

2022 ESG Report

**Better,
Every Day**



Graphic Packaging
INTERNATIONAL





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MESSAGE FROM

Michael P. Doss

President and Chief Executive Officer

While the pandemic temporarily slowed segments such as travel, it accelerated the trend for “on demand” products and transformed modern consumption habits. As the food, beverages, and consumer goods products we use every day are ordered online, delivered to the home, and consumed on the go, the need for durable packaging has reached an all-time high. Pressure to

preserve the planet’s resources also continues to mount. Consumers are demanding higher quality, greater convenience, and conservation. Increasingly, they expect brands to deliver better products that generate less waste and reduce environmental impact.

In this fast-paced economy, our purpose makes an even greater impact: We package life’s everyday moments for a renewable future. We work relentlessly to develop resource-efficient and easily recyclable packaging solutions that use natural resources responsibly. We enable our customers — the world’s leading household brands — to shift toward more recyclable packaging. In addition to helping them meet their sustainability goals, we help shape how they think about packaging their products for the future.

For us, progress means delivering positive outcomes for our people, our planet, our partners, and ultimately the growth and sustainability of our company.

Our 2025 environmental, social, and governance (ESG) goals define our commitment to investing in

innovation, collaborating with our partners, supporting our people, and remaining good stewards of our planet. In 2022, approximately 94% of our product revenues came from fiber-based products made from responsibly sourced, renewable tree fibers.

In 2021, 70% of our workforce participated in our employee engagement survey. In 2022, we began to address our opportunities including improving communications and helping employees see the connection between their work and the company’s success.

We achieved our goals to reduce greenhouse gas (GHG) emissions intensity and nonrenewable energy intensity through investments in efficient manufacturing and expanding the scale of our packaging operations. We ramped up production at our new Kalamazoo recycled paperboard machine, which is predicted to reduce the GHG emissions intensity associated with coated recycled paperboard (CRB) production by 3% versus 2021 performance.

We continue to support the 10 Principles of the UN Global Compact (UNGC). We integrate the UN Guiding Principles into our business strategy,

culture, and operations, and we contribute to UN goals, particularly the Sustainable Development Goals (SDGs).

In 2021, we submitted our formal letter of intent to the Science Based Targets initiative (SBTi) to set carbon emissions goals in line with the goals of the Paris Agreement and UN SDG 13. We then took action, developing targets in 2022 and submitting our proposal to the SBTi in early 2023 for their review.

We are making progress every day, and we know the road ahead is filled with challenges and opportunities that we can tackle together with our partners — our customers, suppliers, shareholders and other stakeholders.

This report shares the efforts our company has taken throughout 2022 in support of these initiatives and to embed ESG more formally into our business practices. I invite you to read our report and learn about our efforts toward a more sustainable business and renewable future.



Who We Are

We package life's everyday moments for a renewable future.

Headquartered in Atlanta, Georgia, Graphic Packaging International provides fiber-based consumer packaging that helps our customers achieve their sustainability goals and achieve brand loyalty.

Our product portfolio starts with renewable and/or 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, actively working to decrease our environmental footprint, and giving back to the communities where we live and work.

With global operations spanning 27 countries, we are one of the largest providers of fiber-based consumer packaging to the world's most recognized brands of food, beverage, foodservice, household, healthcare, beauty, and pet care products.

Our designers create new, innovative packaging concepts that solve current waste challenges and delight consumers. We then bring those solutions to life by first making the paperboard at our mills and then we transform it — print, cut, fold, and glue — into folding cartons and other packaging solutions at our facilities.



27
countries



24,000+
employees

CORE VALUES



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. 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 meet 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.

