These measures are designed to ensure important habitat is provided as soon after harvest as possible and the next generation of forests thrives. Graphic Packaging works with state forestry commissions to monitor post-harvest activities. This includes timely reforestation, checking that trees remaining on site have not been damaged, and that lasting infrastructure has been put into place to protect water, avoid sedimentation, and other impacts.

Graphic Packaging also closely tracks trends in forest cover within our supply basins. Over the past two decades, forest land coverage has increased in the US, with the largest increase observed in the South, where Graphic Packaging sources its wood ([USDA, 2019](#)). Despite the observed regional increases in forest cover, localized risks of forest loss or conversion within the region have been identified through the [FSC National Risk Assessment](#) and other analyses. The FSC analysis associates risk of forest loss/conversion with population growth and other economic development indicators. Graphic Packaging is following these emerging analyses closely to understand potential risks within our woodbasket and are working through our suppliers to help ensure our Company is not contributing to forest loss and that timely reforestation happens on the sites that supply wood to our mills. Additionally, Graphic Packaging requires binding agreements with all our suppliers to mitigate the risk that material supplied to Graphic Packaging originates from converted forests. We also have implemented a process to verify that any wood potentially associated with conversion is limited, fully legal, and does not harm any forest land with high conservation values.



External collaborations

As a large user of wood fiber, we want to amplify our positive impacts on forests via conservation and restoration activities that complement our commitment to sustainable forest management and responsible sourcing. Healthy forests provide soil, water, biodiversity and climate, cultural, economic, and recreational values that benefit the planet and communities far beyond our own supply chains. Graphic Packaging works collaboratively with forest conservation organizations to aid their efforts and to develop actions that improve our own procurement practices. These strategic partnerships are essential for society to achieve the scale necessary for long-term impact and to develop sustainable solutions that address critical regional and global forestry issues.

Partnerships include working with the [American Forest Foundation](#) (AFF) to restore native longleaf pine ecosystems and late successional bottomland hardwoods within the supply basins of our West Monroe, Louisiana mill and our Macon and Augusta mills in Georgia, where these important ecosystems have been identified. Longleaf pine is an imperiled ecosystem that provides habitat for rare species including the black pine snake and gopher tortoise and has high conservation value. Late successional hardwood ecosystems, especially those in low-lying wet areas, are also a conservation priority because they often contain old growth trees with high carbon stocks, and for the habitat they provide ([FSC, 2019](#)). In addition, Graphic Packaging makes an annual contribution to the [Georgia-Alabama Land Trust](#), which works to protect forest and woodlands against threats from development and other factors by using conservation easements, fee acquisitions, and partnership conservation agreements to protect lands in the supply basins in which Graphic Packaging sources wood.

Graphic Packaging also partners with AFF by supporting their American Tree Farm System (ATFS) program that provides family landowners with the resources and tools they need to maintain their forests and be effective stewards of the land. Similarly, we work in collaboration with the SICs in the states we operate in to provide training, field days, and technical support to engage family landowners in forest conservation, because we know engagement is critical to forest stewardship and retention.

304-4 IUCN RED LIST SPECIES AND NATIONAL CONSERVATION LIST SPECIES WITH HABITATS IN AREAS AFFECTED BY OPERATIONS

Species where we source

Graphic Packaging uses several important tools to understand the potential impacts of wood procurement activities on International Union for Conservation of Nature's (IUCN) Red List of Threatened Species (red list species) and their habitats. A primary source is NatureServe's tool, [NatureServe Explorer](#) — the largest online biodiversity encyclopedia in North America. NatureServe is a leading authority that works with network organizations and conservation scientists to collect, aggregate, and standardize biodiversity statistics, providing comprehensive data to the public for strategic conservation efforts. The IUCN red list species is similar in concept to NatureServe's global conservation status assessments, but minor differences do exist in their respective criteria and implementation. However, when applied by experienced assessors using comparable information, the outputs from the two systems are generally concordant. NatureServe is a founding member of the IUCN Red List Committee and, in the regions covered by NatureServe Explorer, NatureServe status ranks and their underlying documentation often form a basis for Red List assessments. Graphic Packaging corroborates NatureServe data for its wood baskets using the Forests in Focus tool, an effort in which Graphic Packaging was a founding member.

According to NatureServe Explorer and data provided by the Texas Parks & Wildlife — Wildlife Division, the [Georgia Biodiversity Portal](#), the Arkansas Natural Heritage Commission, and the [Louisiana Department of Wildlife and Fisheries](#), there are 663 species and 358 ecosystems ranked with critically imperiled (G1) status or imperiled (G2) within the states of Georgia, Mississippi, Louisiana, and Arkansas, as well as in the Texas counties where Graphic Packaging sources wood. The species fall into an array of broad species groups including



crustaceans, insects, flowering plants, vertebrates, and invertebrates. Most of these species are associated with aquatic or marine environments and, thus, are not directly or are unlikely to be directly impacted by forest harvesting. Further, many studies have found the implementation of BMPs during harvesting are effective measures for preserving water quality and protecting aquatic species ([NCASI, 2012](#); [NASF](#)). A few key species of concern across our regions of sourcing include the frosted flatwoods salamander, gopher tortoise, and indigo snake, and the Indiana Bat, which is vulnerable to a rapidly spreading disease called white-nose syndrome.

Analysis of critically imperiled or imperiled species by species group

Broad species group	Number of species	Number G1 ranked ¹	Number G2 ranked ²
Crayfish, shrimp, or other crustaceans	49	24	25
Insects (bees, beetles, caddisflies, mayflies, stoneflies, damselflies, and dragonflies)	56	18	38
Mussels, snails, and other mollusks	96	57	39
Nonvascular plants	7	2	5
Other invertebrates — terrestrial/freshwater	1	1	-
Vascular plants — conifers and relatives	2	1	1
Vascular plants — flowering plants	74	21	53
Vascular plants — ferns and relatives	7	5	2
Vertebrates	47	20	27

¹ G1 rankings denote species or ecosystems “at very high risk of extinction or collapse due to very restricted range, very few populations or occurrences, very steep declines, very severe threats, or other factors.”

² G2 rankings denote species or ecosystems “at high risk of extinction or collapse due to restricted range, few populations or occurrences, steep declines, severe threats, or other factors.”



Climate Change



GRI 302, 305 Energy and emissions

103-1 EXPLANATION OF THE MATERIAL TOPIC AND ITS BOUNDARY

Climate change is a critical issue for our planet and one of the most urgent challenges facing society today. In December 2015, nearly 200 countries adopted the Paris Agreement, a global climate accord that seeks to “strengthen the global response to the threat of climate change by keeping a global temperature rise this century below [1.5°] Celsius above pre-industrial levels.” Achieving the Paris Agreement ambition is part of the UN SDGs — a call for all countries to take action to promote prosperity, protect the environment, and tackle climate change.

The packaging sector plays a central role in the transition to a low-carbon economy due to the current and future demand for recyclable packaging made from renewable, non-fossil-based materials. As Graphic Packaging grows to meet this demand, we must do so while reducing our scope 1 and scope 2 operations GHG emissions, eventually decoupling GHG emissions from production growth. We also need to consider how we impact other GHG emissions from sources outside our operations, ranging from the forest resources and raw materials we purchase and transport to our facilities to the use and end-of-life treatment of the packaging solutions we sell. In doing our part to deliver the meaningful reductions needed to avoid the worst impacts of climate change, we must reduce our own emissions while influencing our value chain to do the same. Graphic Packaging values collaboration to drive change and works with policymakers, our value chain, and other organizations to encourage collective action to reduce GHG emissions and the commercial development and use of lower-carbon forms of energy.

103-2 THE MANAGEMENT APPROACH AND ITS COMPONENTS

Graphic Packaging works to address climate change by taking prudent, practical, and cost-effective actions to reduce our emissions as we grow our Company. We view energy use and GHG emissions as inextricably linked and tackle reducing nonrenewable energy use as a key lever in reducing our scope 1 and scope 2 GHG emissions. We formalize our commitment to reduce our emissions through our Vision 2025 climate goals:

- **Reduce greenhouse gas emissions intensity by 15%.**
- **Reduce nonrenewable energy intensity by 15%.**

We measure progress achieving our climate and energy intensity goals (measured on a revenue basis) versus 2016 performance baselines.

Accomplishing our climate goals requires expertise, innovative thinking, and teamwork across the Company. Graphic Packaging relies on the skills of the following subject matter experts to work with our operations and manufacturing teams to action our goals:



- **Mills center of excellence (COE)** — a team of experts who lead energy audits to identify new opportunities and develop and implement technology solutions to reduce GHG emissions and improve energy efficiency at our mills.
- **Supply chain team** — procurement experts who manage energy and fuel contracts with our service providers, track our usage for reporting, and explore opportunities to source additional renewable power.
- **Continuous improvement team** — operations experts who train and work with the mill and converting plant continuous improvement resources to identify opportunities to reduce energy use, chemical costs, and other consumables, driving both cost and emissions reductions.

Our teams are focused on improving energy efficiency in our operations, increasing our use of renewable energy, acting on opportunities to deploy lower energy/emission technologies at our manufacturing sites, and optimizing our manufacturing footprint. Examples of programs our teams pursue include:

- Increasing use of renewable biomass energy in the virgin mills. Currently, 70% of annual global fuel use is from renewable biomass fuels, and 66% of total global energy demand is from renewable energy sources.
- Optimizing the CRB manufacturing circuit to shift CRB production to more efficient, lower intensity mills and shutter older, higher cost, resource intense production lines.
- Using engineering software to optimize the energy balance within the mills and identify improvement opportunities to lower energy use.
- Exploring opportunities to source solar, wind, and other renewable power options to supply electricity to converting plants and mills.
- Reducing energy use through more efficient motors and pumps, transitioning to LED lighting, and improvements to compressors and heating, ventilation, and air conditioning (HVAC) systems.
- Switching to electric forklifts or other electric service vehicles where viable solutions exist.
- Optimizing fiber content in paperboard and paper-based packaging while maintaining product performance to decrease energy consumed per package.
- Participating in cross-industry collaborative programs, like the Department of Energy Better Plants program, to learn about emerging technology solutions and leverage best practices.

Governance

Our CSO works with the EVP mills and leaders from our converting operations on establishing and actioning our climate strategy. They are accountable for monitoring external trends, assessing climate-related opportunities and risks, allocating resources to action the climate strategy, and providing regular updates to the ELT and Board. The mills EVP works with the mills COE to develop enterprise-wide plans to achieve the Vision 2025 energy and GHG goals, establishes metrics, tracks performance, and works with our business segments to identify and pursue programs to reduce GHG emissions. Ultimately, the mills and converting plants are accountable for successful program execution and delivering energy and GHG emissions reductions. Read more about our ESG governance process in disclosures [102-18](#) and [102-19](#).

Emissions reduction actions are guided by our values, [Code](#), and Worldwide Health, Safety, and Environment policy. The ESG data manager works closely with the operations teams, the COE, and supply chain team to ensure energy and GHG data and metrics are timely, accurate, and effective for communicating our environmental performance and impact. Our GHG inventory management plan provides direction and guidance for collecting, maintaining, verifying, and reporting GHG emissions and other environmental performance data, and energy and GHG data are collected and aggregated as described in disclosure [102-50](#). Our data analysis processes use a third-party platform to aggregate and calculate annual GHG metrics, thereby reducing opportunities for manual errors. We are currently exploring options to implement a centralized data management system to further simplify and streamline our environmental data management process, and plan to implement a system within the next few years in preparation to comply with proposed SEC reporting requirements.



103-3 EVALUATION OF THE MANAGEMENT APPROACH

Graphic Packaging evaluates the effectiveness of our climate management approach by measuring progress toward achieving our nonrenewable energy and GHG emissions intensity reduction goals. We contract with a third-party assurance partner to provide limited level of assurance of our GHG emissions data based on current best practices and in accordance with International Standard for Assurance Engagements (ISAE 3000 and ISAE 3410). The assurance letter for our 2021 GHG emissions data can be found here on our [website](#). In addition, some of our facilities elect to have their energy management systems certified to ISO 50001. As of December 31, 2021, seven sites (6% global locations) are certified to the ISO 50001 energy management system standard.

We also independently assess our climate management approach and performance through third-party evaluation using the CDP climate change response. In 2021 we achieved an “A-” rating for the second year in a row, and are implementing the new learnings from CDP to further refine our climate management approach. Refer to our [2022 CDP climate change response](#) for more information on our approach to managing carbon emissions, climate-related risks and opportunities, and how we are using scenario analysis tools like Aqueduct to understand potential climate-related physical risks.

Our [stakeholder engagement](#), [ESG materiality assessment](#), and annual enterprise risk assessment processes help Graphic Packaging stay current with ESG topics that are important to our industry and society. Evolving climate change science shows us that society needs to take more aggressive action to limit global warming this century. In response, Graphic Packaging formally confirmed its intent with the SBTi to develop, validate, and establish near-term science-based emissions reduction goals by the end of 2023. This will align our climate actions with the reductions needed to meet the goals of the Paris Agreement and UN SDG 13.

Progress towards achieving the Vision 2025 nonrenewable energy and climate goals

We evaluate our annual performance against our Vision 2025 ESG goals and adjust our implementation roadmap as needed to keep us on track for achieving our goals.

GHG emissions intensity in 2021 was 0.30 metric tons CO₂e/\$1,000 revenue, representing a 14% reduction relative to the 2016 baseline, even though total scope 1 and 2 operations emissions actually increased by 4%. Reductions in GHG emissions intensity are largely due to revenue growth from expanding less energy-intensive converting operations and from favorable product pricing. In 2021, the Americraft and AR Packaging converting acquisitions increased revenue by 5%, but only increased GHG emissions by 0.7%. The 94% progress towards achieving the 2025 goal is the result of a 21% increase in sales revenue versus the 2016 baseline revenue, which compensates for the observed 4% increase in absolute GHG emissions.

Similarly, the 9% reduction in nonrenewable energy intensity relative to the 2016 baseline is also attributable to growth in our business. Absolute nonrenewable energy use has increased approximately 10% relative to baseline nonrenewable energy use. The 61% progress towards achieving the nonrenewable energy intensity reduction goal is also attributed to the 21% increase in sales revenue which compensates for the increase in nonrenewable energy use.

Progress advancing our Vision 2025 Climate Goals

	2016 baseline	2021 result	Progress toward Vision 2025
Reduce operations GHG emissions intensity by 15% (metric tons CO ₂ e/\$1,000 revenue)	0.35	0.30	On track
Reduce nonrenewable energy intensity by 15% (MWh/\$1,000 revenue) ¹	1.40	1.27	On track

¹ Prior reporting was on an MMBTU/\$1,000 revenue basis. For 2016 and 2021 these nonrenewable intensity values are 4.79 and 4.35 MMBTU/\$1,000 revenue, respectively.



In 2021, Graphic Packaging advanced several key projects that will be instrumental in delivering nonrenewable energy and GHG intensity reduction benefits. Examples are highlighted below:

- **Kalamazoo line (K2):** In 2021 we mechanically completed construction of K2 and began ramping up production during the first half of 2022. K2 adds approximately 500,000 tons per year of CRB production, enabling Graphic Packaging to meet growing customer demand for recycled packaging while also retiring less efficient production lines, like the Battle Creek, Michigan mill. Originally K2 was to be a capacity neutral expansion, however market demand has necessitated keeping K3 and Middletown in production. Updated estimates predict K2 will reduce CRB mill platform GHG intensity per ton paperboard by 6% and nonrenewable energy intensity by 8% and will reduce mills division GHG intensity per ton paperboard by 1% and nonrenewable energy intensity by 3%. However, due to the net capacity add for the project, absolute CRB mill platform and mills division GHG emissions and absolute purchased energy will increase.
- **Mill process control system upgrades:** Began installing advanced automatic process control system energy management modules at our five largest mills to reduce operation variability and improve efficiency of power generation equipment. The work is in progress and is scheduled to be completed by the end of 2023.
- **Renewable power:** Completed the installation of third-party photovoltaic (solar) panels at the Sneek site in the Netherlands. The installation will provide approximately 10% of the site's power needs from renewable electricity.
- **Converting plant improvement programs:** Several converting plants in Europe implemented projects to reduce GHG emissions and/or energy use, such as installing new and/or upgrading existing printers, gluers, UV lamps, air compressors, heating and ventilation systems, and other projects.
- **Bardon fleet improvements:** The Bardon site invested in new delivery trucks and driver training to reduce fuel use and improve fleet mileage per gallon by >15%. The site received Fleet Operators Recognition Scheme (FORS) Gold Standard recognition and was accepted into the UK Driver and Vehicle Standards Agency Earned Recognition Scheme, which puts us amongst the top 1% of operators in the UK. Trucks are leased for three years, allowing us to easily upgrade the fleet for future improvements.
- **Curtain coaters project:** We are approaching the conclusion of our \$115 million curtain coater upgrade project to update five paperboard coaters with innovative, high efficiency curtain coaters. The upgraded coaters use less material, enabling shorter drying times and a material reduction in energy usage. At the end of 2020, we had installed four out of five new state-of-the-art curtain coaters on major paperboard machines in our CRB and CUK mills in Kalamazoo, Michigan, Macon, Georgia, and West Monroe, Louisiana. The final curtain coater, designated for the West Monroe mill, was scheduled for installation in 2021. However, due to the engineering demand to support the K2 project, this project was delayed and is scheduled to be completed in 2025.

In addition, the mills and COE continuously look for opportunities to improve the efficiency of Graphic Packaging operations. Throughout 2021 they conducted energy surveys at the mills and worked to identify a portfolio of energy improvement projects including process control upgrades, turbine generator improvements, and energy efficiency improvement projects. These opportunities will be further developed in 2022 for viability and funding consideration.

302-1 ENERGY CONSUMPTION WITHIN THE ORGANIZATION

Energy is critical to Graphic Packaging's operations, and how the Company sources and uses energy is a significant contributor towards our overall GHG emissions. Today, the Company uses a variety of fuels, including biomass, natural gas, fuel oil, and other fuels. Renewable biomass represents our most important energy source, and we work to maximize our use of biomass energy, reduce nonrenewable energy use, and improve energy efficiency as part of our GHG emissions reduction strategy. COE experts work closely with the mills to pursue energy-related goals and map energy use throughout the mill system. In addition, the COE team monitors and tracks progress monthly toward meeting annual internal improvement targets and leverages best practices across our manufacturing operations.



Graphic Packaging uses a mix of self-generated and purchased energy to run its mills and converting operations. The virgin mills rely upon recovered bark and biomass wastes, as well as purchased biomass materials, to self-generate steam and electricity. Biomass fuels are supplemented with purchased fossil fuels to generate steam and electricity and operate mobile equipment, and other stationary equipment. Over the past three years, renewable fuels represented approximately 70% of the fuel mix consumed in Graphic Packaging operations. The Company seeks opportunities to convert to cleaner burning fuels, and in 2020, phased out coal usage, with no coal consumed in 2021.

2021 Fuel mix



Total nonrenewable fuel consumption by fuel type (MWh)			
	2019	2020	2021
Coal	20,800	10,800	0
Diesel	58,000	59,600	69,100
Fuel oil 1, 2	5,100	5,200	4,000
Gasoline	4,300	4,800	4,700
Kerosene	400	300	300
Liquified petroleum gas	0	0	8,000
Natural gas	6,916,700	7,630,700	7,368,500
Propane	46,200	47,200	45,900
Other (waste oil, ethanol)	26,000	5,000	23,900
Total nonrenewable fuel	7,077,500	7,763,600	7,524,400
Mills nonrenewable fuel	6,828,300	7,521,900	7,237,500
Converting nonrenewable fuel	249,200	241,700	286,900
Percent nonrenewable fuel in total fuel	29%	31%	30%



Total renewable fuel consumption by fuel type (MWh)			
	2019	2020	2021
Bark	5,303,600	4,792,900	5,455,000
Black liquor	11,701,900	12,075,000	11,929,800
Other biomass (e.g., sludges, railroad ties)	600,800	395,500	457,500
Other renewable fuel (e.g., biogas)	0	0	200
Total renewable fuel consumption	17,606,300	17,263,400	17,842,500
Mills renewable fuel	17,606,300	17,263,400	17,842,300
Converting renewable fuel	0	0	200
Percent renewable fuel in total fuel	71%	69%	70%

Graphic Packaging maximizes opportunities to self-generate the steam and power needed to operate the mills using combined heat and power (CHP) cogeneration systems — thermodynamically efficient systems that generate thermal energy (steam) and electricity from one integrated process and fuel source. We also take advantage of waste heat from gas fired generators and other process units to generate steam or preheat various process flows. These initiatives, combined with maximizing use of renewable fuels, enable the mills to supply the energy needed for papermaking while reducing total fuel consumption and associated GHG emissions. In 2021, Graphic Packaging generated 15.7 million MWh of steam (81% from renewable fuel) and 1.9 million MWh of electricity (71% from renewable fuel). Total electricity needed to power Graphic Packaging operations is defined as the sum of the self-generated electricity from the CHP or other electricity generation operations and purchased electricity. In 2021, global operations used a total of 3.5 million MWh of electricity, of which 39% was supplied by renewable sources.

Total consumed energy (defined as total purchased electricity, heating/cooling, and steam, plus total consumed fuels) in 2021 was 27.0 million MWh, with 66% from renewable sources. Energy quantities for 2021 are slightly higher than 2019 and 2020 due to the recent acquisitions, improvements in the energy inventory methodology, and increased energy use during winter storm Uri.

2021 Energy mix





Total energy consumption (MWh)			
Energy type	2019	2020	2021
Purchased nonrenewable electricity	1,559,000	1,468,500	1,592,900
Purchased renewable electricity	0	0	5,300
Purchased district heating (nonrenewable)	0	0	1,400
Purchased district cooling (nonrenewable)	0	0	100
Purchased steam	0	0	0
Total nonrenewable fuels	7,077,500	7,763,600	7,524,400
Total renewable fuels	17,606,300	17,263,400	17,842,500
Total energy	26,242,800	26,495,500	26,966,600
Nonrenewable energy	8,636,500	9,232,100	9,118,800
Renewable energy	17,606,300	17,263,400	17,847,800
Percent renewable energy	67%	65%	66%
Total mills energy	25,331,100	25,586,900	25,923,300
Percent renewable energy	70%	67%	69%
Total converting energy	911,700	908,600	1,043,300
Percent renewable energy	0%	0%	0.5%

302-2 ENERGY CONSUMPTION OUTSIDE OF THE ORGANIZATION

See disclosure [305-3](#).

302-3 ENERGY INTENSITY

Graphic Packaging measures operations nonrenewable energy intensity on a revenue basis at the enterprise level for tracking progress towards achieving the Vision 2025 nonrenewable energy intensity reduction goal. Nonrenewable energy includes purchased nonrenewable power/energy and purchased fuels and has remained relatively flat year over year from 2020 to 2021 (1% decrease), but has increased 10% relative to 2016 baseline nonrenewable energy use. 2021 nonrenewable energy intensity was 1.27 MWh/\$1,000 revenue and was 9% lower than both 2020 and the 2016 baseline intensity values. The observed reduction is attributed to a 21% increase in sales revenue versus the 2016 baseline revenue, which compensates for the observed 10% increase in nonrenewable energy use.



Mill total energy intensity was 7.43 MWh/metric ton salable board with a corresponding nonrenewable energy intensity of 2.32 MWh/metric ton salable board. Nonrenewable energy intensity was slightly lower in 2021 versus 2020 even though total energy intensity increased, reflecting our focus on shifting towards renewable fuel sources for our operations. Converting total energy intensity was 0.32 MWh/metric ton converted board. Graphic Packaging's operations teams continuously work to identify and implement opportunities to reduce energy consumption per unit production and improve the energy efficiency of our operations.

Energy intensity			
	2019	2020	2021
Nonrenewable energy intensity (MWh per \$1,000 revenue)	1.40	1.41	1.28
Mills total energy intensity (MWh per metric ton salable board)	7.10	7.16	7.43
Mills nonrenewable energy intensity (MWh per metric ton salable board)	2.17	2.33	2.32
Converting total energy intensity ¹ (MWh per metric ton converted board)	-	-	0.32

¹ New reporting metric for 2021.

302-4 REDUCTION OF ENERGY CONSUMPTION

See disclosure [103-3](#) starting on p. 87 for a discussion on energy reduction projects.

305-1 DIRECT (SCOPE 1) GHG EMISSIONS

Graphic Packaging calculates the Company's GHG inventory following the Greenhouse Gas Protocol and includes all sites within our operational control, such as our mills and converting facilities, as described in disclosure [102-50](#). This standard provides best practice guidance on how to inventory the GHG emissions directly generated by our manufacturing operations (scope 1) and the indirect GHG emissions (generated by other companies) associated with our use of purchased electricity and district heating/cooling services (scope 2). Together, these two GHG emissions categories represent the operations carbon footprint needed to make our products.

We report GHG CO₂e emissions for gases covered under both the Kyoto Protocol and select refrigerants managed under the Montreal Protocol as listed below:

- Kyoto Protocol gases: Carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF₆), and nitrogen trifluoride (NF₃)
- Montreal Protocol gases: HCFC-22

We sourced emissions factors for scope 1 emissions calculations from the United States Environmental Protection Agency (US EPA) Stationary Emissions Factor database (GHG MRR Final Rule, 2016), the Department for Environment, Food, and Rural Affairs (DEFRA) 2021 GHG Conversion Factors, and 100-year global warming potential factors (GWPs) from the Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report (AR5, 2014). Energy data are collected and aggregated as described in disclosure 102-50 and in our GHG inventory management plan.



The table below presents the different source categories that make up our total scope 1 emissions, including biomass sources. We present the biogenic emissions to provide a holistic view of direct emissions activities and to illustrate progress reducing net CO₂e emissions to the atmosphere. Biogenic emissions are not included in reported GHG emissions totals because the carbon released during the consumption of biomass is recycled as US forests and crops regenerate, causing no net new addition of CO₂ to the atmosphere. In 2021, most of Graphic Packaging's total direct emissions were from carbon neutral biogenic sources (81%) demonstrating the tremendous progress Graphic Packaging has made transitioning its operations to carbon neutral operations through maximizing the use of renewable biomass fuels in the virgin mill operations.