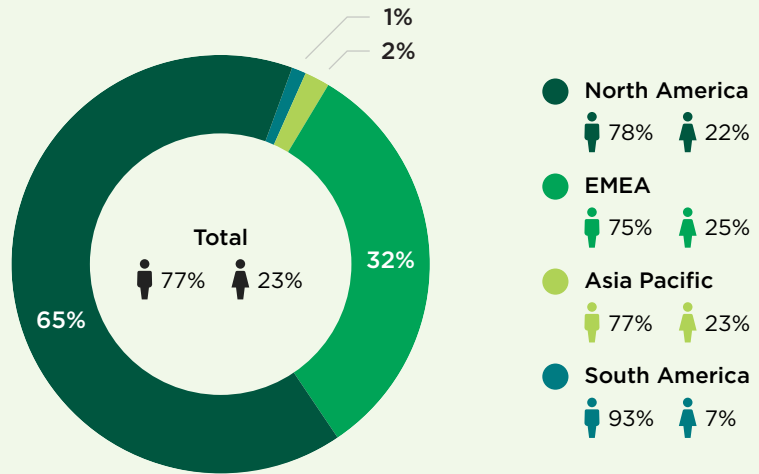


Teamwork

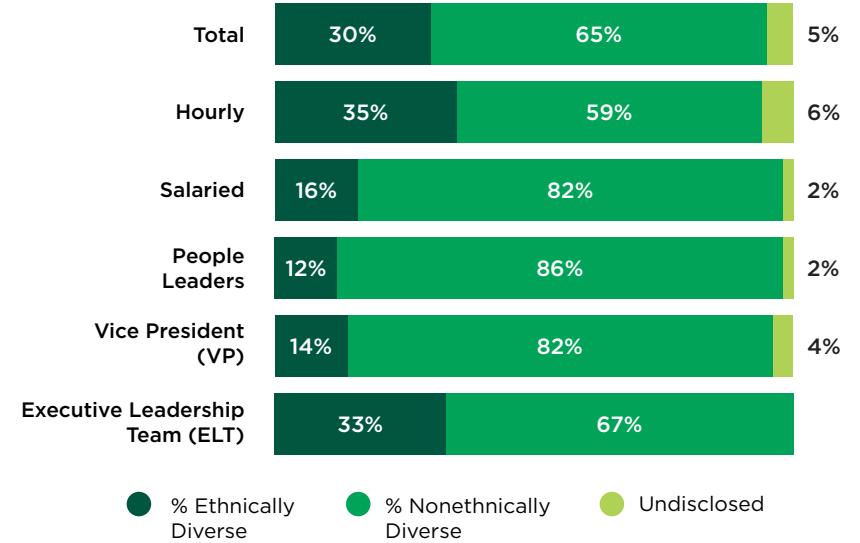
The strongest teams share common goals and work together to achieve them. We encourage everyone's involvement, support each other's ideas, and help others without being asked.



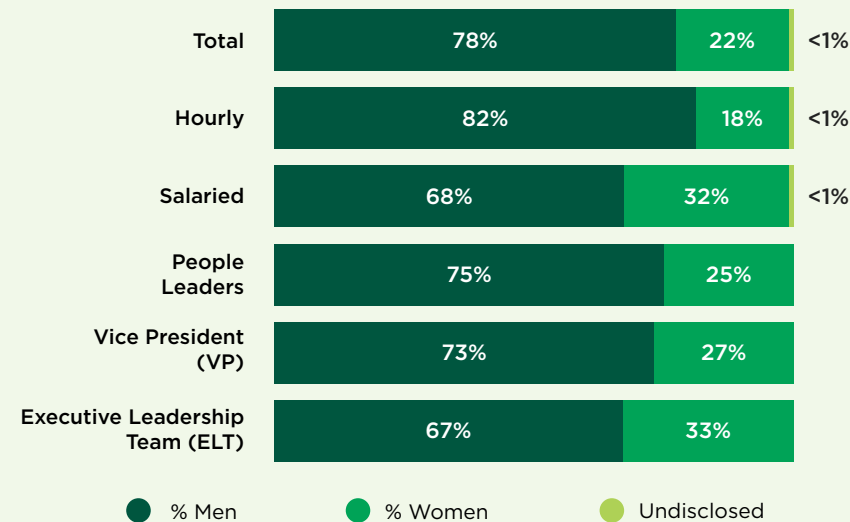
EMPLOYEES BY REGION



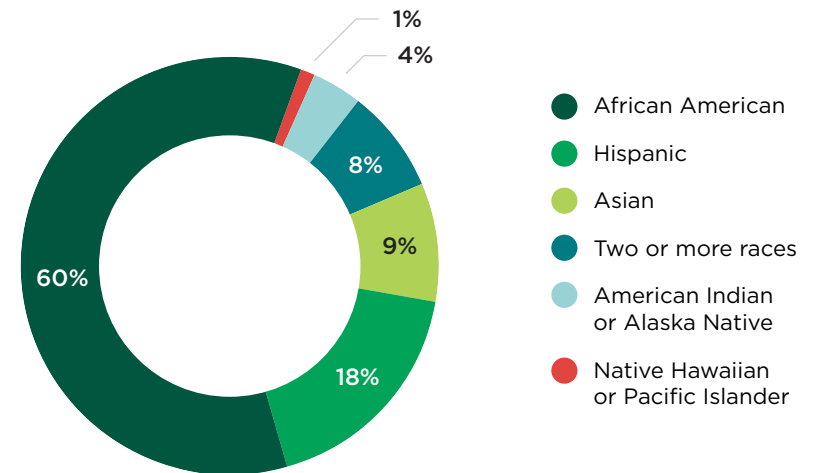
US EMPLOYEE ROLES BY ETHNIC DIVERSITY



AMERICAS EMPLOYEE ROLES BY GENDER

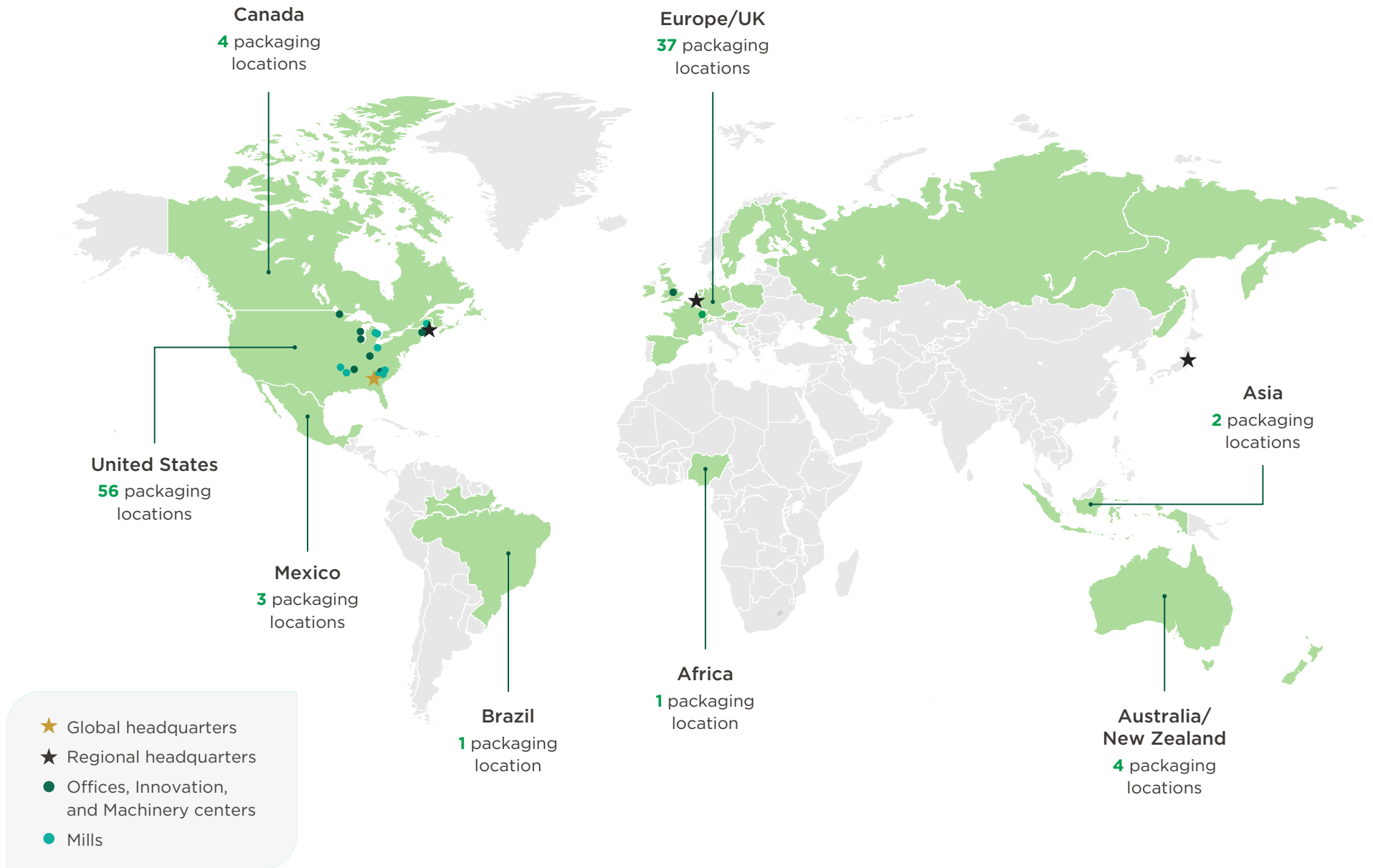


OF THOSE ETHNICALLY DIVERSE





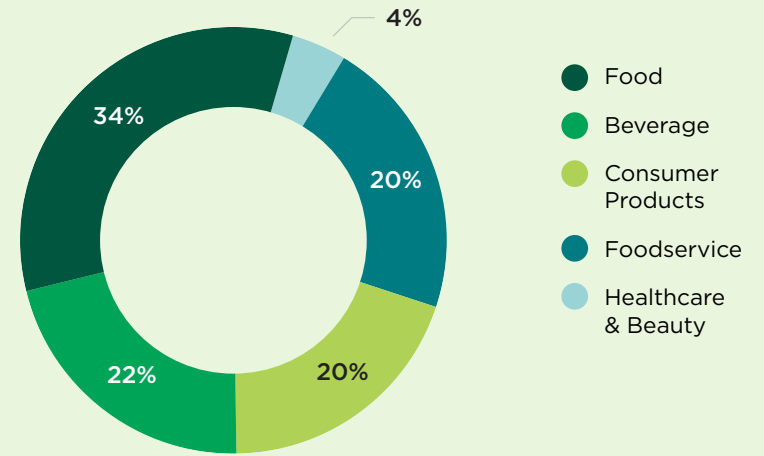
OUR GLOBAL REACH



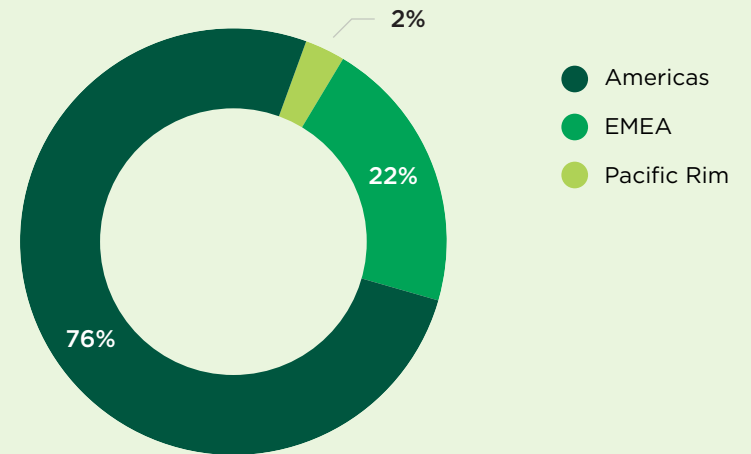


SALES

PERCENTAGE SALES BY MARKET SERVED



PERCENTAGE SALES BY REGION





Our Products

Our packaging touches everyday lives in so many ways. It keeps your breakfast cereal fresh. It holds the hot tea or coffee that helps get you moving in the morning. It preserves the ready-to-cook evening meal that gives you more time with friends or family. And it holds and protects a host of beauty, healthcare, and other consumer products that you use daily. Our solutions make every part of the day easier, safer, and more convenient.

Our products start with trees, a renewable resource. We design our packaging to be recycled, and we work across the value chain to make it easier for people to recycle them. In doing so, we can play our part in the circular economy and support a sustainable future for generations to come.