2021 Direct GHG emissions by source type ¹		
	GHG emissions (metric tons CO ₂ e)	% direct emissions
Nonrenewable fuel	1,372,700	19%
Refrigerant/fugitive emissions	2,900	<0.1%
Renewable biomass fuel (biogenic emissions) ¹	5,735,200	81%

¹ Biogenic emissions included for completeness. They are excluded from total emissions accounting for reporting emissions to the atmosphere per the GHG Protocol accounting methodology.

Total reportable scope 1 GHG emissions for 2021 were 1.4 million metric tons CO₂e, with the majority of Graphic Packaging's scope 1 emissions (97%) occurring in the US and 96% of GHG emissions generated by the mills division. Total scope 1 emissions were down slightly in 2021 (2%) relative to 2020, largely due to reduced natural gas usage in the mills division. The slight increase in converting divisions GHG scope 1 emissions is due to improvements in fuel use accounting and including the Americraft and AR Packaging sites in the inventory for the months in which they were part of Graphic Packaging.

Total reportable direct (scope 1) GHG emissions ¹ (metric tons CO ₂ e)			
	2019	2020	2021
Total scope 1 emissions ¹	1,318,700	1,441,500	1,405,600
Mills scope 1 emissions	1,272,000	1,395,800	1,349,300
Converting scope 1 emissions	46,700	45,700	56,300

¹ Excludes biogenic emissions per the GHG Protocol accounting methodology.

305-2 ENERGY INDIRECT (SCOPE 2) GHG EMISSIONS

Scope 2 emissions reflect purchased energy needed to supply our global manufacturing operations with electricity and district heating or cooling services. We calculated these emissions according to the Greenhouse Gas Protocol Scope 2 Guidance, following both market-based and location-based methods, and report market-based emissions when calculating total operations emissions. Location-based emissions are calculated using the US eGRID, European Residual Mix, Environment Canada, and International Energy Agency (IEA) emissions factors.



Market-based emissions are calculated using site-specific electricity emissions factors to determine CO₂e emissions. Where site-specific emissions factors are unavailable, we use US Residual Mix factors (Green-e® Energy Emissions Rates) CO₂e coefficients from eGRID subregion energy mixes for US locations and the above discussed sources for international locations. Market-based emissions show a slight increase in 2021 relative to 2020, consistent with increased use in purchased electricity. Of interest is the slight decreasing trend in location-based emissions estimates, which we will be working to better understand.

Total indirect energy (scope 2) GHG emissions (metric tons CO ₂ e)			
	2019	2020	2021
Total scope 2 emissions (market-based)	824,200	680,400	735,000
Mills scope 2 emissions	505,300	391,200	435,000
Converting scope 2 emissions	318,900	289,200	300,000
Total scope 2 emissions (location-based)	757,500	652,200	645,300
Mills scope 2 emissions	445,300	364,700	347,100
Converting scope 2 emissions	312,200	287,500	298,200

305-3 OTHER INDIRECT (SCOPE 3) GHG EMISSIONS

Our impact on GHG emissions extends beyond the direct emissions from our manufacturing operations and use of purchased energy. Our activities are connected to various sources of indirect (scope 3) GHG emissions that occur along our value chain, such as the GHG emissions generated to produce the goods we purchase and how our customers use our products. These scope 3 emissions are directly generated and managed by others and are not owned or controlled by Graphic Packaging. We measure our scope 3 GHG inventory following the Greenhouse Gas Protocol's Corporate Value Chain (scope 3) Accounting and Reporting Standard.

In 2021, we refined our analysis approach for scope 3 emissions by updating our calculation methodology and expanding the scope and detail of our inventory measurements. Category 3 emissions calculations were updated to include "well to tank" emissions (using DEFRA factors) in addition to previously reported transmission related emissions (using IEA and US EPA eGRID factors). This resulted in a significant increase in reported category 3 energy related emissions. Emissions previously reported under downstream categories 9 and 13 were reclassified as upstream category 4 and 8 emissions respectively, and 2019 and 2020 values are restated accordingly. We also began reporting emissions for categories 10, 11, and 15. Emissions for these categories are calculated based on scope 1 and 2 measured emissions from similar Graphic Packaging operations. Additional information on our calculation approach is presented in the [2022 CDP climate change response](#).

While reported 2021 scope 3 emissions are approximately double 2020 reported emissions, this is not due to changes in activity, but rather due to improvements in measurement methodologies and data availability. Graphic Packaging continues to refine our measurement approach as we work towards developing a more robust GHG inventory in support of developing SBTs. Estimated scope 3 value chain emissions from purchases of goods and services to manufacture products and product end of life treatment represent the largest contributions (60%) to value chain emissions.

**Scope 3 indirect emissions (million metric tons CO₂e) by category¹**

	2019 emissions	2020 emissions	2021 emissions	2021 % of total
Total scope 3 emissions	3.50	3.58	6.95	100%
Category 1: Purchased goods and services	1.99	2.14	2.16	31.0%
Category 2: Capital goods	0.13	0.26	0.45	6.5%
Category 3: Fuel and energy-related activities (not in scope 1 or 2)	0.04	0.03	0.49	7.1%
Category 4: Upstream transportation and distribution ²	0.52	0.30	0.31	4.5%
Category 5: Waste generated in operations	0.04	0.03	0.71	10.2%
Category 6: Business travel	0.02	0.01	<0.01	<0.1%
Category 7: Employee commuting	<0.01	<0.01	0.03	0.4%
Category 8: Upstream leased assets ³	0.77	0.77	0.59	8.5%
Category 10: Processing of sold products ⁴	-	-	0.15	2.1%
Category 11: Use of sold products ⁴	-	-	0.03	0.5%
Category 12: End-of-life treatment of sold products	0.00	0.04	2.03	29.1%
Category 15: Investments ⁴	-	-	0.01	0.1%

¹ Scope 3 category 9, 13, and 14 emissions do not apply to Graphic Packaging.

² Category 9 emissions were reclassified as category 4 emissions starting in 2021 due to methodology refinement.

³ Category 13 emissions were reclassified as category 8 emissions starting in 2021 due to methodology refinement.

⁴ New reporting category for 2021 starting in 2021 due to methodology refinement.

Total GHG emissions: operations and value chain

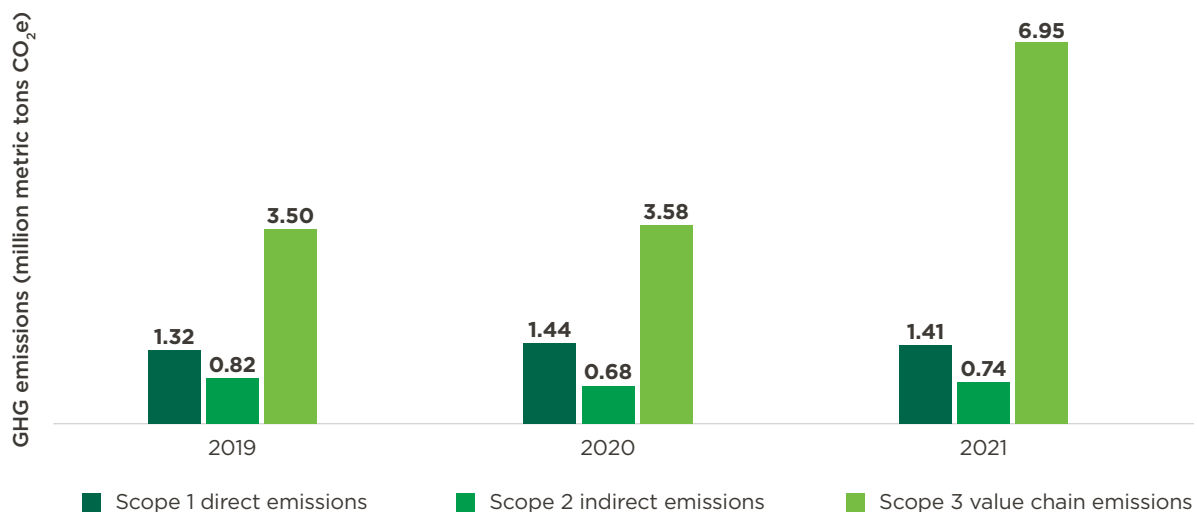
Graphic Packaging defines operations GHG emissions as the sum of scope 1 direct emissions (excluding biogenic emissions) and scope 2 indirect purchased energy emissions. Currently approximately two thirds of our operations emissions are from burning fuels in our operations, with the remaining one third of emissions due to purchased energy use in our operations. Increases in 2021 total operations emissions versus 2020 are primarily due to including emissions from 2021 acquisitions and improved scope 1 emissions accounting for converting operations.



Total operations (scope 1 and scope 2) GHG emissions (metric tons CO ₂ e)			
	2019	2020	2021
Total operations emissions	2,142,900	2,121,900	2,140,600
Total scope 1 emissions	1,318,700	1,441,500	1,405,600
Total scope 2 emissions (market-based)	824,200	680,400	735,000
Mills operations emissions	1,777,300	1,787,000	1,784,300
Converting operations emissions	365,600	334,900	356,300

Graphic Packaging defines value chain GHG emissions as scope 3 indirect emissions and total GHG emissions impact from Graphic Packaging activities as the sum of operations and value chain emissions. In 2021, operations emissions contributed 24% and value chain emissions contributed 76% of total emissions connected to Graphic Packaging activities.

GHG emissions by scope



305-4 GHG EMISSIONS INTENSITY

Graphic Packaging measures operations GHG emissions intensity on a revenue basis at the enterprise level and for tracking progress towards achieving the Vision 2025 GHG emissions intensity reduction goal. Year-over-year variations in enterprise GHG emissions intensity show an 8% reduction in intensity from 2020 to 2021 and a 14% reduction in intensity relative to the 2016 goal baseline (94% progress). Conversely, total scope 1 and 2 operations emissions remained relatively flat year over year from 2020 to 2021 (1% increase) and have actually increased by 4% relative to 2016 operations emissions. Reductions in GHG emissions intensity are largely due to revenue growth from expanding less energy-intensive converting operations and from favorable product pricing. In 2021, the Americraft and AR Packaging converting acquisitions increased revenue by 5%, but only increased GHG emissions by 0.7%.

Mill GHG emissions intensity is measured on a per ton saleable board basis and, for the converting divisions, on a per ton converted board basis. In 2021 mill GHG intensity was 0.51 metric tons CO₂e/metric ton saleable board, up 2% as compared to 2020, and converting GHG intensity was 0.11 metric tons CO₂e/metric ton converted board.

**GHG operations emissions intensity**

	2019	2020	2021
Emissions intensity (metric tons CO ₂ e/\$1,000 revenue)	0.35	0.32	0.30
Mills emissions intensity (metric ton CO ₂ e/metric ton saleable board)	0.50	0.50	0.51
Converting emissions intensity ¹ (metric ton CO ₂ e/metric ton converted board)	-	-	0.11

¹ New reporting metric for 2021.

305-5 REDUCTION OF GHG EMISSIONS

See disclosure [103-3](#) starting on p. 87 for a discussion on GHG reduction projects.

305-6 EMISSIONS OF OZONE-DEPLETING SUBSTANCES

Graphic Packaging uses immaterial quantities of HCFC-22 for HVAC and cooling applications. In 2021, 0.28 metric tons of HCFC-22 were released to the atmosphere.

305-7 NITROGEN OXIDES (NO_x), SULFUR OXIDES (SO_x), AND OTHER SIGNIFICANT AIR EMISSIONS

Non GHG air emissions at our facilities are typically associated with combustion units at the mills, where scrubbers, electrostatic precipitators, and other systems are used to reduce air emissions. Whenever the mills invest in power generation equipment, the design begins with assessing best available technologies for both improved energy generation efficiency and for emissions treatment.

2021 combined NO_x and SO_x emissions were slightly lower relative to 2020. Graphic Packaging has additionally included volatile organic compound (VOC) and particulate matter (PM10) emissions reporting in 2021. Current reported data are for the mills division only, and we are working on including the converting divisions in the annual ESG reporting process. Past emissions reduction programs in the converting divisions have focused on eliminating the use of isopropyl alcohol (IPA) and on switching from solvent-based to water-based inks in printing operations, resulting in reduced VOCs emissions.

Mills division air emissions (metric tons)

Emissions type	2019	2020	2021
NO _x	5,400	5,200	5,100
SO _x	1,400	1,800	1,300
Volatile organic compounds (VOC) ¹	-	-	4,600
Particulate matter PM10 ¹	-	-	1,600

¹ New reporting metric for 2021.



Water Stewardship



GRI 303 Water and effluents

103-1 EXPLANATION OF THE MATERIAL TOPIC AND ITS BOUNDARY

By 2050, at least one in four people is likely to live in a region affected by chronic or recurring shortages of freshwater ([UN Water](#)). Having access to sufficient quantities of clean, fresh water is vital for producing paperboard in our mills, supporting our global operations for our value chain and the communities near our mills and converting plants. Because of this, Graphic Packaging focuses on using water responsibly and understanding water needs in the watersheds where we operate. Both water use and quality are important components of how we manage water resources. We work to reduce the amount of water we withdraw and responsibly return the water we borrow back to the environment.

103-2 THE MANAGEMENT APPROACH AND ITS COMPONENTS

Graphic Packaging recognizes that the communities near our mills expect us to responsibly steward shared water resources and use water wisely, which is why we set the following Vision 2025 water goal:

- **Reduce mill water effluent intensity by 15%.**

The goal is focused on our mills division, our primary water user, which accounts for greater than 99% of our total withdrawn and discharged/effluent water volumes. We measure progress achieving our water intensity goal (measured on a per ton salable paperboard basis) versus a 2016 performance baseline. Progress achieving our water intensity goal is interconnected with progressing our energy and GHG emissions intensity reduction goals — the less water we use, the less energy is needed to heat the water for process use, resulting in fewer GHG emissions.

Accomplishing our water goal requires expertise, innovative thinking and teamwork across our Company. We rely on the skills of the following subject matter experts to work with our mills to action our water intensity goal.

- **Mills COE** — a team of experts who lead water and energy audits in the mills and develop and implement technology solutions to increase water recycling/reuse within the mill, improve water efficiency in key manufacturing and steam generation operating units, and improve water balance accounting methodologies.
- **Continuous improvement team** — operations experts who train and work with mill continuous improvement resources to identify opportunities to reduce virgin water use and water recovery efficiency.

Manufacturing pulp and paper requires a substantial amount of water. According to the [University of Minnesota](#), the US benchmark for water use within pulp and paper mills is approximately 17,000 gallons of water per ton of paper produced. The water is used for “cooking” wood chips to make pulp in virgin mills, repulping recovered fiber in recycle mills, transporting wood fibers and other paper constituents in the paper machines, heat transfer and equipment cooling, material transfer through mill process equipment, steam generation, washing wood pulp and process equipment, and for potable uses. By contrast, converting plant facilities use a relatively small amount of water for equipment washing/cleaning, cooling, and potable uses.



Graphic Packaging mill facilities monitor their water use and work to improve water management practices, paying attention to water availability in regions where we operate. We then determine the need for site-specific actions to optimize water use and/or improve water discharge quality. Individual mills take action to reduce the amount of new water they withdraw from the environment by implementing recycle loops at different manufacturing steps to enable reusing water multiple times in the paper-making process. Example water recycle loops in place at our mills include:

- **Pulp washing:** Following pulp washing, wash water becomes weak black liquor and is heated to concentrate the black liquor for energy recovery. The water evaporated during this step is recovered and reused to wash new pulp batches.
- **Paperboard sheet formation:** Water used to transport and distribute wood fibers in the headbox and table is drained/extracted from the formed paperboard sheet and recycled back to the Fourdrinier headbox to transfer new fiber to the sheeting table.
- **Steam generation:** Spent steam captured as steam condensate in the dryers, black liquor evaporators, turbine generators and other process units are recycled back to the boilers to generate new steam. Recovered steam condensate returned to the boilers typically provides 65-75% of boiler feed water with the remaining make-up water supplied by fresh influent water.
- **Equipment cooling:** Water used to cool process equipment and power turbines is managed in closed loop systems using cooling towers to remove excess heat and recirculate the cooled water back for additional equipment cooling.

The mills work with the COE and continuous improvement experts to improve individual mill water efficiency and explore options to upgrade mill process equipment to increase recycled water volumes and/or reduce water use. The COE also works with third-party experts to complete water and energy audits at the mills to identify new opportunities to improve overall water use and reduce costs. Monthly benchmarking calls discuss audit results, progress implementing findings to reduce use and progress towards meeting annual mill improvement targets. The calls address both energy and water improvement opportunities given the water/energy synergy connected with water heating and steam generation.

In addition to managing the amount of water used, the mills are also focused on managing the quality of the water discharged to the environment. Our approach to managing water quality starts with complying with local laws and regulations and adhering to discharge permit requirements governing specific effluent water quality criteria set to protect local water resources. Next, we focus on our efforts on protection, working to prevent future impacts to water quality by maintaining our facilities to protect against leaks or releases to the environment. Our manufacturing facilities identify potential locations within the facility where spills or leaks of materials may cause impacts to water resources, develop preventive measures, and have spill response plans that describe appropriate actions to mitigate releases and prevent materials from reaching near-by water bodies.

Governance

Graphic Packaging's water stewardship strategy is guided by the Company's values, [Code](#), commitment to the UNGC, and Worldwide Health, Safety, and Environment policy. Graphic Packaging practices a continuous improvement philosophy that drives our efforts to reduce natural resource use, manage compliance across our global operations, reduce costs and increase efficiencies. The CSO works with the EVP mills on establishing and actioning our water strategy. The EVP mills are our executive sponsor for our water stewardship program and are accountable for assessing water-related opportunities and risks, setting water strategy, chartering programs to advance water initiatives, monitoring external stakeholder concerns and providing regular updates to the executive leadership team. The EVP mills work with the COE water experts and the mills leadership teams to identify reduction opportunities, establish metrics, and track performance to achieve annual targets as well as the Vision 2025 water goal. Ultimately, mill operations line leadership, with assistance from the COE, is accountable for successful goal program execution, and delivering water use reductions. Read more about our ESG governance process in disclosures [102-18](#) and [102-19](#).



The ESG data manager works closely with the operations teams and the COE to ensure water data and metrics are timely, accurate, and effective for communicating our environmental performance and impact. The Graphic Packaging water inventory management plan provides direction and guidance for collecting, maintaining, verifying, and reporting water data. Data analysis processes use a third-party analytics platform to aggregate and calculate cumulative annual environmental metrics, thereby reducing opportunities for manual errors.

103-3 EVALUATION OF THE MANAGEMENT APPROACH

Graphic Packaging evaluates the effectiveness of our water stewardship approach by measuring progress towards achieving the Vision 2025 water intensity goal. In addition, we contracted a third-party assurance partner to provide limited level of assurance of our 2021 water data based on current best practices and in accordance with ISAE 3000 and ISAE 3410. A copy of the assurance letter can be accessed on our [website](#).

We also independently assess our water stewardship approach and performance through third-party evaluation using the CDP water security response, and in 2021 received a “B” score on our response. Refer to our [2022 CDP water security response](#) for more information on our approach to managing water. 2022 will be the last year Graphic Packaging will be responding to CDP water. Moving forward, Graphic Packaging will report on our approach to water stewardship performance through our annual ESG report.

Progress achieving our Vision 2025 water goal

We evaluate annual performance against our Vision 2025 ESG goals and adjust our implementation roadmap periodically to ensure we remain on track to achieve our commitments. These adjustments are then cascaded to the organization through the annual performance objective process to set new annual targets in support of achieving our Vision 2025 water goal and other ESG goals.

In 2021, mill water effluent intensity on a per unit production basis increased slightly relative to 2020, and represents a 5% reduction relative to the 2016 baseline value (~34% progress towards achieving the 2025 goal).

Progress advancing our Vision 2025 Water Stewardship Goal

	2016 baseline	2021 result	Progress toward Vision 2025
Reduce mill effluent intensity by 15% (megaliter/metric ton saleable board)	0.041	0.039	Progressing

Progress to date towards achieving the water effluent intensity goal has largely been due to shutting down paper machine 1 (PM1) at West Monroe (2019), selling the White Pigeon mill (2019), the closure of the RFP facility at the Augusta site (2019), increasing internal mill water reuse volumes by optimizing dissolved air flotation (DAF) water purification capabilities at several mills, and general process improvements.

In 2021, resource availability was limited to advance additional water programs due to ongoing pandemic challenges and the Company's focus to complete construction of the new Kalamazoo, Michigan CRB machine (K2) by year end. Production on K2 started ramping up during the first half of 2022 and will be at full production capacity at year end. K2 will enable Graphic Packaging to meet growing customer demand for recycled packaging while also retiring less efficient production lines, like the Battle Creek, Kalamazoo, Michigan mill. Originally K2 was to be a capacity neutral expansion, however market demand has necessitated keeping K3 and the Middletown, Ohio mill in production. Updated estimates predict K2 will reduce CRB mills water effluent intensity by 5% and total mill water effluent intensity by 8%. However, due to the net capacity add for the project, absolute water use will increase.

The Kalamazoo mill also installed a new strainer for the wastewater treatment plant enabling the mill to recycle more water within the plant. The installation began in 2020, and was completed and activated in 2021.



303-1 INTERACTIONS WITH WATER AS A SHARED RESOURCE

Most of the water we withdraw for our paperboard mills is from nearby surface waterbodies, with the balance of our needs sourced from on-site groundwater wells, purchased water, treated municipal wastewater, or water entrained in wood fiber raw materials. Our converting plants predominantly rely upon purchased, potable water for their operations. Currently, all the water we source is from freshwater sources, with the majority of our water use occurring at our mills, where it is treated before discharge. We typically discharge withdrawn water to nearby surface water bodies, either directly at our sites or through local publicly owned treatment works or other third parties. Consumptive water uses include water contained in products, evaporative losses during paper drying and in cooling towers, potable water use or where the water discharge point is different than the source water body.

We assess potential water-related impacts by monitoring water withdrawal and discharge volumes and effluent water quality. We also screen our locations for potential watershed baseline stress to understand potential climate-related impacts on water availability. We use this information to better understand local watershed conditions, including surface water and groundwater use risks, and to identify new opportunities to improve performance and recycling rates at our manufacturing operations and/or the need to develop site-specific site water use reduction goals. Current efforts are focused at our mill locations, which account for most of our water use and represent the largest potential water risk to our operations. Read more about water use in disclosures [303-3](#), [303-4](#), and [303-5](#).

The following examples illustrate how we work with stakeholders to steward water as a shared resource.

West Monroe, Louisiana mill

A large part of northeast Louisiana depends on the Sparta Aquifer for its commercial, industrial and drinking water. More than 10 years ago, West Monroe city leaders noticed the aquifer was in serious decline and began to see signs of saltwater intrusion. The city became concerned about the long-term viability of the aquifer to supply water, as water was being withdrawn from the aquifer more quickly than it could replenish itself, resulting in a loss of approximately 18 million gallons per day. At the time, the Graphic Packaging West Monroe mill was one of the largest Sparta Aquifer water users, pumping approximately 10 million gallons-per-day from the aquifer.

The City of West Monroe saw an opportunity to partner with Graphic Packaging to reduce the strain on the aquifer by supplying the mill with high-quality treated wastewater instead of discharging the water to the Ouachita River. In 2011, the City constructed what became known as the Sparta Reuse Facility, a 10 million gallons per day wastewater reclamation facility capable of producing drinking quality water that meets all EPA primary and secondary drinking water standards. After testing the process for a full year, the city began sending treated water to the paper mill to use in place of pumped groundwater.

The Reuse Facility continues to treat and deliver all available wastewater to Graphic Packaging, but is only operating at 40-50% capacity with the limiting factor being the incoming connections. Furthermore, current operations of the Reuse Facility require Graphic Packaging to treat the water upon receipt as the incoming water does not meet drinking water specifications. Despite the considerable cost to treat the West Monroe Reuse Facility water, Graphic Packaging continues to recycle the water and reduce withdrawal from the Sparta Aquifer. In 2021, the site received on average 4.8 million gallons per day of treated water from the city, offsetting groundwater withdrawals by approximately 35%. The Sparta Reuse Project exemplifies how stakeholders can creatively work together to meet water use needs while successfully conserving limited water resources.

Augusta, Georgia mill

The Savannah Harbor was first listed as being impaired for dissolved oxygen (DO) on the 2002 303d list, and in 2006 the US EPA issued a TMDL (total maximum daily loads) for DO. The Georgia Environmental Protection Division (GA EPD) has subsequently placed the harbor in Category 5R, designating it as impaired, but with an alternative restoration plan in place that is predicted to restore water quality in the harbor without a TMDL being completed. The EPD followed a multi-stakeholder process (including mill representatives) to model river and harbor DO concentrations, the impact of upstream effluent discharges on DO, and needed reductions in upstream discharges to restore harbor DO concentrations to meet the applicable water quality standard for the harbor.



The mill worked cooperatively with the EPD in developing a revised facility NPDES (national pollutant discharge elimination system) discharge permit and implementation schedule to reduce mill effluent biological oxygen demand (BOD) and suspended solids discharges. The mill is making capital investments that support reducing effluent discharges and increasing oxygen levels in the Savannah River basin. The \$54 million multi-year capital project includes changes to flow patterns and retention times in the mill water treatment ponds, installing additional aerators and mixers in the ponds, and upgrading the sludge processing system. Equipment installation began in 2018 and is expected to continue through 2025. The new discharge limits will first take effect in October 2024.

303-2 MANAGEMENT OF WATER DISCHARGE-RELATED IMPACTS

US and Canada regulations and local discharge permits strictly govern discharged effluent water quality at our mills and set discharge parameters through the permitting process. The controls imposed by these government-issued permits contain monitored parameters and limits that are specific to each mill location, based on the profile of the receiving water body.