Folding Cartons



Multipack Cartons



Foodservice Packaging



Trays



Cooking Solutions



Strength Packaging



Fiber-Based Canisters



Flexible Packaging



Machinery Systems



Paperboard



Our Business Vision

Our Vision 2025 outlines how we're investing in innovative fiber-based consumer packaging, empowering our partners, acting as stewards of our planet, and supporting our people, all while delivering value to our stockholders. Vision 2025 guides our current sustainable growth strategy through measurable goals set under the pillars of Partners, Profit, Planet, and People.

Since announcing our original Vision 2025 goals, we have made substantial progress and are on track to achieve our original financial targets two years early. We are focused on growing our company and are already thinking about our horizon, Vision 2030.



Partners

Grow with the best customers in the best markets



Profit

Generate superior returns



Planet

Reduce our environmental impact



People

Engage our employees in a high-performance culture





Better, Every Day



Strong global forces are affecting the packaging industry — more goods need to be packaged and shipped to meet the consumption demands of a growing middle class and increased distribution needs driven by urban migration. At the same time, packaging must adapt so that the entire value chain generates the lowest possible carbon emissions, minimizes packaging waste, and reduces pressures on natural resources. Our ability to innovate commercially viable, low carbon, circular packaging solutions will be a key enabler for long-term prosperity.

Our sustainability vision is to bring to market packaging solutions that help address global needs while minimizing

our impact and renewing natural resources. Our strong foundational values of doing business responsibly and operating with integrity guide us in innovating our packaging and operations for a circular economy, reducing our climate and water impact, creating opportunities for our workforce and communities, promoting safety and well-being, and sustaining the world's forests.

At Graphic Packaging, we package life's everyday moments for a renewable future. And we want every one of those moments to be inherently better for people and our planet.



ESG 2025 Goals and Progress

While Vision 2025 guides our business strategy and sets measurable business goals, our ESG Vision 2025 drives our sustainability strategy through goals set under the pillars of Products, Partners, People, and Planet.

Our sustainability strategy considers how our actions can help address global trends and aligns our efforts with the UN SDGs. We believe our goals will have the most impact advancing four of the UN SDGs — so little by little, step by step, we can make life’s everyday moments better, every day.



ESG Vision 2025 Goals		Progress	UN SDG
Products	\$400M - \$700M net new product sales included in organic growth	On track	12 13 15
	100% sales generated from recyclable products	Progressing	12 13 15
	Reduce low density polyethylene (LDPE) use by 40%	Progressing	12 13 15
Partners	100% global facilities compliant with a fiber certification standard	On track	5 6 8 10 12 13 15 16
People	Achieve top quartile employee engagement	Progressing	3 4 5 8 10 16
	Provide 30 hours of training per employee per year	Progressing	3 4 5 8 10 16
	Continue progress toward aspirational target of zero incidents	Progressing	8
	100% global packaging plants in compliance with a social responsibility audit	On track	4 5 8 10 16
	Planet	Reduce GHG emissions intensity by 15%	Achieved
Reduce nonrenewable energy intensity by 15%		Achieved	7 8 12 13
Reduce mill water effluent intensity by 15%		No progress	6 8 12
Drive out waste in all our operations		Progressing	8 12





2022 ESG Highlights



500+ million plastic packages

substituted with fiber-based alternatives in the EU

1.1 million metric tons of waste diverted from landfill

64% energy derived from renewable sources



34 facilities

with 0 total recordable injuries

30 million employee training hours completed

50% of our executive leadership team is either gender or ethnically diverse



\$3 million donated

to community organizations



A- CDP Climate and Water



ISS Prime Rating



AA MSCI ESG Rating



Recognized as one of America's Most Responsible Companies by Newsweek for the third year in a row