Monitored parameters may include the amounts of suspended solids, chemical oxygen demand, biological oxygen demand, phosphorous, nitrogen and adsorbable organic halogen compounds (AOX), as well as dissolved oxygen, water temperature and pH. Monitoring and reporting may be conducted daily, monthly or annually depending on sites' operations and environmental permits. During 2021, total reported process water discharges to surface water from the four virgin mills included 260 metric tons ammonia nitrogen, 130 metric tons AOX, and 3,770 metric tons biological oxygen demand. Discharges are within allowable permit limits and meet local water quality protection needs. Effluent water from the CRB mills is discharged to local municipal wastewater treatment facilities, where it is treated prior to discharge to nearby surface water systems. There is low environmental risk associated with mill effluent discharges.

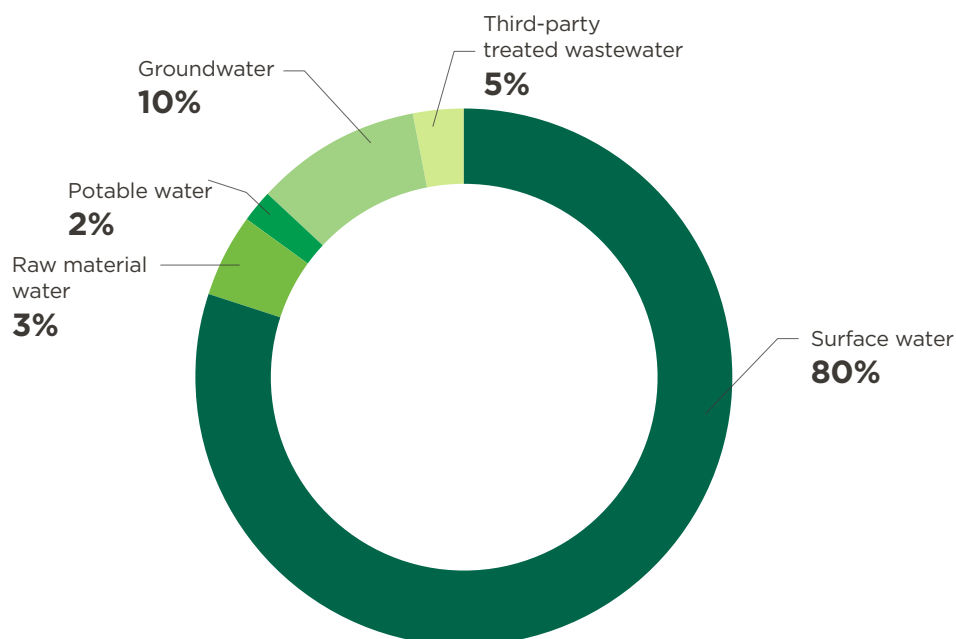
We evaluate the mills' permit compliance by tracking deviations from regulatory requirements and requiring investigation and improvement actions, as applicable. We also track and investigate any incidents that result in a release to the environment, and where needed, make improvements to guard against future recurrences. In 2021, Graphic Packaging experienced no significant spills or incidents of non-compliance associated with water quality permits, standards and regulations. Read more about our environmental compliance approach and spills reporting in disclosure [307](#).

303-3 WATER WITHDRAWAL

Graphic Packaging practices responsible water use across our operations and evaluates opportunities to reduce, reuse, or recycle water as part of our continuous improvement approach. We source the water we use from several inputs, including surface water, groundwater, purchased potable water and treated municipal wastewater. We are also able to extract and use the water entrained in the wood chips during the pulping process step.

In 2021, 100% of water withdrawals were from freshwater sources ($\leq 1,000$ mg/L total dissolved solids), with 99.3% being used in our mills for paperboard production and 0.7% in converting operations. The breakdown by source for 2021 was 80% surface water, 10% groundwater, 2% potable water, 5% treated wastewater and 3% from raw materials (wood fiber and recycled paper fiber).

Total 2021 water withdrawals and withdrawal intensity on a per ton paperboard basis were relatively flat when compared to 2020 and are approximately 6% lower than 2019 values. In general, influent reductions are due to facility closures/changes and improved DAF treatment capabilities to increase reuse water volumes and reduce pressure on influent withdrawals. We continue to work with our operating sites to improve our water use measurements and refine our site water balances to provide a complete view of mill water use, including water recycled, and reused in the mills to reduce withdrawn quantities.

**Water use by source****Total water withdrawal (megaliters)**

Source	2019	2020	2021
Surface water	132,000	125,000	120,000
Groundwater	16,000	15,000	15,000
Third-party water potable water	5,000	3,000	3,000
Third-party treated wastewater	5,000	6,000	7,000
Raw material water	4,000	4,000	5,000
Total water withdrawals	162,000	153,000	150,000
US withdrawals	162,000	152,000	149,000
Outside-the-US withdrawals	<500	1,000	1,000
Mill water withdrawal	161,000	152,000	149,000
Converting plant water withdrawal	1,000	1,000	1,000
Mill water withdrawal intensity (megaliters per metric ton saleable board)	0.045	0.043	0.043
Mill water withdrawal intensity (1,000 gal per saleable US ton board)	10.9	10.2	10.2



Water stress

While water is relatively abundant in most of Graphic Packaging's production locations, water stress may still impact operations locally and through the Company's wider supply chains. We use screening models to help us understand the potential for local baseline water stress conditions and potential impacts on our operating facilities. In 2021, Graphic Packaging updated the baseline stress screening analysis using the World Resources Institute (WRI) Aqueduct (version 3.0) screening tool. The tool identified 19 converting plants located in watersheds with either high or extremely high predicted baseline stress levels. These facilities account for approximately 0.2% of Graphic Packaging's total water withdrawals and 1% of total consumptive water use. Compared to the 2020 assessment, there was no change in predicted watershed baseline stress conditions for the 14 Graphic Packaging locations. An additional five identified sites in 2021 were due to newly acquired AR Packaging locations.

No mills are currently located in watersheds with either high or extremely high predicted baseline stress levels. The risk of loss of influent water is extremely low since most of the influent water supply is surface water from tributaries with ample water flow to meet local water needs. In the case of the West Monroe facility, the site has partnered with the city to use treated, reclaimed water from the city to supplement groundwater, and surface water influent sources. This was done proactively in anticipation of potential future groundwater stress conditions. Read more in disclosure [303-1](#).

The results of the baseline water stress screening indicate that a minor percentage of total consumptive water use may occur in water stressed areas. However, each individual watershed in which Graphic Packaging operates has its own local context for water availability and the use needs of its stakeholders. As Graphic Packaging evolves our water stewardship program, we will work with facilities in predicted stressed watersheds to better understand individual facility risk and develop contingency plans as warranted. At this time there is no indication that the potable water suppliers to converting plants in predicted stressed watersheds are at risk.

Water withdrawal from areas with predicted water stress ¹ (megaliters)			
Source	2019	2020	2021
Surface water	0	0	0
Groundwater	0	0	0
Third-party water potable water	340	280	300
Third-party treated wastewater	0	0	0
Total water withdrawal	340	280	300
US withdrawals	310	250	260
Outside-the-US withdrawals	30	30	40
Mill water withdrawal	0%	0%	0%
Converting plant water withdrawal	100%	100%	100%
Stressed basin withdrawals as percent of total water withdrawals ²	0.21%	0.18%	0.20%

¹ The World Resources Institute (WRI) Aqueduct (version 3.0) screening tool was used to assess areas with predicted water stress conditions.

² Excluding raw material water.



303-4 WATER DISCHARGE

Graphic Packaging mills typically discharge withdrawn water to nearby surface water bodies, either directly after treatment in our facilities or through local publicly owned treatment works or other third parties. In some cases, cooling water and other non-contact water are safely discharged without treatment. Our converting plants typically discharge their water through local publicly owned treatment works or other third parties, which may also ultimately reach surface water systems. At this time, we have not traced the local municipal discharge destinations for facilities receiving converting plant discharged water and report these destinations as third-party destinations.

The below table summarizes water discharge information for 2019 to 2021. Discharged water is a combination of both discharged process wastewater and non-contact cooling water and does not include water contained in products. In 2021, 100% of mill water discharges (99.6% of total discharged water) were ultimately to fresh, surface water systems.

Total 2021 water effluent discharges and discharge intensity on a per ton paperboard basis were relatively flat when compared to 2020 and are approximately 5% lower than 2016 baseline values, or an approximate 34% progress towards achieving the Vision 2025 water stewardship goal. In general, effluent reductions are due to shutting down PM1 at West Monroe (2019), selling the White Pigeon mill (2019), the RFP facility closure at the Augusta site (2019) and increasing internal mill water reuse volumes by optimizing DAF water purification capabilities at several mills to increase reuse water volumes and reduce pressure on influent withdrawals.

Total water discharges (megaliters)			
Discharge destination	2019	2020	2021
Surface water	152,500	135,000	135,000
Groundwater	0	0	0
Third-party ¹	500	400	1,000
Total water discharges	153,000	135,400	136,000
US water discharges	152,600	135,000	135,500
Outside the US water discharges	400	400	500
Mill water discharge	152,500	135,000	135,400
Converting plant water discharge	500	400	600
Discharges in water stress ² areas	80	90	130
Mill water effluent intensity (megaliters per metric ton saleable board)	0.043	0.038	0.039
Mill water effluent intensity (1,000 gal per saleable ton board)	10.3	9.0	9.3

¹ Represents discharges from converting plants to local POTWs (publicly owned treatment works). Mill water discharged to POTWs was verified to ultimately be discharged to surface water systems.

² Learn more about our water management in water stressed areas in disclosure [303-3](#).



303-5 WATER CONSUMPTION

WRI defines water consumption as the portion of water that is not returned to the original water source after being withdrawn. Consumptive water uses include water/moisture content contained in finished products, evaporative losses during paper drying and in cooling towers, potable water use or where the water discharge point is different than the source waterbody (e.g., discharging groundwater to surface water or potable water to wastewater). Paperboard product water losses were estimated using an average paperboard moisture content value (6%), and evaporation losses were calculated using a mass balance approach.

Graphic Packaging calculates both volume loss consumption (water in less water out equals consumption) and use/source change consumption (where use prevents water from being discharged to original influent source). Total consumption in practice would be defined as the sum of these two components, which represents the change in total amount of water available in the watershed when considering changes in available water quantity by water source. Doing so requires a robust water balance that accounts for all water flows entering and leaving the mills to prevent double counting and overestimating consumptive losses.

During the period 2019 to 2021, water use/source change consumption remained relatively flat. However, we see an increase in volume loss consumption from 2019 to 2020. The mills team is investigating the reason for the change and believe it is due to limitations in measuring influent water volumes where influent flows are calculated based on pump runtime versus using metered values. The team is working to improve water measurement capabilities refine site water balances to provide a more complete view of mill water use, discharge, and consumption and address this gap in the mill water management program.

As discussed in disclosure [303-3](#), no mills are currently located in watersheds with either high or extremely high predicted baseline stress levels, and stakeholders in these watersheds have access to enough water to meet their needs.

Water consumption (megaliters)			
	2019	2020	2021
Mill water consumption	26,200	32,200	27,300
Product loss	200	200	200
Calculated evaporative loss	5,000	13,000	8,900
Source change ¹	21,000	19,000	18,200
Converting plant water consumption	700	700	800
Source change ¹	700	700	800
Total water consumption	26,900	32,900	28,100
Volume loss consumption	5,200	13,200	9,100
Source change ¹ consumption	21,700	19,700	19,000
Consumed water in water stressed ² areas	340	280	300
% Consumed water in water stressed ² areas	1.3%	0.9%	1.0%

¹ Source change consumption defined by water being discharged to a different destination than the original water source (e.g., groundwater discharged to surface water following use or potable water use and discharge to a non-potable destination).

² Learn more about our water management in water stressed areas in disclosure [303-3](#).



Waste and Recycling



GRI 306 Waste

103-1 EXPLANATION OF THE MATERIAL TOPIC AND ITS BOUNDARY

Graphic Packaging transforms raw materials and natural resources into the essential fiber-based packaging products needed by the beverage, consumer goods, and other market sectors. These packaging solutions are fundamental in helping our customers transition to using recyclable packaging to meet their sustainability goals and reduce consumer packaging waste. Customers are increasingly looking to reduce their use of virgin plastic in favor of packaging solutions that are made from renewable materials, are recyclable, and in some cases compostable. But it isn't enough to just deliver high-quality, recyclable packaging solutions. Graphic Packaging's stakeholders also expect us to use natural resources responsibly and minimize waste generation in our paperboard and converting manufacturing facilities — expectations consistent with circular economy principles, UN SDG 12, and the broader global sustainable growth agenda.

103-2 THE MANAGEMENT APPROACH AND ITS COMPONENTS

Graphic Packaging aligns its waste minimization and management approach with the circular economy principles promoted by the Ellen MacArthur Foundation. A circular economy approach closes the loop on current linear take-make-waste business models by stopping waste from being produced in the first place. It is underpinned by a transition to using renewable materials and renewable energy with a focus on regenerating nature, effectively decoupling economic activity from the consumption of finite natural resources. Circular business models also make business sense. Less waste means lower operating and compliance costs for companies and their value chain partners.

Graphic Packaging follows the classic waste management hierarchy: reduce, reuse, recycle. Our teams first work to eliminate/reduce waste generation through improved product design, manufacturing process design, plant operations and maintenance, and material recovery. Examples of where we have “designed out” the waste, include:

- Virgin mills maximize tree material usage by recovering bark, branches, and black liquor biomass to burn for fuel, recovering turpentine and tall oil/soap by-products for sale, and optimizing paperboard production to maximize tree fiber yields to make paper. Each of these actions reduces the quantity of residual waste material that must be managed in addition to delivering cost and revenue benefits.
- Virgin mill chemical pulping process units recover and regenerate the quicklime used in the wood chip pulping process. On average, Graphic Packaging mills recover approximately 94% of the quick lime for reuse in pulping, minimizing the amount of new lime that needs to be purchased.
- Upgrading mills with curtain coaters reduces material use and waste during the coating step and reduces defects in finished board, creating less non-salable product waste in addition to improving finished paperboard quality.
- Product designers optimize carton cutting layouts, matching die-cutting patterns to paperboard roll widths to minimize scrap waste generated during converting operations.
- Packaging products are designed to be recycled in most existing recycled paper mills that accept pre- and post-consumer paper materials — keeping valuable tree fibers in circulation and out of the waste stream.
- Reducing customer waste by shipping products in reusable or recyclable packaging, such as corrugated boxes, wooden pallets, and wooden crates.



Graphic Packaging teams next seek opportunities to creatively recover materials, exploring how wastes could be repurposed as raw materials and recycled at their highest value. Examples, where we reuse and/or recycle recovered materials, include:

- Using waste wood fiber materials from the timber industry as mill feedstocks, including trimmings/waste chips, and sawdust from sawmills. Also, much of the virgin mill wood feedstocks are from timber industry thinnings or cullings — trees that are not suitable for cut lumber or pole timber and would become waste if not used to make paper. Read more in disclosures [301](#) and [304](#).
- CRB mills use 100% recycled pre- and post-consumer paper feedstocks. The CRB mills operate sophisticated pulping and fiber separation systems, enabling the mills to accept a wide variety of recycled, fiber-based materials, including foodservice packaging materials. Graphic Packaging works with industry associations, recyclers, and communities to increase acceptance of more fiber-based packaging materials.
- Mills recover paper scraps from quality assurance/quality control (QA/QC) testing, trim material and off-spec paperboard rolls, and repulp the materials to process into new salable paperboard.
- Converting plants collect clippings, scrap material and off-spec cartons and cups. Recovered fiber materials are either sent to Graphic Packaging CRB mills to make new CRB or are recycled externally.
- Operations facilities collect other valuable waste materials for recycling (e.g., metals, wood pallets, core plugs, plastics, electronics, etc.) and structure infrastructure contracts to recover construction waste and debris for material recovery, and recycling.
- Packaging reuse programs are in place at some converting plants, where the boxes used to ship printed cartons to customers are returned to the plants to be refilled with new cartons and shipped back to the customer.

Finally, when there is no other option but disposal, Graphic Packaging environmental resources classify, handle and dispose of hazardous and non-hazardous waste in accordance with local government regulations. Waste management activities occur both on-site at Graphic Packaging facilities and at external, waste disposal facilities.

Vision 2025 waste goal

Graphic Packaging encourages every part of the Company to rethink waste practices as we pursue a more circular business model and expresses this commitment through our Vision 2025 waste goal:

- **Drive out waste in all our operations.**

Accomplishing this aspirational goal requires expertise, innovative thinking and teamwork across our Company. Graphic Packaging relies on the skills of the following subject matter experts to work with the mills and converting plants to action the goal.

- **Mills COE:** A team of experts who develop and implement technology solutions to improve mill operations.
- **Continuous improvement team:** Operations experts who train and work with mill continuous improvement resources to improve materials yields and reduce consumables use, driving both cost and waste reductions.
- **Innovation team:** Product design experts who practice DfE thinking to develop new packaging concepts that generate minimal waste. DfE also considers material selection and packaging design to optimize end package recyclability.
- **Supply chain team:** Procurement experts who manage raw material, packaging, recycling and waste disposal contracts with service providers. They identify alternate recycled or renewable raw materials, outlets for reusing/recycling waste materials, and outlets for waste disposal.
- **Converting quality/continuous improvement resources:** Experts focused on improving materials yields, reducing consumables use, or generating fewer off-spec products in the converting plants.



Partnering to increase paper and paperboard circularity

Paper recycling is a success story. In 2021, the [American Forest & Paper Association \(AF&PA\) study](#) reported that current US paper recovery rates for recycling are approaching 70% of total generated paper compared to EPA-reported recovery rates of 25% for glass and a mere 9% for plastics ([EPA, 2018](#)). Outside the US, paper recovery rates are even higher, with 74% recovery of all paper and board consumed in [Europe in 2020](#) (or 82.9% in the same year for paper & board packaging, according to [Eurostat](#)), and 81% recovery observed in [Japan in 2021](#). As governments and consumer brands around the world look to reduce the use of plastics (and other fossil fuel-intensive materials) in packaging, industry advocacy efforts become necessary to further increase the recovery of paper materials for recycling.

Graphic Packaging collaborates with AF&PA, the Foodservice Packaging Institute (FPI), NextGen, the Paper and Paperboard Association, and other industry groups to increase US community access and recycling rates for paper and paperboard materials. As demand for recycled fiber packaging increases, there is a growing need to further close the fiber loop by increasing the types of paper materials accepted by communities in addition to increasing paper and paperboard recovery rates. The [2021 AF&PA Access to Recycling Study](#) showed current US paper industry recovery rates are at the highest recovery rate since 2001, however, recovered tons of paper have remained relatively flat over the past decade due to declines in printing and writing paper use. This means new sources of paper-based materials, like foodservice packaging and paper cups, will need to be accepted and recovered to supply the growing demand for recycled fiber feedstocks.

Paper cups and other fiber-based foodservice packaging can be recycled, and several leading cities (e.g., New York City, Seattle, San Francisco, Washington, DC, Atlanta, Denver, Detroit, and others) are successfully recovering paper cups in their residential recycling programs. Graphic Packaging and the paper industry are actively working with the [Paper Cup Alliance](#), a subgroup of FPI, to increase community acceptance of paper cup recycling in the US. Paper cups are made from virgin fiber which is a desirable input material for recycled paper mills. There is an unfortunate misconception that paper cups are not recyclable and that the plastic coating used on cups to prevent liquid from leaking out cannot be separated from the fiber. This is simply not true.

A growing number of mills, including Graphic Packaging's new 500,000-ton CRB mill in Kalamazoo, Michigan and our entire CRB mill circuit, can accept and process poly-coated paper cups when they are included in existing recycled paper bales such as sorted office paper (SOP), residential mixed paper (RMP) and carton bales. In early 2022, Graphic Packaging joined seven other mill companies in signing a [joint commitment](#) to accept paper cups and increase their recycling rate. All together these companies represent approximately 75% of the US/Canada consumption of recycled mixed paper. The industry with FPI and the Paper Cup Alliance is engaging communities to add paper cups to the lists of materials accepted and recovered for recycling. Graphic Packaging is working at both ends of the recovered material value stream — promoting paper recycling and then using recovered materials to reduce dependence on virgin fiber in our products.

In Europe, Graphic Packaging is an active participant in several initiatives aimed at improving the circularity of packaging materials, including [CEFLEX](#) (a consortium of companies representing the entire flexible packaging value chain working collaboratively to improve its circularity), [EXTR:ACT](#) (a platform to increase the recycling rates for beverage cartons and fiber-based multi-material packaging), as well as [HolyGrail 2.0](#) (a cross-value chain initiative to pioneer digital technology for smart packaging recycling). In addition, we have leading roles in the [4evergreen Industry Alliance](#) which includes close to 100 members across the fiber-based packaging value chain with the mission to boost the contribution of fiber-based packaging in a circular economy and reach a 90% recovery rate by 2030. Graphic Packaging is a key contributor to the Alliance as a member of the steering committee and as co-lead of the [circularity by design guidelines](#), [collection guidelines](#), and innovation workstreams. We are also contributors in the development of a harmonized recyclability test in Europe. Our broader circularity partnerships and roles are listed on the [Sustainability Alliances](#) section of our website.



Governance

Waste management actions are guided by the Company values, [Code](#), commitment to the UN Global Compact, and Worldwide Health, Safety and Environment policy. The CSO works with the EVP mills and leaders from converting operations in actioning the waste goal. They are accountable for allocating resources to develop waste inventories and diversion programs, assessing waste reduction opportunities and risks, establishing performance metrics and providing updates to the ELT and the Board. Ultimately, the mills and converting plants are accountable for implementing waste diversion and reduction programs. Read more about ESG governance in disclosures [102-18](#) and [102-19](#).

The ESG data manager works closely with the operations teams to ensure reported waste metrics are timely, accurate and effective for communicating environmental performance and impact. Graphic Packaging will be developing a waste inventory management plan to provide consistent guidance and direction to global locations for collecting, verifying, and reporting waste data by category and disposal method.

103-3 EVALUATION OF THE MANAGEMENT APPROACH

Graphic Packaging evaluates the effectiveness of our waste management approach by monitoring progress in meeting our aspirational Vision 2025 ESG goal to drive out waste in our operations. Currently, Graphic Packaging measures progress by advancing the following initiatives:

- Implement manufacturing waste diversion programs at all global converting facilities
- Achieve 100% recovery and recycling of paperboard waste at global converting facilities and mills

Progress advancing our Vision 2025 Waste Goal		
	2021 result	Progress toward Vision 2025
Drive out waste in our operations	–	Progressing
Percent converting plants engaged in a waste diversion program ¹	89%	Progressing
Percent global waste paperboard recovery	95%	On track

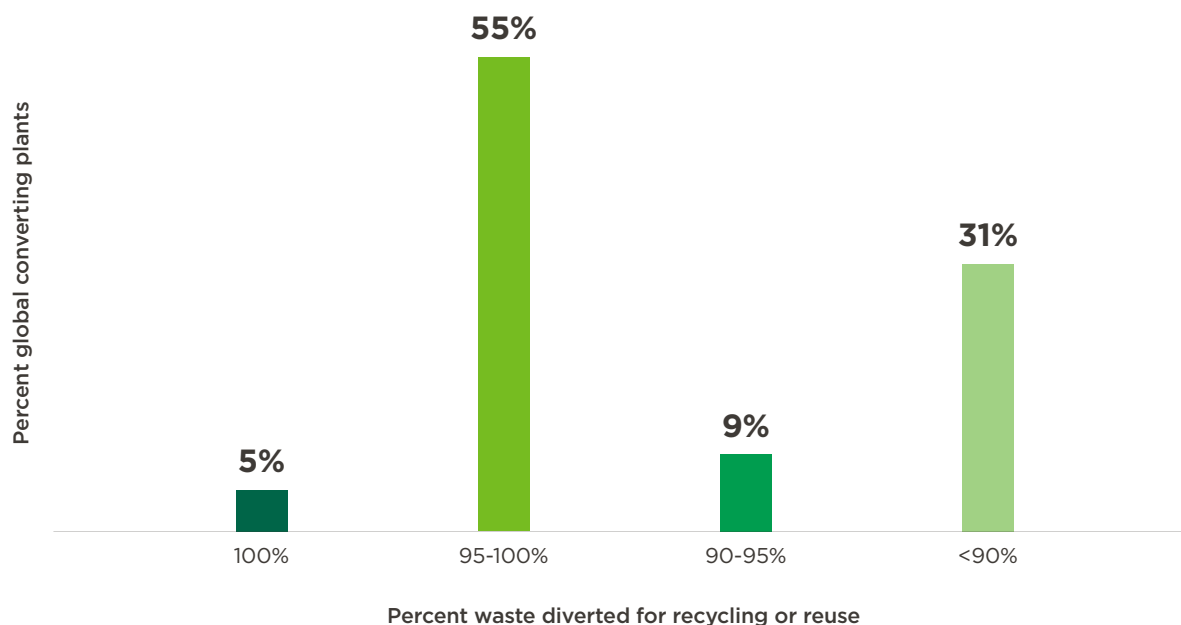
¹ Includes all Graphic Packaging locations as of December 31, 2021.

In 2021, 89% of global Graphic Packaging converting plants (including recent acquisitions) were engaged in some form of a waste diversion program, successfully diverting 1,030,300 metric tons of material (or 91% of converting plant waste) to recycling/beneficial reuse and away from disposal via landfill, incineration, or another disposal method. The decrease in diversion program participation rates relative to 2020 (100%) is largely due to recent acquisitions and updates in the KPI tracking methodology. As Graphic Packaging fully integrates these new facilities and works to further standardize waste diversion programs, participation rates should increase.

We also track waste diversion program effectiveness at our converting facilities. In 2021, 5% of converting plants reported they were recovering 100% of their total waste for recycling or beneficial reuse and diverting all waste from landfill or other disposal methods. An additional 64% of converting plants recovered 90-100% of their total waste demonstrating good progress in driving out waste in the converting operations. The remaining 31% of converting facilities represent opportunities to review and improve upon current diversion initiatives.



Waste diversion progress



In addition to tracking active waste diversion programs, current waste goal efforts are focused on recovering and recycling fiber-based waste materials at the mills and converting facilities. In the US and Canada, Graphic Packaging leverages a third-party partner to collect recovered materials from our facilities and then either deliver the materials to our CRB mills for recycling or sell excess materials for external recovery. In other regions, converting plant fiber recycling programs are managed by local contractors and recovered paper is recycled externally. In 2021, 95% of reported paper waste generated by Graphic Packaging facilities was recovered and recycled, keeping this valuable resource in the fiber loop.

During 2021, Graphic Packaging began building a more detailed accounting of waste generation, recycling, and disposal activities and has developed a baseline inventory of mill and converting plant wastes by waste category, quantity, material type, and disposition method. Learnings from this exercise will be used to develop a waste inventory management plan and to standardize and improve year-over-year waste accounting. Reported data in 2021 represents a good start baselining the Company's waste footprint (92% of Graphic Packaging facilities reported waste), but there is additional work needed to increase reporting consistency and completeness across all global locations. The waste inventory data will be an invaluable source of information to identify new waste diversion opportunities and track progress driving waste out of operations.

306-1 WASTE GENERATION AND SIGNIFICANT RELATED IMPACTS

The following table provides a high-level summary of major waste categories generated by the mills and converting divisions, as well as product end-of-life considerations. This summary is meant to provide an overview of our operations and is not intended to be used for waste analysis and characterization for regulatory compliance purposes. All waste streams are properly characterized by experienced HSE professionals at Graphic Packaging facilities and are managed in accordance with local laws and regulations.

At this time, Graphic Packaging is focused on understanding potential impacts from wastes generated in operations and downstream product end-of-life impacts. Read more about product recyclability in disclosure [416](#) and our approach to using recycled materials in disclosure [301](#).



Waste generation overview		
Waste category	Description	Potential impact
Mills division		
Production waste	Major components include unrecoverable fiber waste, filtered wastewater plant solids, biomass boiler ash, consumables, off-spec product, roll trimmings and QA/QC samples. CRB mills may generate some plastic and metal waste from the repulping process. Hazardous and nonhazardous chemical wastes (e.g., spent cleaning materials, equipment greases, used oil, etc.) and universal wastes are also included in production waste.	Minimal impact. Non saleable paper wastes are recovered and repulped to make new paperboard. Other production wastes are appropriately characterized according to local regulations and sent for disposal.
Business waste	Major components include general office trash, food waste, PPE waste, packaging waste from purchased materials, electronics, etc.	Minimal impact. Where applicable, some materials recovered for recycling. Remainder typically sent to landfill for disposal.
Product end-of-life waste	Major components include converted paperboard packaging and unused material.	Minimal impact. Paperboard may be recycled at end of life following local acceptance policies.
Converting divisions		
Production waste	Major components include paperboard cuttings, off-spec product, QA/QC samples, used printing plates and consumables. Hazardous and nonhazardous chemical wastes (e.g., spent inks, solvents, expired coatings, some equipment maintenance materials, etc.) and universal wastes are also included in production waste.	Minimal impact. Paperboard may be recycled at end-of-life following local acceptance policies. Aluminum printing plates may be recycled at end-of-life. Other production wastes are appropriately characterized according to local regulations and sent for disposal.
Business waste	Major components include general office trash, food waste, PPE waste, packaging waste from purchased materials, electronics waste, etc.	Minimal impact. Where applicable, some materials recovered for recycling. Remainder typically sent to landfill for disposal.
Product end-of-life waste	Major components include used cartons, foodservice packaging, minor quantities of plastic packaging, and decommissioned machines. May also include packaging waste from shipping Graphic Packaging products.	Minimal impact. Fiber-based packaging may be recycled at end of life following local acceptance policies. At this time, some paper foodservice packaging and plastic lids/film packaging may not be accepted and is typically sent to landfill or incineration with energy recovery. Machines are either returned to Graphic Packaging to be refurbished or are scrapped to recover materials for recycling. Graphic Packaging ships products in recyclable packaging. There is potential for plastic leakage from plastic packaging products or from shrink films used in shipping materials, however quantities are not significant relative to total packaging production.



306-2 MANAGEMENT OF SIGNIFICANT WASTE-RELATED IMPACTS

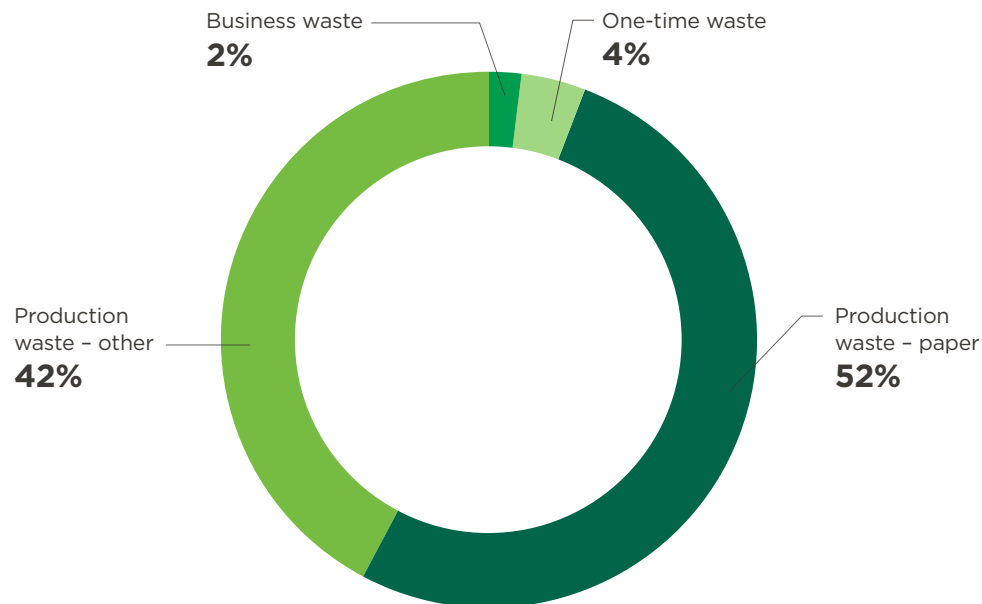
See management approach [103-2](#) discussion and disclosure [306-1](#).

306-3 WASTE GENERATED

In 2021, Graphic Packaging began efforts to build a more detailed accounting of waste generation, recycling and disposal activities and develop a baseline inventory of mill and converting plant wastes by waste category, quantity, material type, and disposition method. Reported data represent a good start baselining the Company's waste footprint with 92% of Graphic Packaging facilities reporting generated waste quantities.

The mill and converting operations reported 2,330,580 metric tons of total generated waste in 2021, of which 52% was recycled, 42% was landfilled, and the remainder was sent to third parties for disposal. Most of the waste (94%) was production waste of which approximately 55% was fiber-based materials, and less than 2% of generated waste (51,190 metric tons) was classified as hazardous waste. Hazardous waste is characterized based on local regulations and was primarily production related chemical wastes such as used oils, solvents, inks, paints, laboratory chemicals, and batteries that were sent off-site for treatment and disposal of by authorized, third-party contractors.

2021 Generated waste by waste category



**2021 Waste quantities by composition (metric tons)**

	Total waste generated	Waste diverted from disposal	Waste directed to disposal
Production waste	2,206,080	1,202,300	1,003,780
Paperboard waste	1,218,250	1,159,950	58,300
Other production waste	987,830	42,350	945,480
Business waste/general trash	34,000	0	34,000
One-time event waste ¹	90,500	0	90,500
Total waste	2,330,580	1,202,300	1,128,280
US waste	2,143,520	1,101,040	1,042,480
Outside US waste	187,060	101,260	85,800
Mill waste	1,203,880	172,000	1,031,880
Converting plant waste	1,126,700	1,030,300	96,400
Hazardous waste	51,190	440	50,750
Nonhazardous waste	2,279,390	1,201,860	1,077,530

¹ Waste generated during a one-time event at a facility, such as a major construction or demolition project, that is not associated with routine facility operations.

306-4 WASTE DIVERTED FROM DISPOSAL

In a circular economy, waste is minimized as materials are diverted from disposal activities and reused or recycled to maximize their value. Across all operations, 52% of reported generated waste was diverted from disposal with most waste diversion activities occurring at Graphic Packaging converting plants. Global converting plants successfully diverted 91% of reported generated waste. Most diverted materials were recycled with minor quantities recovered for composting, and 97% percent of recycled material was fiber-based material. Mills are currently diverting only 14% of reported generated waste and represent our next big opportunity to consider for driving waste out of Graphic Packaging operations.

The waste diversion program has initially focused on recovering and recycling 100% of generated fiber-based waste, and in 2021 95% of total generated paper waste was recovered for recycling. Of the recovered quantities, 36% was consumed internally to make CRB and 64% was sold for external recycling. Additional recovered materials for recycling or reuse include metals, plastics, wooden pallets, and other materials.



2021 Waste diverted from disposal by recovery operation (metric tons)			
	Total waste	Hazardous waste	Nonhazardous waste
Recycled paper: internal	412,000	0	412,000
Recycled paper: external	748,000	0	748,000
Recycled other materials	42,000	300	41,700
Composting	300	140	160
Total diverted waste	1,202,300	440	1,201,860
US diverted waste	1,101,040	10	1,101,030
Outside US diverted waste	101,260	430	100,830
Mill diverted waste	172,000	0	172,000
Converting plant diverted waste	1,030,300	440	1,029,860

306-5 WASTE DIRECTED TO DISPOSAL

Disposal is defined as the end-of-life management of discarded materials in a way the materials become unavailable for further use. The disposal can be by physical processes (such as a landfill), chemical transformation or thermal transformation (i.e., incineration). In 2021, 1,128,280 metric tons of waste (48% of generated waste) were sent for disposal with most of the disposed waste (84%) being sent to landfill for disposal. The remaining wastes were either incinerated (2%) or managed through other third-party disposal options (6%). A small quantity of K2 construction waste was staged on-site waiting to be sent out for disposal in 2022 (8%).

Quantities of recovered black liquor and bark biomass that are burned on-site to generate renewable energy are not included in currently reported waste quantities. Although incineration for energy recovery is technically a waste disposal action, these materials are intentionally separated and recovered (and not discarded) to use as fuel to generate renewable steam and electricity, reducing total mill GHG emissions. Read more in disclosures [302](#) and [305](#).



2021 Waste by disposal operation (metric tons)			
Disposal method	Total waste	Hazardous waste	Nonhazardous waste
Incineration with energy recovery (biomass) ¹	25,000	0	25,000
Incineration with energy recovery (other)	2,210	230	1,980
Incineration no energy recovery	570	70	500
Landfill	946,000	150	945,850
Landfill — one time event waste	2,900	0	2,900
Other disposal options ²	151,600	50,300	101,300
Total disposed waste	1,128,280	50,750	1,077,530
US disposed waste	1,042,480	330	1,042,150
Outside US disposed waste	85,800	50,420	35,380
Mills disposed waste	1,031,900	10	1,031,890
Converting plant disposed waste	96,380	50,740	45,640

¹ Includes clarifier sludges that are recovered and dewatered for fuel use. This does not include bark, black liquor, and other biomass materials that are intentionally separated and recovered as a wood by-product for fuel use.

² Includes one-time event construction waste from the K2 project that was staged on-site until it could be sent offsite for disposal.

When evaluating landfill waste volumes for potential waste reduction opportunities, Graphic Packaging considers wastes generated as part of routine manufacturing operations, including production waste and business waste/general trash. Waste generated by one-time events, such as construction activities, is not considered due to not being part of routine operations and having large year-over-year variations in generated quantities. For 2021, reported manufacturing waste (production waste plus business waste) sent to landfills represented 946,000 metric tons, with the bulk of this material representing production wastes in the mills. Seven percent was managed in on-site landfills, and the remaining 93% was sent off-site for disposal. As our waste inventory evolves, better measurement and characterization of landfill wastes will help identify opportunities to divert additional materials to beneficial reuse and further drive waste out of our operations.

2021 Landfill waste details (metric tons)			
	Total landfill	On-site landfill	Off-site landfill
Production waste	912,000	67,000	845,000
Business waste (general trash)	34,000	0	34,000
One-time event waste	2,900	0	2,900
Total landfilled waste	948,900	67,000	881,900



Environmental Compliance



GRI 307 Environmental compliance

103-1, 2, 3 MANAGEMENT APPROACH

Graphic Packaging strives to be in material compliance with applicable environmental laws and regulations in the global regions where we operate our mills and converting plants. Our [Code](#) and [Worldwide Health, Safety, and Environment \(HSE\) Policy](#) outline the principles we follow and guide our actions to prevent negative impacts on and protect the quality of the environment. Our employees are committed to following our policies and look for opportunities to improve our practices and performance.

Employees are provided with environmental training to understand general and task specific environmental compliance-related operating procedures. Employees are encouraged to report any conditions or potential conditions that could result in a non-permitted spill or release of a hazardous substance to the environment — even if the employee believes the problem is corrected. Our operations are trained to address any spills or releases immediately and to contact local regulatory agencies as applicable per local requirements.

Our vice president, HSE (VPHSE) provides corporate oversight and guidance to our global sites and facilitates sharing learnings and best practices. Each operating location is responsible for implementing and maintaining an environmental compliance program, tailored to the regulatory requirements and operational needs of the site. The site manager is accountable for compliance. The VPHSE provides assistance, as needed, to ensure our sites remain in material compliance with regulatory requirements and any assigned corrective actions are completed on schedule. The VPHSE provides periodic updates on our operation's environmental compliance programs to the executive leadership team and Board.

We demonstrate the performance of our HSE program through monthly environmental compliance reporting and by periodically conducting environmental compliance audits (either second and third-party audits) at our manufacturing locations. Each operating site submits a monthly environmental compliance report to corporate HSE, identifying non-compliance issues incurred during the reporting period.

We use a HSE data management tool to track and document operating site monthly environmental compliance reports, track audit status and track ongoing environmental audits, including audit findings, corrective actions and completion status. The tool that is also used to track site environmental delegation of authority letters are in place, as well as current active permits, regulatory inspections, notice of violations, consent orders, Occupational Safety and Health Administration (OSHA) citations, complaints received from regulatory agencies, and site Resource Conservation and Recovery Act (RCRA) information. Sites use the compliance calendar to set reminders for critical environmental reports and permit renewal timelines. The corporate HSE team performs periodic reviews and data quality assurance checks of the site-entered information to verify compliance activities.

2021 Highlights

- The corporate HSE team developed standardized program templates for operating sites to use for HSE program management.
- 100% of Graphic Packaging sites and Americraft sites (from July through December) completed required monthly compliance reports. AR Packaging sites were not included due to late 2021 acquisition timing.
- Environmental audits were completed at 19 facilities (14 second party audits and five third-party audits; 23% of facilities, excluding 2021 acquisitions).



In addition, some of our sites have pursued third-party certification of their environmental management practices through the ISO 14001 certification. As of December 31, 2021, 23 Graphic Packaging locations (20%) are certified to ISO 14001.

Read more about our HSE program in disclosure [403](#) and on how we engage with the communities where we operate in disclosure [413](#).

307-1 NON-COMPLIANCE WITH ENVIRONMENTAL LAWS AND REGULATIONS

Graphic Packaging is committed to preventing unpermitted releases to the environment at our manufacturing sites, to keep our people and communities safe and to be good stewards of the environment. Over the course of 2021, we received several notices of violations (NOVs) or letters from regulatory officials indicating potential permit deviations at our facilities. Graphic Packaging HSE worked diligently with regulatory agencies to challenge and substantiate these potential violations, and when substantiated took action to ensure corrective measures and/or responses to regulatory agencies were completed in a timely fashion and any further actions were mitigated. The Company paid no environmental regulatory fines in 2021, and there were no incidents of non-compliance that resulted in a formal enforcement action.

Information regarding environmental matters is included in several areas of our 2021 Annual Report on Form 10-K, including:

Item 1 — Environmental and regulatory matters, [p. 12](#)

Item 1A — Risk factors, beginning on [p. 13](#)

Item 7 — Management's discussion and analysis of financial condition and results of operations, [p. 33](#)

Item 8 — Financial statements and supplementary data, note 14 — Environmental and Legal matters, [p. 80](#)

306-3 SIGNIFICANT SPILLS

There were no significant spills in 2021 resulting in serious injury or a significant impact on the environment.

Number of significant spills			
	2019	2020	2021
Significant spills	0	0	0

Each of our facilities that manage hazardous materials in bulk is required to install, operate and maintain equipment to prevent spills to soil, surface water or groundwater. In addition, each applicable facility has implemented an Emergency Response Plan. The purpose of the plan is to provide for organized response for plant emergencies and incidents. An emergency is defined as any situation which requires a response by employees from outside the immediately affected area to an occurrence which will result, or is likely to result, in an uncontrollable hazard. The plan also includes steps to take in the event of a spill or release. The plan identifies appropriate actions to be completed to mitigate releases and prevent spills or releases from impacting environmental media such as soil, water bodies or air. Measures may also include spill/leak prevention provisions in the siting, construction, operations, maintenance, and repair of equipment.



Social Topics

IN THIS SECTION

Engaged Employees

Human Rights

Labor Rights

Community Engagement

Safety



Engaged Employees



GRI 401, 404, 405 Employment, training and education, diversity and equal opportunity

103-1 EXPLANATION OF THE MATERIAL TOPIC AND ITS BOUNDARY

Graphic Packaging's success depends on our ability to create an engaged workplace culture that attracts and retains diverse, top talent. With more than 24,000 employees worldwide, our global workforce is rooted in a variety of backgrounds that bring to the table varied life experiences and professional skill sets — reflecting the diversity of the communities where we operate. Our legacy of hard work, innovation, and helping our customers succeed has always been strengthened by the perspectives and contributions of a diverse team.

103-2 THE MANAGEMENT APPROACH AND ITS COMPONENTS

Graphic Packaging is committed to fostering a rewarding and productive workplace. We invest in employee development and well-being. We set a foundation of strong company values and recognize our employees' accomplishments in accordance with those values. Our culture is underpinned by a long-term global human resources (HR) strategy that supports our employees at every stage in their careers — from recruitment and onboarding to career development, training, performance management, and ultimately succession planning. By fostering a high-performance culture, we ensure Graphic Packaging is a great place to work, an innovative leader for our customers, and a strong partner in the communities where we operate.

Creating a diverse, inclusive workplace

Diversity and inclusion are too important to be left to chance. That's why we've developed an intentional approach to build a cohesive, inclusive workplace environment that supports our globally diverse employees. Our approach respects cultural differences, treats everyone with dignity, and commits to equal employment opportunity and nondiscriminatory practices in hiring, training, and compensating our employees. Being inclusive is not only the right thing to do, but also a compelling business strategy. By treating our people fairly and equitably, we increase engagement, and drive mutual success.

We recognize that inclusion starts with our leaders. Michael Doss, our CEO, has built a diverse and inclusive executive leadership team that mirrors our intent for the future make-up of our Company. Our executive and senior leadership teams facilitate an environment where inclusion is modeled and cascaded throughout our organization. We share diversity metrics on an ongoing basis, highlighting progress and driving accountability. And while we are proud of our work and commitment on this front, we believe we can always do better and will continue to dedicate resources to further strengthen how we foster and celebrate employee diversity.

To accelerate our progress, we formed an Inclusion Council in 2021 and established an inclusion index as part of the employee engagement survey. The council is chaired by our EVPGC and includes diverse leaders from our functions, businesses, and geographies across Graphic Packaging's global footprint. This team supports our inclusion and diversity strategy and defines actions to advance our journey.



We also foster inclusion through the Company's four business resource groups (BRGs), that cover a range of shared qualities. Company-sponsored and employee-led, our BRGs honor the unique cultural experiences of groups within our employee population. By offering a venue for conversation and connection, these groups build communities within our Company, allowing members to share experiences and resources and pursue personal and professional development. Each group sponsors events and initiatives to build awareness and value for our unique talents and cultural backgrounds, supports community engagement and celebrates our diversity.

**WOMEN@GPI****AAPI+**
Asian American,
Pacific Islander**ALIANZA
LATINX+****BEGN+**
Black Employee
Global Network

Attracting and retaining talent is vital to growing and sustaining a thriving business. We are committed to leveling the playing field for diverse candidates and are upgrading our hiring processes. Job descriptions are reviewed to screen for potential barriers to entry and eliminate unconscious bias. We also work to cast a wider net across academic institutions, industries, and military recruitment efforts to attract a more diverse applicant pool. These actions should increase the diversity of our incoming employees.

Investing in our people

As our global economy evolves, we must think and act in new ways to develop talent and effectively compete in our industry. For Graphic Packaging, a successful future means our employees benefit from continuous development and lifelong learning. When our employees pursue their curiosity, our teams get wiser. When we ask each other questions, our processes get smarter. And when we acquire new skills, we stay on the cutting edge. But most of all, we believe that the next generation of leaders is already among us, and that our next winning strategy can come from anywhere.

We strive to create an atmosphere where everyone is learning and growing into their full potential. Graphic Packaging supports our employees' personal development through digital learning platforms, classroom training, and leadership development opportunities. We also offer targeted development programs for underrepresented groups to provide our diverse talent with support, access, and opportunities to advance in the organization. But the best lessons happen on the job, moment to moment, and person to person.

We invest in developing our new and existing managers, educating and supporting them in practicing clear, consistent, and fair processes. By upskilling our managers, we increase awareness of unconscious bias, improve employee engagement, and bolster accountability in our performance evaluation process. We also invest in tools to support our managers, such as Xccelerated Performance (XP), a program that moves performance and career development from a twice-a-year discussion to an ongoing natural dialogue. Read more about our training and performance management programs in disclosure [404](#).

Mentoring is another tool we use to invest in developing and retaining a diverse team. Everyone has room to grow, and everyone has unique skills, talents, and perspectives they can offer to help others grow as well. We encourage both traditional and reverse mentoring relationships to help employees benefit from the multitude of our diverse perspectives and experiences. Traditional mentoring approaches focus on seasoned leaders working with newer employees to build capabilities and provide career guidance and advice for development and professional growth. Meanwhile, reverse mentoring empowers young professionals, women, and racially diverse employees to share their insights, experiences, and skills with more experienced leaders, broadening their perspectives. Our approach encourages employees to consider what type of mentor they need and enables them to seek out mentors throughout the Company. Mentors and mentees are also provided access to on-demand learning tools to support them along the way.



Our commitments

We action our aspiration to build an engaged and inclusive culture through the following Vision 2025 people goals:

- Achieve **top quartile** employee engagement.
- Provide **30 hours** of training per employee per year.

Achieving these goals will position us for success in “attracting and retaining the right talent” and building a culture where every employee is engaged and feels they “play on a winning team.”

Governance

Our executive vice president of human resources (EVPHR) works directly with our ELT in setting our people strategy and guiding our approach for creating a culture that empowers and celebrates our employees. The Global HR Team designs and deploys an integrated suite of programs and processes to ensure we achieve our goal of an inclusive, diverse, and thriving workplace culture and maintains the governance and data management systems we need to measure our progress. They review our progress with the ELT each quarter, and our EVPHR provides annual updates to the Compensation and Management Development Committee on talent management and diversity, equity, and inclusion progress.

Our governance system is underpinned by our Company values, [Code](#), and strong corporate policies that embrace the principles of the UN Global Compact, external global frameworks described in disclosure [102-12](#), and comply with the local laws and regulations in the regions in which we operate. In addition, our [Equal Employment Opportunity Policy](#) describes our approach to treat all employees fairly, protect against discrimination, and provide accommodations for employee needs. Through our policies, we set behavioral expectations for our global workforce. When employees have concerns, they are encouraged to speak-up to management or through the ALERTline.

Learn more about our values, corporate policies, and employee speak-up process for communicating concerns in disclosures [102-16](#), [102-17](#), and [205](#) and about our ESG governance process in sections [102-18](#) and [102-19](#).

103-3 EVALUATION OF MANAGEMENT APPROACH

Our employee engagement process (Your Voice Our Company) helps us understand how employees experience our workplace and what matters most to help them thrive. These insights help us strengthen our inclusive culture and empower people to be their authentic selves, have respectful, courageous conversations, and develop genuine relationships.

In 2020 and 2021, we used a survey to baseline employee engagement. This survey assesses the Graphic Packaging employee experience and provides the necessary insights we need to drive initiatives to improve the employee experience. Survey results are assessed at both the enterprise level and at the individual team level. Each manager is provided with their team’s composite assessment. Managers share the feedback with their team, and they work together to create an action plan for improvement.

We’ve spent a significant amount of time reviewing the results and the written comments provided by our employees. Common themes across both surveys allow us to highlight and monitor our top employee engagement drivers:

- There is confidence in Graphic Packaging’s future success and trust in our leaders.
- Employees believe the Company is committed to providing high quality products and services.
- Employees believe the Company has a strong commitment to safety.
- Employees are proud to work for the Company.



We also heard from our employees that we have room to improve to achieve our Vision 2025 people goals. Our current overall engagement score is tracking below the assessment framework top quartile benchmark and the packaging industry norm. Areas where we need to focus include:

- Improving communication across all levels of the organization.
- Recognizing employees and helping them see the connection between their work and the Company's success.
- Increasing teamwork and collaboration between departments.

In response, we are taking action to continue investing in leadership development, act on local concerns, and assess workforce practices. We plan to resurvey our workforce in 2023 to measure progress and align our efforts on the priorities needed to deliver a successful future — for both our employees and our Company.