Products

IN THIS SECTION

Driving Circularity

Product Innovation

Product Recyclability

Reducing LDPE Use





Products

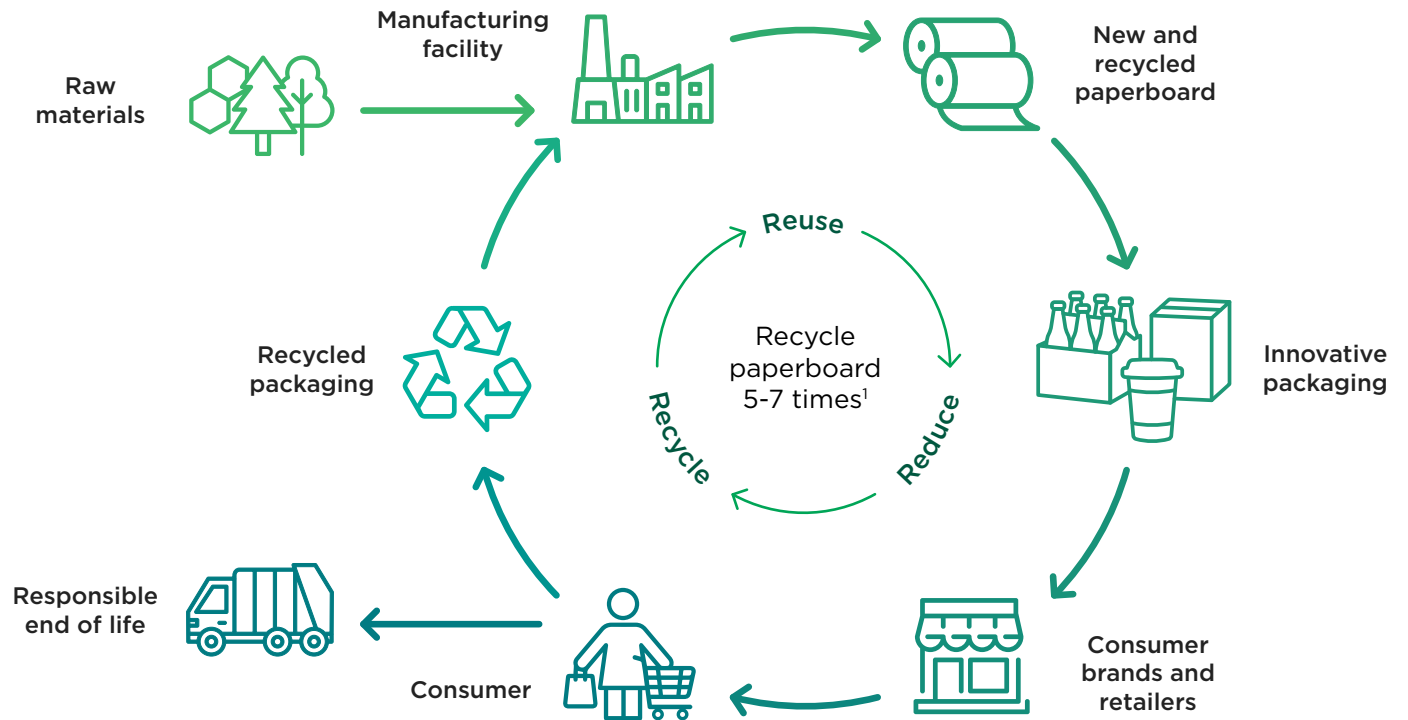
We create innovative consumer packaging solutions that make a world of difference. Our packaging safely transports food, beverages, and other essential consumer goods from our customers to end consumers around the world. And we're making our packaging and manufacturing practices better every day to drive out waste and fuel a circular economy.

Driving Circularity

Approximately 94% of our revenues comes from packaging products that are made with responsibly sourced, renewable tree fibers. We manufacture our products using natural resources as efficiently as possible while working to reduce waste and emissions.

We also collaborate with our customers to understand their needs and end consumer expectations. Our goal is to deliver the value and quality our customers expect through innovative packaging that is designed to be recycled after use and help solve the growing waste challenge.

PACKAGING CIRCULARITY



1. Handbook for Pulp and Paper Technologies, Fourth Edition, Chapter 14, 2016

Product Innovation

We embrace Design for Environment (DfE) principles to guide packaging design decisions and manufacturing choices. Applying DfE thinking early in the innovation process enables reducing a product's environmental impacts throughout its life cycle.

Our team tests product solutions with enhanced sustainability, convenience, and performance attributes and works to create innovations that can substitute plastic packaging with fiber-based packaging solutions.

Product innovation drives our progress in achieving our Vision 2025 goals, and we expect to surpass the \$400M - \$700M in net new product sales by year end 2024.