Progressing our Vision 2025 people goals

We measure top quartile employee engagement success by achieving >85% participation rate for employees responding to our engagement survey. What we consider most important is that our employees engage and provide feedback to help shape our Company culture. As Graphic Packaging leadership demonstrates our commitment to listen and act on that feedback, we expect engagement to increase. We want our employees to feel their perspectives are valued, and they can make a difference when they speak up. In 2021, we saw a year-over-year increase in survey participation with 70% employees responding in 2021 versus 64% in 2020.

Progress advancing our Vision 2025 People Goals		
	2021 result	Progress toward Vision 2025
Top quartile employee engagement ¹	70% participation	On track
30 hours training per employee ² per year	6	Progressing

¹ Measured by percent participation rate in employee engagement survey.

² Measured based on salaried employees enrolled in GPI U at year end and does not include hours of live training received by employees.

When we launched our 2025 training goal, it was very aspirational. At the time, all training was managed locally and/or through individual functions to address specific training needs. We did not have a central learning management system where we could track training programs across the organization. Since then, we have made significant progress implementing a global learning management system, GPI U and piloting GPI U with our salaried employee population. In 2021, enrolled salaried employees averaged 6 hours of training per employee, taking advantage of both GPI U and LinkedIn learning opportunities. As more trainings and employees are moved onto the platform, improving our ability to track investment in employee skills development, we expect this number to increase. We also made significant strides in 2021 deploying our new in-person leadership development training series with 13% mid-level and frontline leaders completing training (an additional 11% started the training) as part of our commitment to train 100% of these leaders over a three-year period. Learn more about our training approach and programs in disclosure [404](#).

Additional highlights from 2021 people initiatives include:

- We accelerated our focus on increasing women representation in leadership positions and launched our women in leadership development experience with 25 participants in our inaugural program.
- 420 frontline leaders (28%) completed the new frontline leadership development training program. Graphic Packaging is focused on building leadership capability in this future Company leader group.
- We continued building out training content in GPI U with a focus on leadership, innovation, sales, and diversity and inclusion.



- We launched two additional business resource groups, Alianza Latinx+ and Asian American, Pacific Islander+, for a total of four BRGs across the organization. The business resource groups were also instrumental in kicking off our Diversity Speaker Series featuring diverse members from our Board of Directors in 2021.
- We launched an Inclusion Index to measure employee sentiments on authenticity, belonging, and their belief in our commitment to diversity. In 2021, survey results showed 62% of employees reported positive sentiments.

We are already seeing the benefits of these programs and will continue advancing our training program in 2022 and beyond. Future initiatives include expanding use of GPI U, expanding our learning and development programs, enhancing employee communications, upgrading people systems, and tools, and more.

401-1 NEW EMPLOYEE HIRES AND EMPLOYEE TURNOVER

We're proud to be an equal opportunity employer. As such, we do not make employment decisions based on race, color, religion, age, gender or sex (including pregnancy), national origin, ancestry, marital status, sexual orientation, gender identity, disability, veteran/military status, genetic information, or any characteristic protected by law. As a global enterprise, we're proud that our people come from all over the world, bringing their unique experiences, histories, and perspectives to work with them.

In 2021, a constrained talent market and continued impacts from the COVID-19 pandemic affected our business operations, as they did for many companies. In response to these challenges, we invested in our talent acquisition capabilities and processes. We also increased our efforts to understand the reasons employees choose to leave the Company and put action plans in place to address our overall voluntary attrition rate of 19% in the United States.

2021 US workforce¹ changes by age group, gender, and ethnic diversity

	New hires		Voluntary attrition ²	
	Number employees	Percent new hires	Number employees	Percent voluntary attrition
Total US employees	3,844	27%	2,618	19%
Age group				
Under 30	1,303	34%	750	29%
30-50	1,938	50%	1,334	51%
Over 50	603	16%	534	20%
Gender				
Male	2,885	75%	1,873	72%
Female	959	25%	745	28%
Ethnic diversity^{1,2}				
Ethnically diverse	1,294	34%	744	28%
Non-ethnically diverse	2,229	58%	1,664	64%
Undisclosed	321	8%	210	8%

¹ Data are for Legacy Graphic Packaging only and exclude Americraft locations.

² Graphic Packaging also experienced involuntary attrition in 2021. Total attrition rate for 2021 was 25% (19% voluntary and 6% involuntary).



401-2 BENEFITS PROVIDED TO FULL-TIME EMPLOYEES THAT ARE NOT PROVIDED TO TEMPORARY OR PART-TIME EMPLOYEES

Graphic Packaging offers a robust benefits package that includes:

- Paid vacation and holidays
- Leave programs
- Healthcare plans
- Financial, physical, and mental well-being programs
- Maternity leave
- Virtual healthcare and second opinion services
- Adult and childcare benefits
- Life insurance
- Short- and long-disability coverage
- Business travel accident coverage
- Retirement savings
- Tuition reimbursement

Benefits align with local laws and requirements, as well as collective bargaining agreements where applicable. Benefits are only offered to full-time employees and part-time employees working more than 30 hours per week. Our employees can choose whether to subscribe for just themselves or to a plan that also includes their family members. Throughout the COVID-19 pandemic of 2020 and 2021, we expanded benefits and support to our employees who may be at risk, working remotely, or impacted by the economic shutdown. Our healthcare plans, mental well-being programs, and paid sick days helped our employees weather the pandemic via a safe and supportive working environment.

In some regions, employees may also be offered the option to voluntarily participate in benefits programs such as pet insurance, identity theft protection, automobile and home insurance, and other programs. Read more about wellness programs in disclosure [403-6](#).

404-1 AVERAGE HOURS OF TRAINING PER YEAR PER EMPLOYEE

Graphic Packaging provides core competency training throughout all levels of our organization, focusing on ethics and integrity, leadership skills, cybersecurity, technical training, safety, and other subjects. Individual site locations and business functions offer many of our current training programs, which makes it difficult to aggregate total employee training hours. We have invested in GPI U, a digital learning platform, to host and manage employee training. We are in the process of migrating more of our trainings into the platform and enrolling our global employees.

Salaried employees currently enrolled in GPI U (excluding employees from AR Packaging acquisition), participated in approximately six hours of training per employee throughout 2021, with 38% of enrolled salaried employees taking advantage of LinkedIn self-directed learning.

We are also making an investment in developing our current and future leaders and are committed to providing skills training to all leaders over the next three years and to training new leaders within one year of hire. In 2021, 476 (or 24%) of our leaders participated in either the frontline leadership or mid-level leadership training programs (13% completed), 19 early career employees were part of the Leadership Development Program, and 25 women completed the pilot women in leadership training program. Read more about these programs in disclosure [404-2](#).

The Company issues training by role and not by gender. Gender statistics for learning are not within our learning system; however, as part of our process to close any diversity gaps for employee and leadership readiness, underrepresented individuals may be invited to specific trainings to increase the diversity pool. Training for our hourly employees is currently managed at the local sites and not tracked at an enterprise level. Our hourly employees receive on-the-job skills and safety training to prepare them for success in their work assignments.



404-2 PROGRAMS FOR UPGRADING EMPLOYEE SKILLS AND TRANSITION ASSISTANCE PROGRAMS

Graphic Packaging employees and their managers collaborate to plan a range of experiential assignments, peer and leader mentoring, and training programs in a self-directed model that supports the individual career goals of each employee. Our development philosophy follows the 70:20:10 development model, where 70% of employee development comes from on-the-job experiences, 20% through feedback and coaching and 10% through formal training. Beginning with employee orientation training, we provide multiple learning opportunities and on-demand training through the GPI U digital platform to help employees as they grow. The following highlights some of our employee training and development programs:

- **New Employee Orientation** introduces new hires to our values, business, and benefits available to them.
- **Carton College** is an immersive two-day training that teaches employees about the paperboard carton manufacturing process from the forest to the store shelf.
- **Leadership Development Program** is a highly visible, 12-month leadership program for new college graduate employees designed to develop operational, business and leadership skills. The program provides fast-track industry experience through structured learning and a hands-on approach.
- **Frontline Leadership Program** equips new leaders with the skills and knowledge to lead people while delivering business results. Participants will improve their personal leadership skills by understanding their role as a leader and how to get things done, and their people leadership skills through eight competency development sessions.
- **Mid-level Leadership Experience** is a cohort-based learning program designed to build critical leadership and coaching skills, through a combination of in-person and virtual sessions. Participants learn how to create inclusive environments, manage change, provide effective coaching and feedback, and to create an inclusive, engaged environment where employees will thrive.
- **Women in Leadership** program provides our women leaders with different approaches for effectively handling common obstacles, strengthening emotional intelligence, and developing the skills necessary to stand out as a leader. The program is developed and delivered in concert with Washington University Olin Business School.
- **LinkedIn Learning** is an award-winning industry leader in online training, with a digital library of over 6,000 courses covering a wide range of technical, business, software, and creative topics. Employees can select courses relevant to their current role in areas like business, technology, and marketing to work on growing their skills at their own pace.
- We leverage special projects, short-term assignments, and cross-functional job rotations to further develop employees through experiential learning and support them in meeting their personal aspirations.
- We also provide function specific training customized to individual job requirements as part of onboarding into new roles and ongoing job skills development. Examples include safety, engineering, business communications, regulatory compliance, and other training.

In addition to on-the-job and career development training, the Company offers programs that assist employees during various life events. Through GPI Fit and our partnership with Fidelity Investments we provide financial planning services to support employees with savings and retirement planning. We also provide career transition assistance services, which may include outplacement counseling services, severance pay, and benefits continuation for those times when employees are separated from the Company due to asset sales, asset closures or strategic reductions in workforce.

404-3 PERCENTAGE OF EMPLOYEES RECEIVING REGULAR PERFORMANCE AND CAREER DEVELOPMENT REVIEWS

Our Performance Management Process (PMP) provides a structure to facilitate the alignment of expectations and goals, the integration of ongoing coaching and feedback, and the summary of contributions. Employees receive feedback on both “what” (core job, goals, impact) and “how” (behaviors/competencies) so they can be more successful in their roles. Both leaders and employees together play a key role in ensuring the effectiveness of the PMP by establishing SMART (specific, measurable, actionable, realistic, and time-bound) goals and reviewing progress throughout the year.



In 2021, 93% of salaried employees completed the annual PMP with their managers (note: AR Packaging employees not included due to acquisition timing). These discussions align on employee strengths and encourage individuals to focus on career goals and competency growth. We analyze performance ratings across several demographics including gender and ethnicity to ensure the process is equitable. Our hourly employee workforce receives regular informal feedback throughout the year to ensure effective job performance and long-term success with the Company.

We are in the process of transitioning from less frequent, formal reviews to a process of continuous conversations. This new approach, as referenced above, is called XP. At the heart of the program are consistent one-on-one informal conversations, enabling employees to quickly adjust and improve incrementally throughout the year. Employees are also able to share upward feedback with their managers, creating a two-way dialogue.

405-1 DIVERSITY OF GOVERNANCE BODIES AND EMPLOYEES

Inclusion and diversity begin with our leadership. Our Board of Directors is composed of 10 individuals with diverse experience and credentials, selected for their acumen and ability to challenge, and to add value to management. Each director has held significant leadership positions, providing the Company with unique insights and fresh perspectives. To learn more about our Board, see disclosure [102-22](#) and our [2022 Proxy Statement](#).

Gender, age group, and ethnic diversity of Board of Directors as of January 31, 2022

Gender	
Female	30%
Male	70%
Age group	
Under 30	0%
30-50	0%
Over 50	100%
Ethnic diversity	
Ethnic diversity ¹	0%

¹ Effective March 1, 2022, we added a new Board member to replace a retiring Board member, increasing ethnic diversity representation on our Board to 10%.

Having an inclusive and diverse workforce enhances our work at every level. It makes us more innovative, improves our customer experience, and strengthens our understanding of the communities we serve. As of January 31, 2022, our US workforce was made up of 21% women (23% globally) and 29% ethnically diverse employees versus the pulp/paper industry benchmarks of 28% and 17% respectively (US Bureau of Labor Statistics, 2020). In 2021, we accelerated our focus on increasing women representation in leadership positions and launched our women in leadership development experience. During the first half of 2022, we also increased representation of women on our executive team, with women now making up 33% of our executive leadership team. Our leadership team facilitates an environment where inclusion is modeled and cascaded through our organization.

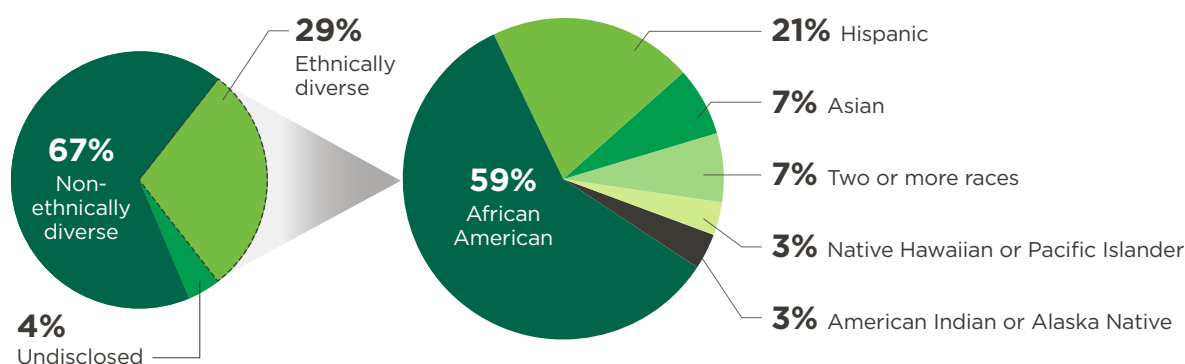


US employees by age group, gender, and diversity as of January 31, 2022 ^{1, 2}						
	Total	Hourly	Salaried	People leaders	Vice president	Executive leadership team
Age group						
Under 30 ²	13%	14%	14%	5%	0%	0%
30-50	47%	48%	42%	46%	33%	0%
Over 50	40%	38%	44%	49%	67%	100%
Gender						
Male	79%	82%	59%	79%	79%	80%
Female	21%	18%	41%	21%	21%	20%
Ethnic diversity						
Ethnically diverse	29%	33%	17%	13%	7%	40%
Non-ethnically diverse	67%	62%	81%	86%	92%	60%
Undisclosed	4%	5%	2%	1%	1%	0%

¹ Includes both legacy Graphic Packaging and Americraft employees.

² No US employees <18 years of age.

US employee ethnicity representation



As additional information, we also provide our most recently filed US Federal Employer Information Report EEO-1 on our [website](#). Because federal reporting requirements group employees in the EEO-1 differently than the Company does in its annual ESG Report (which aligns with the Company's organizational structure and employee level or pay grade), the numbers are not directly comparable. While we are making the EEO-1 Report available, we believe the data as presented in this ESG Report is the most meaningful measure of our diversity progress.

Additional employee data can be found in disclosure [102-8](#).



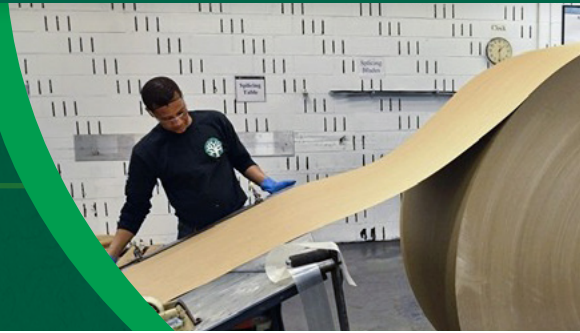
405-2 RATIO OF BASIC SALARY AND REMUNERATION OF WOMEN TO MEN

Graphic Packaging evaluates annual total compensation on a role-specific basis, aligning pay to the market and reflecting performance and progression over time. In the interest of confidentiality and competitiveness, the Company does not report ratios based on employee demographic group average compensation or make pay decisions based on these ratios.

To further our diversity and inclusion strategy, we engaged a third-party consultant to conduct a pay equity analysis of our 9,000 salaried and non-union hourly employees in the United States. The study was conducted in 2021 and included 231 groups and subgroups who were compared to each other and evaluated based upon protected equal employment opportunity (EEO) categories, job titles, and EEO job categories. We are proud to note that no systematic inequities were present based on gender, race, or ethnicity. We will continue to periodically conduct pay equity analyses to enable us to identify areas for improvement. See disclosures [102-36](#) and [102-39](#) for additional information on our remuneration processes.



Labor Rights



GRI 402, 407 Labor/management relations, freedom of association and collective bargaining

103-1 EXPLANATION OF THE MATERIAL TOPIC AND ITS BOUNDARY

Graphic Packaging recognizes and respects applicable labor and employment laws — including those addressing freedom of association, privacy, and equal employment opportunity — wherever we operate. We believe that working positively and directly with employees best serves their interests. Additionally, we strive to work cooperatively with duly chosen employee representatives in the common pursuit of the interests of the employees and the Company's vision.

It is important we maintain strong, positive relationships with the unions or work councils who represent our employees and to bargain fairly with those representatives to maintain optimal operations globally. A majority of our approximately 24,000 employees globally are represented by labor unions, collective bargaining agreements, and/or work councils. In the United States, approximately 44% of employees belong to a labor union. Globally, that number rises to approximately 52% of all employees belonging to a labor union, with 20% of employees covered by a work council (includes some union employees) and approximately 53% of employees who are covered by formally elected employee representatives. Most union/represented employees are hourly, full time, permanent production employees working in Graphic Packaging mills and converting plants.

103-2 THE MANAGEMENT APPROACH AND ITS COMPONENTS

We strive to maintain a direct relationship with employees built on integrity, trust, and teamwork and to treat employees with dignity, respect, and fairness at all times. We provide competitive benefits, wages, and other terms and conditions that showcase the benefits of a direct relationship with Graphic Packaging as employees. We also honor the right of our employees to choose a bargaining representative without fear of reprisal, intimidation, or harassment. Our employees' right to freedom of association means we will work cooperatively with employees' chosen representatives in the common pursuit of the interests of the employee and the Company's vision for the future. Graphic Packaging does not tolerate retaliation against employees for their lawful affiliation with any labor organization.

Graphic Packaging works to build relationships with union leadership at a local, regional, and national level, and bargain with these groups in good faith. We honor the terms set forth in our collective bargaining agreements. We centrally coordinate bargaining wherever possible, and maintain a disciplined, locally driven process focused on the needs of our employees, customers, and the communities where we operate. Collective bargaining agreements set forth the terms and conditions pursuant to which employees covered by those agreements work. Such agreements may include, but are not limited to provisions concerning hours of work, wages, health and welfare benefits, retirement benefits, training, career progression, safety expectations and protective equipment, attendance, grievance and arbitration procedures, and rules of conduct.



We implement strong grievance mechanisms related to labor relations, and ensure grievances are investigated thoroughly. Employees may file a grievance concerning alleged violations of the collective bargaining agreement covering their employment with local union representatives. The union representative will then address the grievance with the Company and work with the Company to resolve the issue. If no resolution can be reached, the parties may choose to arbitrate the grievance before a neutral third-party. In addition, we encourage employees to address concerns directly with their supervisors, managers or local human resources leaders. Employees may also report grievances on our toll-free ALERTline, available globally 24 hours per day, seven days per week. Read more about ALERTline in disclosures [102-17](#) and [205](#).

103-3 EVALUATION OF MANAGEMENT APPROACH

In 2021, Graphic Packaging established a cross-functional labor council that consists of the EVPHR; the vice president, labor relations; the vice president, chief employment counsel; the director of benefits; senior leaders from each business unit; and their respective human resources business partners. The labor council reviews the Company's collective bargaining strategies and the status of all collective bargaining agreements, including those that may have expired, are undergoing negotiation, or are nearing negotiation. They also monitor wage and benefit offerings and external labor trends and events that could impact our labor relations strategy.

As of December 31, 2021, 541 Graphic Packaging employees globally were working under expired contracts or contracts in negotiation processes. No additional employees were covered under collective bargaining agreements that expire within one year. In addition, Graphic Packaging experienced one labor strike in 2021. The Australian Manufacturing Workers Union and their members in our Melbourne, Australia facility engaged in a brief strike over a dispute regarding wage increases. That single event occurred during the fourth quarter in 2021 and was resolved within a month. No other work stoppages or strikes have taken place in the past five years. Management believes that its relations with employees and labor organizations are positive.

402-1 MINIMUM NOTICE PERIODS REGARDING OPERATIONAL CHANGES

Graphic Packaging adheres to all federal, state, local, and regional laws and regulations applicable to an operational closure, regardless of where it is consummated. Contractual notice of operational closure and/or changes varies by collective bargaining agreement and is absent in many. Where such provisions exist, several months' notice is typical per local legislation or agreements. Regardless, whether a collective bargaining agreement contains specific notice and discussion provisions regarding operational closure and/or changes, Graphic Packaging consistently complies with its legal bargaining obligations regarding such changes as they impact employees' terms and conditions of employment.

407-1 OPERATIONS AND SUPPLIERS IN WHICH THE RIGHT TO FREEDOM OF ASSOCIATION AND COLLECTIVE BARGAINING MAY BE AT RISK

Graphic Packaging respects our employees' right to freedom of association and to the right to choose or not choose a bargaining representative without fear of reprisal, intimidation, or harassment. We do not tolerate retaliation against anyone for lawful affiliation with any labor organization either in our operations or those of our partners and suppliers. While we do not currently monitor our suppliers' collective bargaining actions, we set expectations with our suppliers, through our GSCOC for them to similarly respect their employees' right to freedom of association and collective bargaining. Read more about our supplier expectations in disclosure [204](#).



Safety



GRI 403 Occupational health and safety

103-1, 2 MANAGEMENT APPROACH

Delivering inspired packaging begins with Graphic Packaging's focus on the safety and health of our people — our employees and contractors working under our control at our facilities. Our vision is to create a safe, healthy, and environmentally responsible culture that will enable us to achieve an injury free workplace across all our global operations. Our employees should trust that their physical and psychological safety is our priority, and that they will be treated with respect and leave each workday as they arrived.

Graphic Packaging employs a layered approach to our HSE global efforts, beginning with our HSE core values and expectations. The health and safety of our employees and the public, and the quality of our environment means minimizing to the extent possible health, safety and environmental risks. Our HSE team provides leadership for business units to implement effective standards to protect our employees, contractors, neighboring communities, and the environment. Our HSE core values align with our business core values of Teamwork, Respect, Accountability, Relationships, Integrity, and specifically express that:

- Preventing injuries and events is good business.
- HSE is everyone's responsibility.
- Working safely and in an environmentally responsible manner is a condition of employment.
- All injuries and events are preventable.

We strive to be in material compliance with all applicable health and safety laws and regulations, and we expect our employees and contractors to work in a safe and environmentally responsible manner 100% of the time. Our employees are accountable for their personal safety and the safety and well-being of their colleagues. Our HSE continuous improvement efforts are designed to drive improved safety performance and culture through HSE global and local systems and requirements.

Minimum safety expectations

We have implemented minimum safety expectations (MSEs) across our operations, globally. Graphic Packaging's MSE's are a combination of cultural and programmatic elements designed to take a facility-wide approach to managing HSE risks through effective implementation of risk reduction and technical programs.

Our culture elements focus on management leadership, training, HSE resources, and behavioral based efforts. Programmatic elements are designed to reduce risk in our operations through implementing technical HSE programs consistently across our business. This continuous improvement approach led by our operational leaders, drives our HSE culture of caring and engaging employees. MSEs also include expectations that operational leaders:

- Document and implement HSE strategies and programs.
- Communicate and enforce safety absolutes.
- Implement the HSE minimum expectations.



- Understand how work is performed and how to do tasks safely.
- Train employees to work safely and responsibly.
- Hold employees accountable for following procedures.
- Ensure all incidents (injuries, first aid, near misses) are reported and investigated in a timely manner and corrective actions are implemented.

MSE cultural elements	MSE programmatic elements	
• HSE manager • Monthly strategic safety meeting • Graphic Packaging safety vision training • Supervisor safety contacts • Floor leader safety-focused GEMBA¹ • Safety review of added or modified production equipment • Incident reporting and management • Hazard mitigations • Tracking of safety work orders • Safety training • Safety absolutes	• Air hoses • Confined space entry • Contractor safety • Emergency planning • Electrical safety • Fall protection/working from heights • Roof access • Guarding/machine safeguard • Hazard communication • Hazardous energy control • Hot work (welding/torch cutting)	• Industrial hygiene survey • Knives and cutting devices • Line breaking • Pedestrian safety • Powered industrial vehicles • PPE • Robot cells • Safety absolutes • Truck/vehicle loading and unloading • Working with suspended loads

¹ The Gemba walk is an essential part of the Lean management philosophy. Its initial purpose is to allow managers and leaders to observe the actual work process, engage with employees, gain knowledge about the work process, and explore opportunities for continuous improvement.

Our strategy continues with our safety absolutes which apply to all sites in our global footprint. The absolutes establish standards of conduct around HSE and create a culture for all employees to “Think About Safety Always.” They define a set of unsafe actions that have the potential to cause significant harm to the employee or colleague and are not permitted in our facilities. Employees that break a safety absolute are subjected to disciplinary action, following a thorough investigation, up to and including separation from the Company.

Safety absolutes

The following unsafe actions are not permitted at any Graphic Packaging facility:

- | | | |
|---|---|--|
| <ul style="list-style-type: none"> • Neglecting to lockout equipment in violation of established Lockout/Tagout procedures. • Intentionally bypassing, removing, or disabling a safety device. • Neglecting to follow established confined space permit procedures when entering a defined confined space. | <ul style="list-style-type: none"> • Neglecting to follow established fall protection procedures. • Reaching into moving equipment in violation of established safe operating procedures. | <ul style="list-style-type: none"> • Operating a powered industrial vehicle in a reckless or threatening manner. • Placing yourself or another employee in serious danger. |
|---|---|--|



Our HSE approach is guided by three key governance documents:

- [Worldwide Policy for Health, Safety, and Environment](#)
- Health, Safety, and Environmental Audit Standard
- HSE Incident Notification Standard

In addition to these documents, our Employee Handbook includes additional corporate level policies developed to ensure employees are fit-for-duty and that our workplace provides for both physical and psychological safety. Sample policies include: Anti-harassment Policy, Drugs and Alcohol Policy, Employee HSE Policy, Human Rights Policy, Workplace Violence Policy, and Weapons Policy.

Individual operating sites also implement local HSE policies, standards, and procedures that are site-specific and address local, unique operating needs. Local policies, standards, and procedures are provided in native languages to ensure employees understand our safety expectations and have the information they need to perform their work safely. Read more about our corporate policies in disclosures [102-16](#) and [405](#).

Vision 2025 safety goal

Our Vision 2025 safety goal is to continue progress towards our aspirational target of zero safety incidents, ensuring that safety remains a top priority. We measure progress achieving this aspiration through the following targets:

- **Zero LIFE injuries.**
- **Reduce LTIR to 0.2.**

Graphic Packaging is focused on addressing the most serious life altering injuries, those that result in a fatality, loss of limb or function, hospitalization, brain injury, bone injury, burns, or significant wounds requiring treatment. These injuries cause pain and significant disruption to the injured person's health and wellbeing and can impact team morale at our sites. Our focus is part of a broader industry initiative to improve the paper industry safety record and drive down rates for serious injuries and fatalities (SIFs, or what we refer to as LIFE injuries).

Graphic Packaging is an active member of the AF&PA and has committed to advancing the organization's safety goal to prevent SIFs. Major elements of the program include: (1) leadership and management commitment; (2) employee involvement; (3) risk identification; (4) risk management; (5) measuring and monitoring progress; and (6) continuous improvement. Safety professionals have begun to focus on leading indicators, rather than lagging indicators to identify and mitigate precursors that may lead to LIFE incidents. Through this and other external organizations we regularly monitor international health and safety standards and implement initiatives widely accepted by our industry.

Governance

Our CEO is ultimately accountable for safe operations across the Company and approves our global HSE policy. Day-to-day operational HSE leadership is the responsibility of the VPHSE, who reports directly to the executive vice president of the mills division (a member of the executive leadership team and ESG steering team). The VPHSE provides corporate oversight and guidance to our global sites and facilitates sharing learnings and best practices. Each operating location is responsible for implementing a local HSE compliance program, tailored to the regulatory requirements and operating needs of the site, and the site manager is accountable for compliance. The VPHSE provides assistance and training, as needed, to ensure our sites remain in material compliance with regulatory requirements and MSEs, and that any assigned corrective actions are completed on schedule.

The VPHSE reports monthly to the executive team on HSE performance and provides the EVPGC with quarterly HSE updates to share with the NCGC. Safety performance discussions are shared quarterly with all Graphic Packaging employees during global town hall meetings.

Read more about ESG governance in disclosures [102-18](#) and [102-19](#).



103-3 EVALUATION OF MANAGEMENT APPROACH

To reinforce our principles and strengthen our health and safety practices, we assess ourselves using management reviews, data analysis, auditing, operational learning, and benchmarking. We test and validate the implementation maturity and continuous improvement of our HSE program through our compliance assessment process. This process has two components, one focused on technical compliance of our operations with applicable local, state, federal, and provincial/national HSE regulations and a second focused on internal culture and compliance with our MSEs.

We evaluate technical compliance through execution of routine third-party audits. Third-party HSE compliance assessments are completed by qualified HSE consulting companies globally. In addition to our third-party auditing process, some of our facilities elect to have their HSE systems certified to ISO 45001. As of December 31, 2021, 8 sites (7% facilities) are certified to the ISO 45001 safety management system standard.

Beyond these compliance auditing efforts, we are implementing and are very proud of our peer-to-peer (P2P) assessment process. Operational leaders from one plant conduct an onsite assessment of another location's implementation of aspects of our MSE's, adherence to our HSE policies, Company requirements, corrective action closure, progress toward completion of safety plans and machine guarding efforts among other things. The key aspect of the success of our P2P assessment process is that it is owned and executed by our operational leadership (e.g., plant managers) and supported by our HSE community. The P2P assessment program was initially piloted in 2020 and significantly expanded in 2021.

In 2021, we completed 90 P2P assessments. Findings and corrective actions from the P2P assessments are tracked to closure through an HSE data management system. This system enables us to trend continuous improvement opportunities, programmatic gaps, and educate operations on top trends across the business.

Progress advancing Vision 2025 safety goal

We closely monitor our progress towards reaching our Vision 2025 safety goals on our journey to achieve a workplace that is injury free. We track all incidents and injuries across our operations, and encourage reporting of "near miss" incidents, evaluating each situation and implementing appropriate countermeasures to prevent similar instances. In 2021, we were proud to have 30 locations (excluding AR Packaging) with zero recordable injuries. Further, our Macon, Georgia mill received the Award of Safety Excellence from the Pulp & Paper Safety Association.

Over the past few years, we have acquired several companies with multiple locations. These sites brought opportunities for improvement, however through aggressive integration plans that include, education, risk reduction, HSE programs and initiatives we managed to keep our safety injury rates fairly flat through these integrations. We remain focused on eliminating LIFE injuries and to significantly reducing our lost time injury rate (LTIR) by 2025 on our journey to achieving a zero-incident workplace.

Progress advancing our Vision 2025 Safety Goals		
	2021 result	Progress toward Vision 2025
Reduce employee LTIR to 0.2 ¹	0.41	No progress
Zero employee LIFE injuries ²	10	No progress

¹ Rate is defined as number of events per 100 workers per year.

² LIFE injuries defined as serious life threatening or life altering injuries (e.g., those that result in a fatality, loss of limb or function, hospitalization, brain injury, bone injury, burns or significant wounds requiring treatment).



Safety benchmarking

We benchmark our safety performance using manufacturing industry safety metrics reported by the US Bureau of Labor Statistics and by the AF&PA. Our 2021 worldwide LTIR was 0.41, well below the 2020 Paperboard and Packaging Recordable Case Rate 0.90 as reported by the Bureau of Labor Statistics (2020 represents the most recent published data).

2021 Health and safety highlights

- The Macon, Georgia mill received the Award of Safety Excellence from the Pulp & Paper Safety Association.
- 30 locations (excluding Americraft and AR Packaging) had zero recordable injuries in 2021
- We completed 90 P2P assessments — touching 90 sites across our global network.
- The corporate HSE team developed standardized program templates for operating sites to use for HSE program management.
- We launched a global safety leadership training program designed to build a strong culture of safety and ownership of health and safety principles at every level in the organization. This training is a large leadership commitment as it takes 2-2.5 days to complete. This training was deployed at 90 locations.

403-1 OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT SYSTEM

Each facility in our global footprint manages a site-specific, tailored health and safety program, with the corporate team assisting in compliance and training. Individual site programs are designed to comply with local, regional, and national laws and meet GPI's MSEs. The Global HSE Team and HSE vendors conduct second or third-party audits at our operating sites to review their health and safety compliance program. The sites are accountable for correcting the findings found during the audit in a timely manner. This approach works to ensure a sense of ownership of the health and safety program and empowers site leadership teams to create a safety-focused culture. All site employees, contractors working at a site under Graphic Packaging's control, and site visitors must comply with our HSE requirements and policies.

Read more about our HSE program in the above management approach discussion and about our environmental compliance program in disclosure [307](#).

403-2 HAZARD IDENTIFICATION, RISK ASSESSMENT, AND INCIDENT INVESTIGATION

At Graphic Packaging, we focus on prevention and mitigating risks that could impact people, the environment and our business. Our sites conduct job assessments to identify and address potential HSE risks. They also conduct operations hazard assessments for routine operations and non-routine operations as well as changes to operations (e.g., start-up of new operations equipment) to identify, address potential HSE risks and improve site operating procedures and processes.

We embed open, two-way communication across our health and safety initiatives globally. We encourage all employees to report hazard mitigations, incidents, improvement opportunities, and identify issues and hazards for their local teams and operations. Further, employees are empowered to stop work if unsafe conditions develop and work with local management and HSE representatives to address the unsafe conditions. We do not tolerate retaliation against anyone who makes a good faith report, and employees or contractors will not be disciplined or penalized in any way for making a report.

Each site investigates work-related incidents and develops corrective actions as a result of incidents in the work place. Workplace incidents are entered into a web based HSE management tool and identified corrective actions are tracked through completion. Local leaders share those incidents and actions with business unit leaders, other operating sites and corporate health and safety as needed in the spirit of continuous improvement and driving a safety-minded culture.



403-3 OCCUPATIONAL HEALTH SERVICES

Graphic Packaging ensures our workers are provided with PPE including safety glasses, hearing protection, hard hats, gloves, steel toe shoes, and other PPE as necessary to work safely in our facilities.

We contract with third parties to provide occupational medicine at a few of our manufacturing sites based on location, size, and need. Occupational medicine includes emergency care, disability management, and targeted medical surveillance (such as hearing screenings) based on specific risk criteria. Depending on the location, contract providers may provide occupational medicine services on site or externally, while always maintaining the confidentiality of personal health information.

Our corporate HSE team and/or our operations also engage third-party industrial hygiene, risk, fitness for duty, and ergonomic consultants to evaluate if work conditions are safe and continuously improve health and safety processes. These efforts may include periodic noise sampling for hearing protection programs, air sampling and exposure monitoring. We also provide training so that employees and managers can identify potentially hazardous conditions that may require industrial hygiene assessment, such as air quality or ergonomic issues.

403-4 WORKER PARTICIPATION, CONSULTATION, AND COMMUNICATION ON OCCUPATIONAL HEALTH AND SAFETY

At all levels of the organization, safety and health are part of our conversations with employees. From our CEO to business and functional leaders to operations site leaders, our safety performance and top issues are reviewed and discussed to keep safety front and center. In addition to our front-line safety engagement efforts, many of our sites have safety teams composed of members from various job functions and site management levels. Local teams review safety trends and identify key topics for local communications, activities, and improvement initiatives. Safety meetings and activities typically occur monthly, but meeting frequency may vary by site and business location.

We also seek feedback from our employees and contract partners in the spirit of learning and continuous improvement. Employees participate in safety incident root cause investigations, job safety assessments, internal audits, and numerous other continuous improvement activities. Employees are encouraged to speak up and can take action. If employees observe an unsafe condition, potential hazard, or dangerous practice, they are trained and encouraged to report issues to their supervisor or local HSE representative. They can also call the confidential ALERTline to report HSE issues or concerns.

403-5 WORKER TRAINING ON OCCUPATIONAL HEALTH AND SAFETY

Individuals with HSE responsibilities are trained and prepared to share their knowledge with others across the enterprise. Our employee handbook serves as an additional resource for employees, and our operating sites have developed specific policies, standards, job procedures, and trainings to communicate our expectations on what it takes to create a safe workplace.

All operations employees and contractors under our control receive location specific occupational health and safety training. Health and safety training needs are assessed based on job role, job location, and knowledge and skill performance assessments. The frequency of the training is dependent on risk, performance, and regulatory requirements. Training topics may include employee health and safety, risk identification and mitigation, PPE use, pollution prevention, process safety, chemical handling, product stewardship, and other topics. Where needed, based on role or local requirements, training content is provided in local languages. Training effectiveness is assessed dependent on role and risk and typically include knowledge check assessments and/or in-field performance assessments.



In 2021, we launched a Global Safety Leadership Training program designed to build a strong culture of safety and ownership of health and safety principles at every level in the organization. The program consists of 11 concept modules — from the role of leadership in a positive safety culture, to the role of discipline in a safe workplace — with in-class sessions typically lasting two days. The program is designed for and completed by our operations leaders, managers and front-line leaders worldwide, and periodic refreshers are also performed. This training is also required for any new operations leaders, including those joining through acquisition, to ensure consistency across our operations.

403-6 PROMOTION OF WORKER HEALTH

We strive to keep all employees safe and healthy — whether in our facilities or at home with their families. We offer each employee a broad range of benefits, which include group medical, dental, vision, and employee assistance plans from local providers in the countries in which we operate, as well as access to insurance coverage. Read more about our benefits offerings in disclosure [401-2](#).

We also promote employee wellness through a variety of programs including providing treadmill workstations, wellness rooms, a fitness room at our headquarters office, and through our GPI FIT wellness program. GPI FIT enables our employees and their enrolled spouses to earn funds for their healthcare spending accounts based on the completion of wellness activities. Examples of activities include completing an annual physical (which can identify opportunities to improve an employee's health), participating in fitness challenges, participating in mental health wellness activities, financial wellbeing activities, and more.

Though our corporate benefits provide many avenues to voluntarily participate in health promotion activities, we find these programs work best when administered at a local level. Many of our sites promote worker well-being and encourage a healthy lifestyle in their own unique way.

403-7 PREVENTION AND MITIGATION OF OCCUPATIONAL HEALTH AND SAFETY IMPACTS DIRECTLY LINKED BY BUSINESS RELATIONSHIPS

Graphic Packaging has a multipronged approach toward preventing and mitigating occupational health and safety impacts linked by business relationships, which includes:

- An established product stewardship program to ensure that health, safety and environmental protection is an integral part of designing, manufacturing, marketing, distributing, using, recycling, and disposing of our products.
- Manufacturing facilities that meet applicable internal and external Good Manufacturing and Distribution Practice requirements for food contact and pharmaceutical packaging.
- We set HSE expectations with our contractors through our [GSCOC](#) and through the contracting process in the Americas region. See disclosure [204](#) for more information.
- Selected solutions for remediation opportunities are based on risk assessment results; highest and best land use and sustainability; full material compliance with applicable legal requirements; and ensuring alignment with our commitment to protecting people and our planet.

403-8 WORKERS COVERED BY AN OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT SYSTEM

100% of workers whose work and/or workplace is controlled by Graphic Packaging are required to comply with Company health and safety requirements.



403-9 WORK-RELATED INJURIES

Our aspiration is to achieve zero work safety incidents, ensuring that safety remains a top priority for our Company. Each month, our HSE team releases a safety report that discusses current metrics, progress advancing safety initiatives, and key learnings from any incidents investigated in the prior month. We track both lagging and leading key indicators, including first aids, near misses, safety contacts, hazard mitigations, recordables, lost times, LIFE Potential, and LIFE injuries across Graphic Packaging. Workplace incidents are entered into our HSE data management tool, and the provided metrics are derived from that data. Globally we utilize United States OSHA injury rate calculations and actual hours to normalize our rates globally. International locations also report and calculate rates as required by local safety agencies.

In 2021, Graphic Packaging employees and contractors under our control worked over 43.6 million hours, with a total recordable incident rate (TRIR) of 1.18, LTIR of 0.41, and LIFE injury rate 0.05, representing a slight increase relative to 2020. Over the past few years, we have acquired several companies with multiple locations. These sites brought their own unique challenges; however, through education and implementation of Graphic Packaging programs and initiatives we managed to keep our safety injury rates fairly flat through these integrations.

We benchmark our safety performance using manufacturing industry safety metrics reported by the US Bureau of Labor Statistics and by the AF&PA. Our 2021 worldwide TRIR and LTIR were well below the 2020 Paperboard and Packaging industry rates of 2.40 and 0.9 respectively, as reported by the Bureau of Labor Statistics (2020 represents the most recent published data).

Through conducting thorough incident investigations, we identify root causes, contributing causes and preventative and corrective actions. These investigations and outcomes allow us to continually improve our programs and adjust our HSE focus areas and efforts to reduce risk and prevent injuries in all injury categories and to specifically target injuries in our top incident categories.

Employee and contractor ¹ work-related injury metrics			
	2019	2020	2021
Total recordable incident rate ² (TRIR)	1.10	1.10	1.18
Lost time incident rate ² (LTIR)	0.35	0.31	0.41
LIFE injuries ³	8	9	10
LIFE injury ³ rate	0.04	0.05	0.05
Fatalities	0	0	0
Fatality rate	0	0	0

¹ Includes Graphic Packaging employees and contractors working under Graphic Packaging control.

² Rate is defined as the number of events per 100 workers per year and 2,000 hours per worker. For salaried employees, we assume 2,250 hours per worker.

³ LIFE Injury rate aligns with the American Forest & Paper Association significant injury and fatality methodology.

Graphic Packaging is aligned with the AF&PA significant injury metric (LIFE injury) to focus on more severe and life-threatening injuries. Injuries at this level are reviewed at the highest level of the business unit where the incident occurred. We benchmark our performance against industry standards. We remain focused on eliminating LIFE injuries and significantly reducing our LTIR by 2025 on our journey to achieving a zero-incident workplace. Our performance in 2021 was in the top half of our industry sector's performance, as published by AF&PA.



403-10 WORK-RELATED ILL HEALTH

Reporting for work-related ill health metrics is included in disclosure [403-9](#). We do not currently separate ill health cases from injuries in our metrics.

INDICATOR EMERGENCY RESPONSE

Graphic Packaging plans for the possibility that incidents may occur and that our sites are ready to respond to emergency situations. Our sites develop local emergency response plans that address risks to their specific locations, such as fire, medical, weather, natural disasters, security incidents, workplace violence, and other locally relevant topics. Site leadership is accountable for the success of each site's emergency response program. The sites conduct drills and may involve local off-site responders during drills to build capability and ensure strong relationships with local resources. The knowledge sharing during these activities helps our Company and our surrounding communities to be better prepared for any situation that may arise.

INDICATOR PANDEMIC PLANNING AND RESPONSE

The Company continued protocols to manage COVID-19 through 2021, as launched in the prior year, to ensure continuity of operations and preserve our ability to produce packaging for the global food and beverage supply chain. Front line workers continued to be at an increased risk to contract the disease due to the nature of their work. The Company adhered to our previously established standards of cleaning, social distancing, temperature checks and the use of safety gear to include masks, gloves, and barriers as appropriate. The Company encouraged employees to vaccinate through information sharing, onsite vaccination clinics, resources to find vaccine availability and scheduling, and monetary incentives in locations where legally permissible. The Company continued global monitoring of local and intercompany case rates and adhered to governmental and health department recommendations or requirements to manage our schedules and use of personal protection and social distancing. Office workers were returned on hybrid work schedules with intermittent remote work when local case rates increased to high transmission levels. Our efforts were highly successful in minimizing the impact of COVID-19 and resulted in minimal operational disruptions.



Human Rights



GRI 406, 408, 409, 412 Human rights — including non-discrimination, child labor, forced or compulsory labor, human rights assessment

103-1, 103-2 MANAGEMENT APPROACH

Graphic Packaging is committed to ensuring that people are treated fairly and with dignity and respect throughout the Company, its subsidiaries, in our supply chain and in the communities in which Graphic Packaging operates across the globe. We are committed to protecting human rights throughout our global operations, and we respect the human rights of all people in the communities where we operate and in our supply chain. Human rights include equality among people, employee well-being and security, personal freedom from persecution, privacy, and economic, social and cultural freedom.

The Company's [Code](#) and [Human Rights Policy](#) encompass the international human rights principles set forth in the UN Guiding Principles on Business and Human Rights, the UN Universal Declaration of Human Rights and its two corresponding covenants, the International Bill of Rights, the United Nations Conventions on the Rights of the Child, and the United Nations Convention on the Elimination of Discrimination against Women. Graphic Packaging's approach to its business operations is informed by the OECD Guidelines for Multinational Enterprises, the ILO's 1998 Declaration on Fundamental Principles and Rights at Work, and the UNGC. We strive to create a working environment for all employees that fosters a spirit of respect, trust, accountability, and teamwork — and we encourage our vendors and suppliers to do the same. To promote that environment in all our workplaces around the world, we have defined business practices that support human rights.

Health and safety	We are committed to providing a work environment that encourages and promotes wellness and safety for our employees, contractors, suppliers, visitors, and neighboring communities.
Equal opportunity and fair treatment	We do not discriminate based on national or ethnic origin, place of residence, gender, gender identity, sexual orientation, pregnancy, color, religion, ancestry, age, disability, marital status, genetic information, political affiliation, veteran/military status, and any other status protected by applicable law. This applies to anyone we employ or do business with, as well as anyone who applies for employment with us.
Respectful behavior	We do not tolerate conduct that would lead to a hostile, intimidating, or offensive work environment. For more details see our anti-harassment policy .
Fair and safe working environment	We respect our employees' right to work free from persecution and abusive, or otherwise unfair, treatment. We are committed to providing a work environment free from violence, threats of violence, harassment, and physical intimidation or coercion.



Wages	We comply with applicable national and local regulations related to wages, work hours, overtime, and benefits.
Workers' rights	We recognize and respect our employees' right to choose whether or not to join a labor union, participate privately in trade associations and collectively bargain in accordance with local or national law. Read more in disclosures 102-41 , 204 , and 207 .
Voluntary labor	We do not knowingly engage in forced, compulsory or bonded labor and we do not threaten workers or restrict their movement. For more details, see our policy prohibiting human trafficking .
Child labor	We do not employ workers in violation of any applicable national or local regulation governing age of employment. In addition, we do not employ workers in violation of the mandatory school age set by a country. For more details, see our policy prohibiting child labor .
Privacy	We respect the privacy of personally identifiable and other information of our employees, customers, suppliers and business associates. We are committed to proper handling of this information in accordance with our privacy policies, contractual obligations and all applicable privacy laws.
Suppliers	We want to work with suppliers whose standards with respect to human rights align with those of the Company. Our goal is to eliminate human trafficking from our supply chain and to use only those products that do not finance or benefit armed groups in the Democratic Republic of Congo and nine adjoining countries. The Company's expectations for its suppliers are fully set forth in Graphic Packaging's GSCOC .
Transparency	We report on our human rights practices annually through the UK and Australia Modern Slavery Act Transparency Statements , California Transparency in Supply Chains Act Declaration , Conflict Minerals Report , and this ESG report.

Read more about our [Code](#), policies, ethics and compliance governance, training on our policies and options for employees to report concerns in disclosures [102-16](#), [102-17](#), and [205](#). Read more about employment-related topics in disclosures [401](#), [402](#), and [407](#).

Vision 2025 social responsibility goal

As part of our 2025 ESG vision, we are committed to conducting human and labor rights due diligence assessments throughout its converting plant operations and set the following goal:

- **100% global converting plants will be in compliance with a social responsibility compliance audit.**

In 2015, we embarked on a journey to integrate auditing our commitments to safety, the environment, human rights, and diversity using a single, comprehensive compliance program. We selected the Supplier Ethical Data Exchange ([Sedex](#)) platform, an on-line collaborative platform that allows us to screen for risks, complete annual self-assessments, document third-party social responsibility audits of our facilities, and share our social responsibility program and compliance results with our customers. Sedex has developed a rigorous 4-pillar auditing program that assesses a site based on the organization's standards for labor, health and safety, environment and business ethics. All audits are conducted by a Sedex approved, independent third-party auditor.



We initially set an ambitious plan to have every converting plant under our ownership for more than a year complete the four-pillar Sedex Member Ethical Trade Audit (SMETA) by the end of 2018, and then reaudit every three years or earlier. As we acquire new facilities, we add them to the program and work to complete the SMETA audit within the first year after purchase. Currently, we only conduct SMETA audits at converting locations. Therefore mills, machinery plants, corporate offices and R&D facilities are not in-scope for this goal.

103-3 EVALUATION OF THE MANAGEMENT APPROACH

We measure the effectiveness of our human rights approach through progressing our Vision 2025 social responsibility ESG goal, annual compliance training completion rates, and through our ALERTline process as described in disclosures [102-17](#) and [205](#).

Progressing our Vision 2025 people goals

Our converting plants use the Sedex platform to conduct annual self-assessments and every three years complete a social responsibility SMETA audit to check that they are compliant with applicable local, state, or national/regional requirements, as well as Graphic Packaging policies. At year-end 2021, 71% of converting plants were compliant with completing their third-party SMETA audit on schedule. The decrease in compliance rates relative to 2020 (91%) is due to the Americraft and AR Packaging acquisitions completed in 2021. Historically, the Company has reported goal progress only for facilities owned by Graphic Packaging for one year or longer. Starting with 2021, we are simplifying our reporting methodology and will be measuring compliance considering all facilities at year-end, regardless of acquisition date. Newly acquired facilities will be included in the auditing schedule, targeting highest risk locations first, and we will continue to report progress with the goal of achieving 100% compliance by 2025.

Progress advancing our Vision 2025 Social Responsibility Goal

	2021 result	Progress toward Vision 2025
100% global converting plants will be in compliance with a social responsibility compliance audit	71%	Progressing

406-1 INCIDENTS OF DISCRIMINATION AND CORRECTIVE ACTIONS TAKEN

See disclosures [102-16](#), [102-17](#), and [205](#) for information on our policies and process for investigating ALERTline calls. Due to confidentiality reasons, we do not publicly report incident details and corrective actions.

408-1 OPERATIONS AND SUPPLIERS AT SIGNIFICANT RISK FOR INCIDENTS OF CHILD LABOR

Graphic Packaging complies with local, state, national, and regional laws prohibiting child labor. The Company does not hire individuals under the age of 15 and prohibits the hiring of individuals under the age of 18 for positions that would expose them to hazardous work or materials. At the time of hire, we request new employees provide legal proof of age, and we maintain copies of these documents in our local human resources management systems. Original documents are returned to employees. We have robust controls in place and to our knowledge no Graphic Packaging operations have significant risks of child labor.



While we do not currently monitor our suppliers' human rights practices, we set expectations with our suppliers, through our [GSCOC](#), for them to similarly respect human rights and we explicitly prohibit the use of child labor and forced or compulsory labor. The GSCOC is made available to all suppliers through our supplier portal, and we include our expectation to comply with the GSCOC in contract terms and conditions for our North America suppliers. Read more about our supplier expectations in disclosure [204](#).

409-1 OPERATIONS AND SUPPLIERS AT SIGNIFICANT RISK FOR INCIDENTS OF FORCED OR COMPULSORY LABOR

Graphic Packaging complies with local, state, national, and regional laws prohibiting all forms of forced labor, including prison labor, indentured labor, bonded labor, military labor, modern forms of slavery and any form of human trafficking. Graphic Packaging does not collect and retain employees' legal, personal identification documents, withhold wages, allow debt bondage practices, nor do we attempt to control or restrict employee movements. We have controls in place and to our knowledge no operations have risks of forced or compulsory labor.

412-1 OPERATIONS THAT HAVE BEEN SUBJECT TO HUMAN RIGHTS REVIEWS OR IMPACT ASSESSMENTS

Graphic Packaging conducts a tiered system of due diligence activities to identify and prevent human rights risks/impacts across our global business operations. We first screen countries where we have core business operations (e.g., HQ offices, mills, converting plants, and innovation centers) using the Sedex risk assessment tool Radar. The tool contains risk data based on independent and reputable sources that assess risks in the four SMETA pillars and 14 risk topics, including human and labor rights. Country risk indicators are drawn from publicly available sources and are chosen according to their coverage, reliability, comparability and relevance. Of the 129 locations reviewed (100% of our significant business operations locations), two ranked as potentially high-risk. These locations were recently acquired in 2021 and will undergo further assessment, including third-party SMETA audits, to screen for potential human rights impacts. The sites have been trained on our [Code](#) as part integration efforts, and to our knowledge no significant human rights risks are present at these locations.

Any employee with questions about our human rights policy, reviews, or additional concerns can contact their local human resources representatives, the legal department, or our confidential ALERTline as outlined in disclosure [102-17](#).

412-2 EMPLOYEE TRAINING ON HUMAN RIGHTS POLICIES OR PROCEDURES

See disclosures [102-16](#) and [205](#) for a discussion of our policies, training practices (which include human rights policies and procedures), and training metrics.

412-3 SIGNIFICANT INVESTMENT AGREEMENTS AND CONTRACTS THAT INCLUDE HUMAN RIGHTS CLAUSES OR THAT UNDERWENT HUMAN RIGHTS SCREENING

See disclosure [204](#) for a discussion on our practices sharing the Graphic Packaging GSCOC with suppliers and including the GSCOC and certain human rights provisions in supplier agreements.



Community Engagement



GRI 413 Local communities

103-1, 2 MANAGEMENT APPROACH

Graphic Packaging operates in a world that increasingly expects more from a company than providing jobs and maintaining safe operations. The communities where we operate, and where our employees live and work, also want us to be positive contributors to local initiatives. In response, our approach to stakeholder engagement is rooted in our communities. We do this not just because the vitality of our communities is important to our Company's success, but also because being a good neighbor is simply the right thing to do. These communities are our employees' hometowns, provide necessary services for our sites and their families, and provide a talent pool where the next generation of future workers are educated. We believe that listening to and investing in our communities improves the health of our business, our local environment, and our society.

Our community engagement programming is driven by [our core values](#). We focus on three pillars that guide our engagement strategy, actions, and philanthropic commitments: putting food on the table, preserving the environment, and investing in education.



Putting food on the table

Providing packaging solutions to food and beverage companies is core to our business, so it follows that we commit to fighting hunger in our communities. Through local food drives and our partnerships with the United Way and Atlanta's Community Assistance Center, we assist organizations that provide food security in our communities. Graphic Packaging sites also donate time and funds to food pantries and other groups that provide meals to those in need.



Preserving the environment

As a leading paperboard manufacturer, preserving the environment and educating others on how to do so is important for our business, communities, and future generations. We support conservation organizations such as the Georgia-Alabama Land Trust, participate in river cleanups, and engage with schools across the globe to introduce the science behind recycling paper to create new packaging. Each year, Graphic Packaging hosts Trees Into Cartons, Cartons Into Trees (TICCIT, pronounced "ticket"), a community outreach and educational program founded by the Paperboard Packaging Council. By partnering with local schools in our communities, our employee volunteers teach children the importance of renewable, sustainable resources in the paper and paperboard packaging industry. Our goal is to instill in children an appreciation and respect for the natural resources they encounter every day, and to highlight their role as stewards of those resources.



Investing in education

Educating tomorrow's leaders ensures a pipeline of talent to shape our future workforce. Our Graphic Packaging Scholarship is offered to college-aged students of our employees who are pursuing programs in paper sciences, engineering, supply chain and other curricula that support careers in our industry. In West Monroe, Louisiana, we participate in the national Manufacturing Day initiative each year, introducing high school students to a challenging and rewarding career in manufacturing. We also partner with Louisiana Tech University and Western Michigan University to develop curricula in STEM (science, technology, engineering, and math) and paper-related sciences. We mentor youth through organizations such as Boy Scouts of America and TechBridge Jobs for America's Graduates, and we are a proud supporter of Junior Achievement, a worldwide organization that unites schools and businesses to teach students how to succeed in our ever-evolving global economy, and Atlanta's Junior Achievement Discovery Center.

Each year, Graphic Packaging employees around the world volunteer with community organizations, sharing their time and talents to improve our communities. We offer paid time off for volunteerism for Company-sponsored community giving events. One of the most widespread examples of this is the TICCIT program in which employees visit elementary schools and scouting groups to teach children where fiber-based packaging comes from and the importance of recycling.

Our corporate giving program is led by our director of corporate communications and sponsored by our EVPHR. The EVPHR works with the executive leadership team and CSO in setting the strategy and guiding our approach for our community engagement program. Donations are reviewed annually by the corporate communications, human resources, and audit functions. Graphic Packaging does not set annual targets for community giving, and instead matches community engagement and giving to specific needs each year.

Graphic Packaging encourages community members to share ideas or concerns with their local operating site leadership team or to contact us through our corporate website. Requests for community support are reviewed for alignment with our corporate giving pillars as part of consideration for funding. While we prioritize supporting programs that align with our three focus pillars, our sites have flexibility to address specific local needs.

103-3 EVALUATION OF MANAGEMENT APPROACH

Graphic Packaging's independent, third-party auditors oversee our donation process to ensure compliance and make recommendations for improvement. In addition, we may audit organizations receiving funding at any time for any reason. To ensure best practices, we review our donation policies regularly. For our larger partnerships, we have access to impact reports for the communities in which we participate.

In 2021, Graphic Packaging and our employees donated more than \$724,000 to community organizations, veterans' groups, and educational activities. In the US, where we partner with the United Way, our employees generously contributed to the annual fund drive, and the Company matched a percentage of all employee donations. The match follows employees' individual designations (i.e., if an employee chooses Red Cross as a recipient, their donation to Red Cross is supplemented by the Company match), which makes their contribution even more impactful.

Community support			
	2019	2020	2021
Charitable donations (\$thousand) ¹	\$771	\$864	\$724

¹ Includes both corporate donations and employee donations through annual corporate sponsored United Way campaign.



Opportunities for Graphic Packaging employees to volunteer in our communities in 2021 were limited due to the continuing need to social distance during the pandemic. Below are highlights from our 2021 community engagement efforts:

- Graphic Packaging's annual work with TICCIT continued through virtual engagement. We provided at-home tools for our employees to engage in activities with their families to teach the importance of recycling and encourage tree-planting. We plan to resume in-person events in 2022. Since we joined the program in 2008, we have planted over 120,000 trees with students in North America, South America, and Europe.
- We granted \$55,000 in scholarships to employees' college-aged students pursuing programs in paper sciences, engineering, supply chain, and other curricula supporting careers in our industry.
- Our global operating sites provided support for local schools, front-line responders, humane societies, clothing drives, and other community groups. Many US sites also supported the annual Salvation Army Christmas stocking and angel tree programs.
- We hosted the Fast Forward program and provided instructors for Louisiana Tech's Papermaking 101. This is a one-day program held at the West Monroe mill as part of the engineering curriculum. We have also provided guest lecturers to the LA Tech College of Business.
- In 2021, West Monroe sponsored a virtual event for National Manufacturing Day due to ongoing concerns with the COVID-19 pandemic. The mill recorded information/mill overview session that was provided to the Chamber of Commerce for distribution to local junior high and high schools.

413-1 OPERATIONS WITH LOCAL COMMUNITY ENGAGEMENT, IMPACT ASSESSMENTS, AND DEVELOPMENT PROGRAMS

In the communities where we have a larger presence, we identify and engage with representatives from local governments, economic development leaders, neighborhood groups, civic organizations, religious organizations, and other community stakeholders to better understand community needs and concerns. We are interested in engaging with a diverse group of community representatives to help provide feedback that accurately reflects the thoughts and perceptions of all our neighbors surrounding our sites. Open and transparent discussion with community stakeholders provides site operations management a clear picture of what is needed in their community and guides our giving actions to focus on the greatest needs. This also provides a venue for Graphic Packaging to share information with our neighbors about our sites, ongoing activities, and future projects.

An example is the ongoing engagement activities at our Kalamazoo, Michigan, CRB recycle mill. Graphic Packaging has partnered with the Kalamazoo community in many areas including school engagement, workforce development and distressed property acquisition and clean up. Highlights from these engagements include:

- Graphic Packaging has a partnership with Michigan Works and is active with the community to recruit more residents for critical jobs. We participate annually in the job fair conducted at Kalamazoo Expo Center and also sponsors other local job fairs and works with MI Works on recruitment events and opportunities.
- Through a collaborative relationship between the Company and WMU, the university is able to enhance their paper technology curriculum. The Company provides student tours, sponsorships, staff time, and has donated equipment.
- Through the TICCIT program, Graphic Packaging provides an educational program for school aged children that highlights the renewability and sustainability of paper and paperboard packaging. Students learn about the many uses for trees and importance of recycling through a hands-on educational experience. Each student receives a tree sapling to take home and plant.

Safety is a top priority at Graphic Packaging for our employees and our communities. In 2015 the Company began purchasing distressed and blighted properties near our mill. The Company demolished several dilapidated buildings and removed more than 100,000 tons of debris (including more than 17,000 tons of hazardous material). Our massive cleanup efforts resulted in dramatic environmental and aesthetic improvements. The blighted properties were a safety hazard and also presented a surface and ground water contamination concern.



In response to a small number of complaints of odor emanating from our Kalamazoo paper mill, we have partnered with the City of Kalamazoo on an Odor Task Force to study the cause and potential mitigation options to address odors near the mill. We installed 16 Envirosuite monitoring units at our mill complex to collect data to assist in identifying potential odor source areas. We also retained a third-party to conduct an odor study to evaluate potential sources of the odors, whether at the mill or within the community. This established baseline metrics which will further inform future odor reduction measures.

Following the recommendation of an industrial wastewater engineering firm, we changed our chemical additives that were introduced to the system to minimize the potential for odors and began adding oxygen and hydrogen peroxide to our wastewater and process water. This, along with several additional actions, has helped minimize the potential for nuisance odors. Throughout the investigation process, we have worked cooperatively with local city officials, the City of Kalamazoo Public Services and the Michigan Department of Environmental, Great Lakes, and Energy (EGLE) to address community concerns. In addition, we created a website "[Kalamazoorecycles.com](https://www.kalamazoorecycles.com)" to inform community stakeholders of our progress and investigation learnings. In early 2022, we engaged in dialogue with Kalamazoo City administration and local community leaders to increase our community outreach and partnership. The results of that dialogue have culminated with the establishment of a Community Relations Liaison and the formation of a Community Advisory Board.

Read more about our community engagement activities at [Kalamazoorecycles.com](https://www.kalamazoorecycles.com) and in disclosure [303-1](#).

413-2 OPERATIONS WITH SIGNIFICANT ACTUAL AND POTENTIAL NEGATIVE IMPACTS ON LOCAL COMMUNITIES

See disclosure [413-1](#).



Appendix

IN THIS SECTION

Graphic Packaging 2021 ESG
Data Summary

Sustainability Accounting
Standards Board (SASB) Index

Task Force on Climate-
related Financial Disclosures
(TCFD) Index

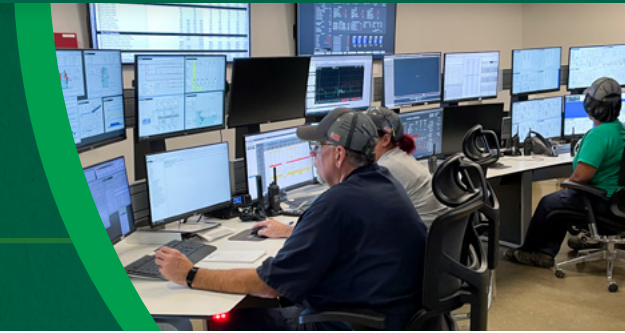
United Nations Global
Compact (UNGC)
Communication on Progress

United Nations Sustainable
Development Goals Index

Report Resources



Graphic Packaging 2021 ESG Data Summary



Performance Indicator	Baseline ¹	FY2019	FY2020	FY2021	Vision 2025 Progress
Business Overview (USD in millions)					
Economic Value Generated					
Net Sales	6,160	6,160	6,560	7,156	On track
Adjusted EBITDA ²	1,030	1,030	1,070	1,056	
Adjusted Earnings per Share²	\$0.87	\$0.87	\$1.12	\$1.14	On track
Economic Value Distributed					
Operating Costs ³		5,617	6,026	6,739	
Research and Development		9	10	10	
Payments to Providers of Capital ⁴		373	548	223	
Payments to Governments ⁵		76	42	74	
Capital Expenditures		353	646	802	
Economic Value Retained					
Change in Retained Earnings ⁶		56	-48	66	
Product Innovation					
Annual Revenue from New Product Innovations (USD in millions)		115	>120	>160	
Cumulative Revenue from New Product Innovations	0	115	-240	-300	On track
Percent Revenue from Recyclable Products	-	97%	97%	95%	On track
Percent Reduction in Low Density Polyethylene (LDPE) Use	-	4%	16%	19%	On track
Governance					
Percent Completion Code of Conduct Training — Global Salaried Employees		89%	94%	97%	
Percent Completion Anti-harassment Training — Global Salaried Employees		96%	94%	97%	
Percent Converting Plants Compliant with Completing SMETA Audit⁷	-	89%	91%	71%	Progressing
Say on Pay Voting Percentage		99%	98%	96%	



Performance Indicator	Baseline ¹	FY2019	FY2020	FY2021	Vision 2025 Progress
CEO Total Compensation Ratio		151:1	147:1	136:1	
Political Contributions and Trade Association Fees (USD in Millions)		3.0	3.0	2.7	
Social					
Employees					
Total Number Employees at Year End		-19,000	-19,000	-24,000	
Women in Total Global Workforce		21%	21%	23%	
Women in Global Leadership Team		21%	25%	29%	
Women in Executive Team		40%	27%	20%	
Women on the Board of Directors		22%	22%	30%	
Ethnic Diversity in Total US Workforce		23%	25%	29%	
Ethnic Diversity in US Leadership Team		8%	9%	7%	
Ethnic Diversity in Executive Team		20%	27%	40%	
Ethnic Diversity on the Board of Directors		0%	0%	0%	
Employee Hiring Rate ⁸		-	-	27%	
Employee Voluntary Attrition ⁸		12%	13%	19%	
Employee Involuntary Attrition ⁸		7%	8%	6%	
Percent Employees Covered by Collective Bargaining Agreements		41%	41%	52%	
Employee Engagement Survey Participation	-	-	64%	70%	On track
Training hours per employee⁹	-	-	-	6	Progressing
Revenue per Employee (USD)		324,000	346,000	296,000	
Adjusted EBITDA ² per Employee (USD)		57,000	56,000	44,000	
Stakeholder Engagement					
Charitable Giving (USD in Thousands)		771	864	724	
Charitable Giving as Percent Revenue		0.01%	0.01%	0.01%	
Health, Safety, & Environment					
Total Reportable Incident Rate (TRIR)¹⁰	0.95	1.10	1.10	1.18	No progress
Lost Time Incident Rate (LTIR)¹⁰	0.32	0.35	0.31	0.41	No progress
LIFE Injuries¹¹	-	8	9	10	No progress
LIFE Injury Rate ^{10,11}		0.04	0.05	0.05	
Fatalities		0	0	0	
Fatality Rate ¹⁰		0	0	0	
Total Number Significant Spills		0	0	0	
Percent Locations Certified to ISO 45001		5%	5%	7%	
Percent Locations Certified to ISO 14001		11%	11%	20%	



Performance Indicator	Baseline ¹	FY2019	FY2020	FY2021	Vision 2025 Progress
Environment					
Materials					
Virgin Woodfiber Consumed (metric tons)		9,874,000	9,149,000	9,155,000	
Percent Chain of Custody Certified		24%	25%	24%	
Recycled Fiber Consumed (metric tons)		991,000	1,030,000	1,226,000	
Total Paperboard Production (metric tons)	3,483,000	3,566,000	3,575,000	3,489,000	
Total Paper Mill By-products Produced (metric tons) ¹²		-	-	59,000	
Percent Recycled Paperboard Produced		25%	25%	26%	
Percent Internal Paperboard Consumption		68%	70%	72%	
Total Converted Paperboard (metric tons) ¹²		-	-	3,211,000	
Percent Recycled Paperboard Converted ¹²		-	-	33%	
CDP Forests Rating		B-	B	B	
Energy Use					
Total Purchased Electricity (MWh)		1,559,000	1,468,500	1,598,200	
Percent Renewable Purchased		0	0	0.3%	
Total Self-generated Electricity (MWh) ¹²		-	-	1,912,500	
Percent Renewable Self-generated Electricity ¹²		-	-	71%	
Self-generated Electricity Sold — Renewable Sources (MWh)		-17,200	-6,200	-7,600	
Renewable Electricity as Percent Total Electricity Use ¹²		-	-	39%	
Total Fuel Use (MWh)		24,683,800	25,027,000	25,366,900	
Percent Renewable Fuel Use		71%	69%	70%	
Total Purchased Heating (MWh)		0	0	1,500	
Total Energy Use (MWh)	26,076,700	26,242,800	26,495,500	26,966,600	
Percent Renewable Energy	68%	67%	65%	66%	
Nonrenewable Energy Intensity (MWh/\$1,000 net revenue)	1.40	1.40	1.41	1.27	On track
Mill Division Energy Use (MWh)		25,331,100	25,586,900	25,923,300	
Mills Percent Renewable Energy		70%	67%	69%	
Mills Total Energy Intensity (MWh/metric ton saleable board)		7.10	7.16	7.43	
Mills Nonrenewable Energy Intensity (MWh/metric ton saleable board)		2.17	2.33	2.32	



Performance Indicator	Baseline ¹	FY2019	FY2020	FY2021	Vision 2025 Progress
Converting Plant Energy Use (MWh)		911,700	908,600	1,043,300	
Converting Percent Renewable Energy ¹²		0.00%	0.00%	0.50%	
Converting Total Energy Intensity (MWh/metric ton converted board) ¹²		-	-	0.32	
Percent Locations Certified to ISO 50001		0%	0%	6%	
Greenhouse Gas Emissions					
Direct (Scope 1) GHG Emissions (metric tons CO ₂ e)	1,257,500	1,318,700	1,441,500	1,405,600	
Indirect (Scope 2) GHG Emissions — Market Based (metric tons CO ₂ e)	793,000	824,200	680,400	735,000	
Total Scope 1 and 2 GHG Emissions (metric tons CO ₂ e) [market based]	2,050,500	2,142,900	2,121,900	2,140,600	
Mills Scope 1 and 2 GHG Emissions (metric tons CO ₂ e) [market based]		1,777,300	1,787,000	1,784,300	
Converting Scope 1 and 2 GHG Emissions (metric tons CO ₂ e) [market based]		365,600	334,900	356,300	
US Scope 1 and 2 GHG Emissions (metric tons CO ₂ e) [market based]		2,061,200	2,037,700	2,047,200	
Outside US Scope 1 and 2 GHG Emissions (metric tons CO ₂ e) [market based]		81,700	84,200	93,400	
Direct Biogenic GHG Emissions (metric tons CO ₂ e)		5,652,200	5,543,600	5,735,200	
Total Scope 1 and 2 GHG Emissions Intensity (metric tons CO₂e/\$1,000 net sales)	0.35	0.35	0.32	0.30	On track
Total Scope 1 and 2 GHG Emissions Intensity (metric tons CO ₂ e/\$1,000 Adjusted EBITDA)	1.99	2.08	1.98	2.03	
Mills Scope 1 and 2 GHG Emissions (metric tons CO ₂ e/metric ton saleable board)		0.50	0.50	0.51	
Converting Scope 1 and 2 GHG Emissions (metric tons CO ₂ e/metric ton converted board) ¹²		-	-	0.11	
Indirect Value Chain (Scope 3) GHG Emissions (million metric tons CO ₂ e) ¹³		3.50	3.58	6.95	
Percent Emissions Covered Under Regulatory Program		>99%	>99%	>99%	
Percent Emissions Covered Under Regulatory Reporting Program		97%	97%	96%	
Percent Emissions Covered Under Regulatory Emissions-Limiting Program		2%	2%	2%	
CDP Climate Change Rating		B	A-	A-	



Performance Indicator	Baseline ¹	FY2019	FY2020	FY2021	Vision 2025 Progress
Air Emissions					
Total NOx Emissions (metric tons) ¹⁴		5,400	5,200	5,100	
Total SOx Emissions (metric tons) ¹⁴		1,400	1,800	1,300	
Total Volatile Organic Compound (VOC) Emissions (metric tons) ¹⁴		-	-	4,600	
Total Particulate Matter (PM10) Emissions (metric tons) ¹⁴		-	-	1,600	
Water Stewardship					
Total Water Withdrawals (megaliters)		162,000	153,000	150,000	
Total Discharged Water (megaliters)	142,400	153,000	135,400	136,000	
Total Water Consumption (megaliters)		26,900	32,900	27,300	
Mills Water Withdrawal Intensity (megaliters/metric ton saleable board)		0.045	0.043	0.043	
Mills Water Discharge Intensity (megaliters/metric ton saleable board)	0.041	0.043	0.038	0.039	Progressing
Number of Locations in Stressed Watersheds per Aqueduct Screen		14	14	19	
Stressed Watershed Withdrawal/ Total Withdrawals		0.21%	0.18%	0.20%	
Discharged Biological Oxygen Demand (BOD; metric tons) ¹⁵		-	-	3,770	
Discharged Total Suspended Solids (TSS; metric tons) ¹⁵		-	-	6,200	
Discharged Adsorbable Halide (AOX; metric tons) ¹⁵		-	-	130	
Discharged Total Ammonia Nitrogen (metric tons) ¹⁵		-	-	260	
CDP Water Stewardship Rating		B-	B	B	
Waste and Recycling					
Total Nonhazardous Waste Disposed (metric tons) ¹²		-	-	1,077,530	
Total Hazardous Waste Disposed (metric tons) ¹²		-	-	50,750	
Landfill ¹²		-	-	948,900	
Waste to Energy ¹²		-	-	27,210	
Other Disposal ¹²		-	-	152,170	
Percent Generated Waste Diverted for Recycling ¹²		-	-	52%	



Performance Indicator	Baseline ¹	FY2019	FY2020	FY2021	Vision 2025 Progress
Recycled Fiber (metric tons) ¹²		-	-	1,160,000	
Percent Waste Fiber Recovery for Recycling¹²		-	-	95%	On track
Other Recycled Materials ¹²		-	-	42,000	
Percent Converting Plants with Waste Diversion Program		100%	100%	89%	Progressing
Supply Chain					
Percent Facilities Compliant with Fiber Certification Standard⁷		100%	100%	93%	On track
Percent Audits Completed for Targeted Wood Suppliers		-	63%	112%	
Percent New Wood Suppliers Screened for Risk ¹²		-	-	100%	
Percent Global Employees Completing Modern Slavery Awareness Training		99%	-	90%	
Spend with GPI Defined Diverse Supplier Group (\$million USD) ¹⁶		\$161	\$177	\$182	
Year Over Year Change in Spend		13%	10%	3%	
Spend with All Diverse and Small Supplier Groups (\$million USD) ^{12, 17}		-	-	\$260	
Percent of North America Addressable Spend ¹²		-	-	7.8%	
Total Number Small and/or Diverse Suppliers ¹²		-	-	661	
EcoVadis Rating		Bronze	Bronze	Gold	

Footnotes

¹ Baseline year for financial goals is 2019, the LDPE and recyclable product revenue goals is 2018, and for all other goals is 2016.

² Adjusted EBITDA and Adjusted EPS represent non-GAAP measures.

³ Defined as cost of good sold, selling, general, and administrative expense, and restructuring, asset-related, and other charges, as disclosed in the Company's Annual Reports on Form 10-K for the reporting year. Excludes R&D costs.

⁴ Defined as payments to providers of capital as dividends to all shareholders, plus interest payments made to providers of loans (net of amounts capitalized), and purchases of treasury stock as disclosed in the Company's Annual Report on Form 10-K for the year.

⁵ Defined as all of the organization's taxes plus related penalties paid at the international, national, and local levels. Organization taxes can include corporate, income, and property — net of refunds. Excludes deferred taxes.

⁶ Economic Value Retained reflects the change in retained earnings, as disclosed in the Company's Annual Reports on Form 10-K for the reporting year. Economic Value Retained does not represent Economic Value Generated less Economic Value Distributed, as not all financial impacts are reflected within the metrics included above. Refer to the Company's Annual Reports on Form 10-K for the years ended December 31, 2019, 2020, and 2021 for further information.

⁷ Starting in 2021, goal reporting methodology and will measure progress considering all facilities at year-end, regardless of acquisition date.

⁸ Data are for Legacy US Graphic Packaging only. Does not include 2021 acquisitions.

⁹ Includes hours training per employee enrolled in GPI University. In-person training not included in reported total.

¹⁰ Rate is defined as number of events per 100 workers per year. Includes Graphic Packaging employees and contractors working under our control.

¹¹ LIFE injuries defined as serious life threatening or life altering injuries (e.g., those that result in a fatality, loss of limb or function, hospitalization, brain injury, bone injury, burns, or significant wounds requiring treatment).

¹² New reporting metric for 2021.

¹³ Updated and expanded scope 3 reporting methodology in 2021.

¹⁴ Reported for mills division only.

¹⁵ New reporting metric for 2021. Includes virgin mills only.

¹⁶ Defined by Graphic Packaging as woman, minority, or disabled/disabled-veteran owned supplier. Includes both certified and self-declared diverse suppliers.

¹⁷ Graphic Packaging defined diverse supplier group plus spend with small businesses, LGBTQ+, veteran, and other diverse supplier groups. Includes both certified and self-declared diverse suppliers.



Sustainability Accounting Standards Board (SASB) Index

This index outlines Graphic Packaging's alignment with the recommended metrics and disclosures for the SASB Containers and Packaging standard. All data is for the year ended on December 31, 2021, unless otherwise noted.

SASB TOPIC/ CODE	ACCOUNTING METRIC	RESPONSE
Greenhouse Gas Emissions		
RT-CP-110a.1	Gross global Scope 1 emissions, percentage covered under emissions-limiting regulations	GRI 302, 305 Climate change 2% of Graphic Packaging's emissions are covered under emissions-limiting regulations.
RT-CP-110a.2	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	GRI 302, 305 Climate change 2022 CDP Climate Change Response
Air Quality		
RT-CP-120a.1	Air emissions of the following pollutants: (1) NO _x (excluding N ₂ O) (2) SO _x (3) Volatile organic compounds (VOCs) (4) Particulate matter (PM)	GRI 305-7 Other air emissions
Energy Management		
RT-CP-130a.1	(1) Total energy consumed (2) Percentage grid electricity (3) Percentage renewable (4) Total self-generated energy	(1) 97,079,760 GJ total energy consumed, (2) 100% of purchased electricity is sourced from the grid, (3) 66% of total energy consumed was from renewable fuel or purchased energy sources, (4) 6,885,000 GJ self-generated electric power, note not all of this electricity is consumed by Graphic Packaging GRI 302, 305 Climate change



SASB TOPIC/ CODE	ACCOUNTING METRIC	RESPONSE
Water Management		
RT-CP-140a.1	(1) Total water withdrawn (2) Total water consumed Percentage of each in regions with High or Extremely High Baseline Water Stress	GRI 303 Water and effluents <1% water withdrawal at sites with high or extremely high baseline water stress per Aqueduct Tool water risk assessment.
RT-CP-140a.2	Description of water management risks and discussion of strategies and practices to mitigate those risks	GRI 303 Water and effluents 2022 CDP Water Security Response
RT-CP-140a.3	Number of incidents of non-compliance associated with water quality permits, standards, and regulations	No incidents in 2021
Waste Management		
RT-CP-150a.1	Amount of hazardous waste generated, percentage recycled	Waste is characterized according to local regulatory requirements. GRI 306 Waste
Product Safety		
RT-CP-250a.1	Number of recalls issued, total units recalled	Zero
RT-CP-250a.2	Discussion of process to identify and manage emerging materials and chemicals of concern	Graphic Packaging has processes in place to review, and approve, raw materials used in our manufacturing operations. Our packaging products are traceable, ensuring quick and accurate investigations. We are active participants in industry groups, engage with knowledge leaders, and have a solid relationship with regulators and customers to ensure that we are aware of emerging trends regarding material safety and emerging chemicals of concern. GRI 416 Product stewardship



SASB TOPIC/ CODE	ACCOUNTING METRIC	RESPONSE														
Product Lifecycle Management																
RT-CP-410a.1	Percentage of raw materials from: (1) Recycled content (2) Renewable resources (3) Renewable and recycled content	GRI 301, 304 Sustainable forestry														
RT-CP-410a.2	Revenue from products that are reusable, recyclable, and/or compostable	82% of revenue from converted fiber-based packaging. Paperboard sales not included.														
RT-CP-410a.3	Discussion of strategies to reduce the environmental impact of packaging throughout its lifecycle	GRI 301, 304 Sustainable forestry GRI 306 Waste GRI 204, 308, 414 Supply chain sustainability Product innovation														
Supply Chain Management																
RT-CP-430.1	Total wood fiber procured, percentage from certified sources	GRI 301, 304 Sustainable forestry														
RT-CP-430.2	Total aluminum purchased, percentage from certified sources	258 Metric tons; 0% certified														
SASB TOPIC/ CODE	ACTIVITY METRIC	DISCLOSURE														
RT-CP-000.A	Amount of production, by substrate	GRI 301, 304 Sustainable forestry														
RT-CP-000.B	Percentage of production as: (1) Paper/Wood (2) Glass (3) Metal (4) Plastic	<table><tr><th colspan="2">Percentage of production</th></tr><tr><th>Domain</th><th>%</th></tr><tr><td>(1) Paper/Wood</td><td>96%</td></tr><tr><td>(2) Glass</td><td>0%</td></tr><tr><td>(3) Metal</td><td>1%</td></tr><tr><td>(4) Plastic</td><td>3%</td></tr><tr><td>Total</td><td>100%</td></tr></table>	Percentage of production		Domain	%	(1) Paper/Wood	96%	(2) Glass	0%	(3) Metal	1%	(4) Plastic	3%	Total	100%
Percentage of production																
Domain	%															
(1) Paper/Wood	96%															
(2) Glass	0%															
(3) Metal	1%															
(4) Plastic	3%															
Total	100%															
RT-CP-000.C	Number of employees	GRI 102-8 Information on employees														



Task Force on Climate-related Financial Disclosures (TCFD) Index



Given the immense affect climate change poses for business, now and in the future, the Financial Stability Board's Task Force on Climate-related Financial Disclosures (TCFD) was established to help identify the information needed by investors, lenders, and insurance underwriters to appropriately assess and price climate-related risks and opportunities.

In alignment with the TCFD recommendations, the following index provides links to Graphic Packaging's key disclosures on climate change, including our 2022 CDP climate change response and this 2021 ESG report.

DISCLOSURE FOCUS AREA	RECOMMENDED DISCLOSURE	RESPONSE
Governance		
Disclose the organization's governance around climate-related risks and opportunities.	A) Describe the board's oversight of climate-related risks and opportunities.	2022 Proxy Statement, pp. 8-9 2022 CDP Climate Change Response : C1 GRI 102-18 Governance structure GRI 302, 305 Climate change
	B) Describe the management's role in assessing and management risks and opportunities.	2022 CDP Climate Change Response : C1 GRI 102-18, 102-19 Governance structure and delegating authority GRI 302, 305 Climate change
Strategy		
Disclose the actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.	A) Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term.	2022 CDP Climate Change Response : C2 GRI 102-29, 102-30 Assessing and managing ESG impacts and effectiveness of risk management process GRI 102-46 Defining report content and topic boundaries
	B) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.	2022 CDP Climate Change Response : C2, C3, C12 GRI 102-29, 102-30 Assessing and managing ESG impacts and effectiveness of risk management process GRI 102-46 Defining report content and topic boundaries



DISCLOSURE FOCUS AREA	RECOMMENDED DISCLOSURE	RESPONSE
	C) Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	2022 CDP Climate Change Response: C3 GRI 102-29, 102-30 Assessing and managing ESG impacts and effectiveness of risk management process GRI 102-46 Defining report content and topic boundaries The Company has committed to establish and develop Science-Based Targets (SBTs) by the end of 2023.
Risk Management		
Disclose how the organization identifies, assesses, and manages climate-related risks.	A) Describe the organization's processes for identifying and assessing climate-related risks.	2022 Proxy Statement, pp. 8-9 2022 CDP Climate Change Response: C2, C12 GRI 102-29, 102-30 Assessing and managing ESG impacts and effectiveness of risk management process GRI 102-46 Defining report content and topic boundaries
	B) Describe the organization's processes for managing climate-related risks.	2022 Proxy Statement, pp. 8-9 2022 CDP Climate Change Response: C1, C2, C12 GRI 102-29, 102-30 Assessing and managing ESG impacts and effectiveness of risk management process GRI 102-46 Defining report content and topic boundaries
	C) Describe how processes for identifying, assessing and managing climate-related risks are integrated into the organization's overall risk management.	2022 CDP Climate Change Response: C1, C2 GRI 102-29, 102-30 Assessing and managing ESG impacts and effectiveness of risk management process GRI 102-46 Defining report content and topic boundaries



DISCLOSURE FOCUS AREA	RECOMMENDED DISCLOSURE	RESPONSE
Metrics and Targets		
Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities.	A) Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.	2022 CDP Climate Change Response : C4, C5, C6, C7, C8, C11 GRI 302, 305 Climate change
	B) Disclose Scope 1, Scope 2 and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.	2022 CDP Climate Change Response : C4, C5, C6 GRI 302, 305 Climate change
	C) Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.	2022 CDP Climate Change Response : C4 GRI 302, 305 Climate change



United Nations Global Compact (UNGC) Communication on Progress



On November 2, 2021, Graphic Packaging became a signatory to the United Nations Global Compact (UNGC), committing to act in accordance with the 10 principles of the compact, covering human rights, labor, the environment and anti-corruption, and to take action in support of broader United Nations goals. As such, we committed to annual reporting on our progress toward implementing the UNGC's 10 Principles. This 2021 ESG Report serves as our annual UNGC Communication on Progress, describing our actions to integrate the UNGC and its principles into our business strategy, culture and daily operations.



This is our **Communication on Progress** in implementing the Ten Principles of the **United Nations Global Compact** and supporting broader UN goals.

We welcome feedback on its contents.

Graphic Packaging applies the standards of the UNGC to our [Code](#); our business ethics policies; our human resources policies; our worldwide health, safety and environment policy; and our supply chain sustainability program. Our policies can be found on our [website](#). Read more about our implementation strategy for each of the UNGC principles in the section(s) referenced in the following index and in our [CEO Message](#) at the front of this report.

“I am excited to renew our pledge of ongoing support to the Ten Principles of the United Nations Global Compact. Though we have more work ahead of us, I am proud of the advancements we’ve made in our first year and the foundation we’ve built for the future. I invite you to read about our progress and join us on our journey toward a more sustainable future.”

Michael P. Doss,
Chief Executive Officer

PRINCIPLE	PRINCIPLE DESCRIPTION	PROGRESS
Human rights		
Principle 1	Businesses should support and respect the protection of internationally proclaimed human rights.	GRI 406, 408, 409, 412 Human rights GRI 413 Community engagement
Principle 2	Make sure that they are not complicit in human rights abuses.	GRI 204, 308, 414 Supply chain sustainability GRI 205, 206 Business ethical conduct



Labor		
Principle 3	Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining.	GRI 102-41 Employees covered by collective bargaining agreements
Principle 4	The elimination of all forms of forced and compulsory labor.	GRI 402, 407 Labor rights
Principle 5	The effective abolition of child labor.	GRI 403 Safety
Principle 6	The elimination of discrimination in respect of employment and occupation.	GRI 404, 405, 410 Engaged employees
		GRI 406, 408, 409, 412 Human rights
		GRI 205, 206 Business ethical conduct
		GRI 102-16 Values, principles, standards, and norms of behavior
		GRI 204, 308, 414 Supply chain sustainability
RECOMMENDED DISCLOSURE		RESPONSE
Environment		
Principle 7	Businesses should support a precautionary approach to environmental challenges.	GRI 102-11 Precautionary principle or approach
Principle 8	Undertake initiatives to promote greater environmental responsibility.	GRI 301, 304 Sustainable forestry
Principle 9	Encourage the development and diffusion of environmentally friendly technologies.	GRI 302, 305 Climate change
		GRI 303 Water and effluents
		GRI 306 Waste
		SASB Index
		2022 CDP Responses: Climate Change, Forests, and Water Security
Anti-corruption		
Principle 10	Businesses should work against corruption in all its forms, including extortion and bribery.	GRI 205, 206 Business ethical conduct
		GRI 102-16 Values, principles, standards, and norms of behavior



United Nations Sustainable Development Goals Index



Graphic Packaging is inspired by the global vision that the United Nations Sustainable Development Goals (UN SDGs) represents and works to advance these goals within our sphere of influence. We share the UN's belief that inclusive and sustainable economic growth is essential for prosperity and that companies should contribute to positive change. In keeping with our commitment to the United Nations Global Compact (UNGC), we mapped our Vision 2025 ESG goals to the UN SDGs and their targets to better understand where we can have an impact and add value.

Our targeted impact

All 17 of the UN SDGs are important; however, our level of engagement and our ability to influence each of them varies. Based on the [material topics](#) of our business, the scope of our operations and the interest of our stakeholders, we believe we have the greatest level of influence in addressing and advancing action on four goals — SDGs 8, 12, 13, and 15 — and have identified the targets within each goal most closely connected to our activities.

PROMOTE SUSTAINED, INCLUSIVE, AND SUSTAINABLE ECONOMIC GROWTH, FULL AND PRODUCTIVE EMPLOYMENT, AND DECENT WORK FOR ALL



Targets
8.4, 8.5, 8.6,
8.7, 8.8

At Graphic Packaging, we know our economic success contributes to the success of our employees and their families, our communities, and our partners around the world. By growing our business in a responsible way, we continue to challenge conventional packaging and contribute to a sustainable future. Our collaborative, creative, team members drive the change and innovation central to our success. We work diligently to create a safe environment for our employees, where workers' and human rights are protected, and build a culture that embodies diversity, equity, and inclusion. We also work to ensure decent working conditions in our supply chains, without child labor or different forms of forced labor.

Learn more:

[Climate change](#)

[Community engagement](#)

[Engaged employees](#)

[Health and safety](#)

[Human rights](#)

[Labor rights](#)

[Supply chain sustainability](#)

[Waste](#)

[Water and effluents](#)



ENSURE SUSTAINABLE CONSUMPTION AND PRODUCTION PATTERNS



Targets 12.2,
12.3, 12.4,
12.5, 12.6

Sustainable growth means shifting from linear, resource intense business models to more circular approaches. We do this by integrating life-cycle thinking into the design of our products, considering each product stage from raw materials through end-of-life use. We make products using renewable fiber-based materials and that are designed to be recycled. Our resource-efficient operations are constantly improved to minimize energy consumption and environmental impact and to recover waste materials for beneficial reuse. Together with our customers we can help reduce food and material waste, raise the level of recycling, and make sustainable production, consumption, and packaging a reality.

Learn more:

[Climate change](#)

[Sustainable forestry](#)

[Product innovation](#)

[Waste](#)

[Supply chain sustainability](#)

[Water and effluents](#)

TAKE URGENT ACTION TO COMBAT CLIMATE CHANGE AND ITS IMPACTS



Targets
13.1, 13.2

The packaging sector plays a central role in the transition to a low-carbon economy due to the current and future demand for recyclable packaging made from renewable, non-fossil-based materials. Graphic Packaging's fiber-based packaging is currently produced using approximately 70% renewable fuels, and can provide a lower carbon footprint package than other materials, such as plastic, metal, and glass. Our sustainable forestry management approach helps keep forests intact, providing a carbon capture climate benefit. Graphic Packaging values collaboration to drive change and works with policymakers, our value chain, and other organizations to encourage collective action to reduce GHG emissions and the commercial development and use of lower-carbon forms of energy.

Learn more:

[Climate change](#)

[Product innovation](#)

[Supply chain sustainability](#)

PROTECT, RESTORE, AND PROMOTE SUSTAINABLE USE OF TERRESTRIAL ECOSYSTEMS, SUSTAINABLY MANAGE FORESTS, COMBAT DESERTIFICATION, AND HALT AND REVERSE LAND DEGRADATION AND HALT BIODIVERSITY LOSS



Targets
15.2, 15.5

Forests are the foundation for our products and the starting point for our value chain. They provide us with the renewable material we need to continue creating products that contribute to a sustainable society. We are dedicated to treating forests and water responsibly, and to protecting ecosystems and biodiversity. We ensure that the wood we use is responsibly grown and that wildlife in the forests is being protected. Responsible forestry also provides a considerable climate benefit and is of great value for local society.

Learn more:

[Community engagement](#)

[Supply chain sustainability](#)

[Product innovation](#)

[Sustainable forestry](#)



Additionally, our ESG strategy aligns with several other SDGs where we have a lesser though important ability to influence. We are committed to doing our part to addressing the following:

 Target 2.1 The Company's philanthropic efforts provide donations to food pantries in our local communities, and our products help protect food and beverages during distribution and storage. Learn more: Community engagement	 Targets 6.3, 6.4, 6.5 Graphic Packaging focuses on using water responsibly and understanding water needs in the watersheds where we operate. We work to reduce the amount of water we withdraw and responsibly return the water we borrow back to the environment. In addition, the Company provides safe drinking water and sanitation/handwashing services at all facilities globally. Learn more: Community engagement Supply chain sustainability Water and effluents
 Targets 3.4, 3.5, 3.7, 3.8 Graphic Packaging provides health and wellness benefits to employees to ensure healthy lives for employees and their families. Learn more: Engaged employees	 Target 7.3 Graphic Packaging sources more than 65% of our energy from renewable sources and is actively working to increase the use of renewable energy and improve energy efficiency in our facilities worldwide. Learn more: Climate change
 Targets 4.3, 4.4, 4.5 Graphic Packaging provides training and development opportunities for our employees. We also support education programs through our corporate philanthropic initiatives. Learn more: Community engagement Engaged employees	 Targets 10.2, 10.3 Graphic Packaging does not tolerate discrimination or harassment in our Company or supply chain and is proud to be an equal opportunity employer. Learn more: Engaged employees Human rights Supply chain sustainability



Targets
5.1, 5.5

Graphic Packaging's commitment to diversity and inclusion promotes gender equity for our employees and across our supply chain. We set annual targets to increase year over year spend with women-owned and other diverse businesses.

Learn more:

[Engaged employees](#)

[Human rights](#)

[Supply chain sustainability](#)



Targets
16.2, 16.5,
16.7

Our [Code](#), policies, and Company values ensure ethical and equitable business practices and a respectful workplace. Our [GSCOC](#) sets similar expectations with our suppliers and contractors.

Learn more:

[Business ethical conduct](#)

[Engaged employees](#)

[Human rights](#)

[Supply chain sustainability](#)

[Values, principles, standards,
and norms of behavior](#)



Report Resources



Governance Documents

[2021 Annual Report on Form 10-K](#)

[2022 Proxy Statement](#)

[Corporate Disclosure Policy](#)

[Corporate Governance Documents](#)

[Policy Regarding Related Party Transactions](#)

Policies

[Anti-Bribery and Anti-Corruption Policy](#)

[Anti-Harassment Policy](#)

[Anti-Slavery and Human Trafficking Policy](#)

[Child Labor and Remediation Policy](#)

[Code of Business Conduct & Ethics](#)

[Equal Employment Opportunity Policy](#)

[Global Supplier Code of Conduct](#)

[Human Rights Policy](#)

[Policy Statement on Conflict Minerals](#)

[Privacy Policies](#)

[Sustainable Forestry Policy](#)

[Worldwide Policy for Health, Safety, and Environment](#)

Reporting Resources

[2021 Employer Information Report \(EEO-1\)](#)

[2022 CDP Climate Change Response](#)

[2022 CDP Forests Response](#)

[2022 CDP Water Security Response](#)

[California Transparency in Supply Chains
Act — Declaration](#)

[Graphic Packaging Holding Company Conflict Minerals
Report 2021](#)

[Modern Slavery Act Transparency Statements](#)

[Prior Years ESG Reports](#)



Acronyms

AF&PA	American Forest & Paper Association	DfE	Design for the environment
AFF	American Forest Foundation	DO	Dissolved oxygen
AFTS	American Tree Farm System	E&C	Ethics and compliance
AOX	Adsorbable organic halogen compounds	EBITDA	Earnings before interest, taxes, depreciation, and amortization
BMP	Best management practice	ECMA	European Carton Makers Association
BOD	Biological oxygen demand	EEO	Equal employment opportunity
BRC	British Retail Consortium	EGLE	Michigan Department of Environmental, Great Lakes, and Energy
BRG	Business resource groups	eGRID	Emissions & Generation Resource Integrated Database
CDP	Carbon Disclosure Project	ELT	Executive leadership team
CEFLEX	A circular economy for flexible packaging	EMEA	Europe, Middle East, Africa
CEO	Chief executive officer	EMF	Ellen MacArthur Foundation
CH₄	Methane	ERM	Enterprise risk management
CHP	Combined heat and power	ESG	Environmental, social and governance
CIO	Chief information officer	EU	European Union
CISO	Chief information and security officer	EVP	Executive vice president
CITES	Convention of International Trade in Endangered Species or Wild Fauna and Flora	EVPGC	Executive vice president, general counsel
CMA	Compost Manufacturing Alliance	EVPHR	Executive vice president, human resources
CMDC	Compensation and Management Development Committee	FEC	Federal Election Commission
CO₂	Carbon dioxide	FECV	Forests with exceptional conservation value
CO₂e	CO ₂ equivalent	FPI	Foodservice Packaging Institute
COC	Chain of custody	FSC	Forest Stewardship Council
Code	Code of conduct	FSSC	Food Safety Systems Certification
COE	Center of excellence	FTC	Federal Trade Commission
CPG	Consumer packaged goods	GA EPD	Georgia Environmental Protection Division
CRB	Coated recycled paperboard	GDPR	General data protection regulation
CSO	Chief sustainability officer	GFSI	Global Food Safety Initiative
CUK	Coated unbleached kraft paperboard	GHG	Greenhouse gas
DAF	Dissolved air flotation	GIS	Geographic information system
DDS	Due diligence system	GMO	Genetically modified organisms
DEFRA	United Kingdom Department for Environment, Food, and Rural Affairs	GMP	Good manufacturing practices



GPI U	Graphic Packaging University	LTIR	Lost time injury rate
GPI-PAC	Graphic Packaging Political Action Committee	MAP	Modified atmosphere barrier
GPK	Graphic Packaging International, LLC's New York Stock Exchange ticker symbol	MiDiCo	Michigan Diversity Council
GRI	Global Reporting Initiative	ML	Megaliter
GSCOC	Global supplier code of conduct	MRR	Mandatory reporting regulation
GWP	Global warming potential	MSEs	Minimum safety expectations
HCFC	Hydrochlorofluorocarbon	MWh	Megawatt hour
HCV	High conservation values	N₂O	Nitrous oxide
HFC	Hydrofluorocarbons	NA	North America
HR	Human resources	NASF	National Association of State Foresters
HSE	Health, safety, and environmental	NCASI	National Council for Air and Stream Improvement, Inc.
HVAC	Heating, ventilation, and air conditioning	NCGC	Nominating and Corporate Governance Committee
IEA	International Energy Agency	NF₃	Nitrogen trifluoride
ILO	International Labour Organization	NGOs	Nongovernmental organizations
IPA	Isopropyl alcohol	NIST	National Institute of Standards and Technologies
IPCC AR5	Intergovernmental Panel on Climate Change, Fifth Assessment Report	NMSDC	National Minority Supplier Development Council
ISAE	International Standard for Assurance Engagements	NOV	Notice of violation
ISO	International Organization for Standardization	NO_x	Nitrogen oxides
IT	Information technology	NPDES	National pollutant discharge elimination system
IUCN	International Union for Conservation of Nature	OECD	Organization for Economic Cooperation and Development
K2	Kalamazoo Line 2	OFAC	Office of Foreign Assets Control
LCA	Life cycle assessment	OHSA	Occupational Safety and Health Administration
LDA	Lobbying Disclosure Act	P2P	Procure to pay or Peer to peer
LDPE	Low-density polyethylene	PAC	Political Action Committee
LED	Light-emitting diode	PAD-US	Protected Areas Database of the United States
LGBTQ+	Lesbian, gay, bisexual, transgender, queer, plus others	PCR	Post-consumer recycled
LIFE	Life altering injuries, those that result in a fatality, loss of limb or function, hospitalization, brain injury, bone injury, burns, or significant wounds requiring treatment	PE	Polyethylene



PEFC	Program for the Endorsement of Forest Certification	SO_x	Sulfur oxides
PET	Polyethylene terephthalate	STEM	Science, technology, engineering, and math
PFC	Perfluorocarbons	SVPS	Senior vice president, supply chain
PIR	Post-industrial recycled	TCFD	Task Force on Climate-Related Financial Disclosures
PLA	Polylactic acid	TICCIT	Trees into carbons, cartons into trees
PM1	Paper machine 1	TMDL	Total maximum daily load
PM10	Particulate matter	TRIR	Total recordable incident rate
PMP	Performance management process	TSS	Total Suspend Solids
POTW	Publicly owned treatment works	UK	United Kingdom of Great Britain and Northern Ireland
PPE	Personal protective equipment	UN SDGs	United Nations Sustainable Development Goals
PSU	Performance stock units	UNGC	United Nations Global Compact
QA	Quality assurance	US	United States
QC	Quality control	US EPA	United States Environmental Protection Agency
QMS	Quality management system	USD	United States Dollar
QSRs	Quick service restaurants	USDA	United States Department of Agriculture
R&D	Research & development	UV	Ultraviolet
RCRA	Resource Conservation and Recovery Act	VOC	Voice of the customer
RMP	Residential mixed paper	VOC	Volatile organic compound
RPA	Recycled Paperboard Alliance	VPGA	Vice president, government affairs
RPTA	Recycled Paperboard Technical Association	VPHSE	Vice president, health safety environment
RSU	Restricted stock units	VPP	Vice president, procurement
SASB	Sustainability Accounting Standards Board	VPSC	Vice president, supply chain
SBS	Solid bleached sulfate paperboard	WBENC	Women's Business Enterprise National Council
SBT	Science-based target	WMU	Western Michigan University
SEC	Securities and Exchange Commission	WRI	World Resources Institute
SF₆	Sulfur hexafluoride	XP	Xccelerated performance
SFI	Sustainable Forestry Initiative		
SIC	Sustainable Forestry Initiative Implementation Committee		
SMETA	Sedex Members Ethical Trade Audit		
SOAR	Scoping ideas, opportunity development, align expectations and release to market		
SOP	Sorted office paper		



Graphic Packaging
INTERNATIONAL