Product Recyclability

We classify the recyclability of our products according to the following four categories:

Widely recyclable products

are those that meet criteria for technical recyclability and can demonstrate recycling in practice and at scale following Federal Trade Commission (FTC) requirements in the US and/or the Ellen MacArthur Foundation’s global commitment definition.

Locally recyclable products

are those that meet criteria for technically recyclable, but for which the access to recycling is limited due to lack of infrastructure for material collection.

Conditionally recyclable products

are those that require specialized recycling technologies not commonly available, require the consumer to separate package components for recycling, or require further testing to confirm technical recyclability claims.

Not recyclable products

are those that do not meet technical recyclability criteria, may have contamination issues due to their applications, or may have very limited access for recycling in practice.

95%

We measure total revenue from recyclable products as the sum of revenues from the widely recyclable, regionally recyclable, and conditionally recyclable product groups. In 2022, 95% of revenue was from products meeting these recyclability criteria. Our team is focused on improving the recyclability of our products and increasing access for recycling to enable widespread recycling of more of our products and increased fiber circularity.

Before



After



INTRODUCING BOARDIO™

Boardio™ is a fiber-based rigid container that provides an alternative to plastic, glass, and metal containers. Made from more than 80% renewable materials, our recyclable Boardio solution enabled ~38 million rigid plastic containers to be replaced in 2022.

Multinational confectionery manufacturer Perfetti Van Melle partnered with us to create the first-to-market paperboard bottle in the gum category that offered a more than 90% reduction in plastic use without losing the structural integrity or barrier performance of a rigid plastic tub.



Reducing LDPE Use

Our goal to reduce the use of LDPE 40% by 2025 was inspired by the need to increase the recyclability of certain foodservice packaging items and beverage cups. LDPE is typically applied to paper packaging to create a protective water and grease barrier, but this coating can create paper recycling challenges in some paper mills. We are working to improve packaging circularity by finding alternative, renewable barrier materials that can replace fossil-derived polymer coatings and support package recyclability and compostability.



PAPERSEAL™ PORTFOLIO GROWTH

The multiaward-winning PaperSeal tray portfolio saw continued growth and success in 2022 with its first commercialization in the United States. Grocery retailer New Seasons Market introduced PaperSeal for its partner brand Fresh Pasta, substituting the plastic packaging with a fiber-based tray to reduce total package plastic components by 91%.

PaperSeal™ Shape was introduced in 2022, expanding the product portfolio with the addition of round, multi-compartment, and deeper tray shapes. These new shapes broaden the range of packaging applications PaperSeal can serve and will allow more customers to adopt this innovative tray format.

Our tray portfolio also includes PaperLite, a paper-based material that can be used in a range of packaging formats and applications, including frozen prepared meals. In 2022, we launched a new PaperLite product containing ~90% fiber content. The reduced plastic content of this onside coated tray enables it to comply with more stringent recyclability requirements set by the UK's On-Pack Recycling Label (OPRL) scheme for 2023 and further reduces the package's carbon footprint.



ESG Vision 2025 Products Goals	
Goal	Status
\$400M - \$700M net new product sales included in organic growth	~\$460M ¹
100% sales generated from recyclable products ²	95%
Reduce LDPE use by 40%	15% reduction

1. Cumulative revenue measured January 1, 2020 through December 31, 2022.

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



Partners

IN THIS SECTION

Sustaining Forests

Sustainable Forestry
Management

Supplier Engagement
and Training

Conservation Partners

Collaborating to Scale
Recycling Solutions





Partners

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, which is why we work across our value chain to promote sustainable forest stewardship practices that will sustain healthy forest ecosystems for generations to come.

Sustaining Forests

We're bringing better choices to everyday life, protecting valuable forest ecosystems through forest conservation efforts and responsible sourcing practices.

Our forest material stewardship approach follows three core principles:

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

We source the wood fiber materials we need from local, sustainably managed working forests where renewal and biodiversity are safeguarded. This approach supports green jobs and economic opportunities for family forest owners in our communities and helps reduce our carbon footprint through shorter haul distances. Harvest areas are scattered throughout our wood

supply region and are interspersed with forest stands at different growth stages. Randomly distributing the harvest locations throughout the wood supply region helps to create a mosaic of forest habitats and growth stages that can support a rich and diverse community of forest dwelling species.

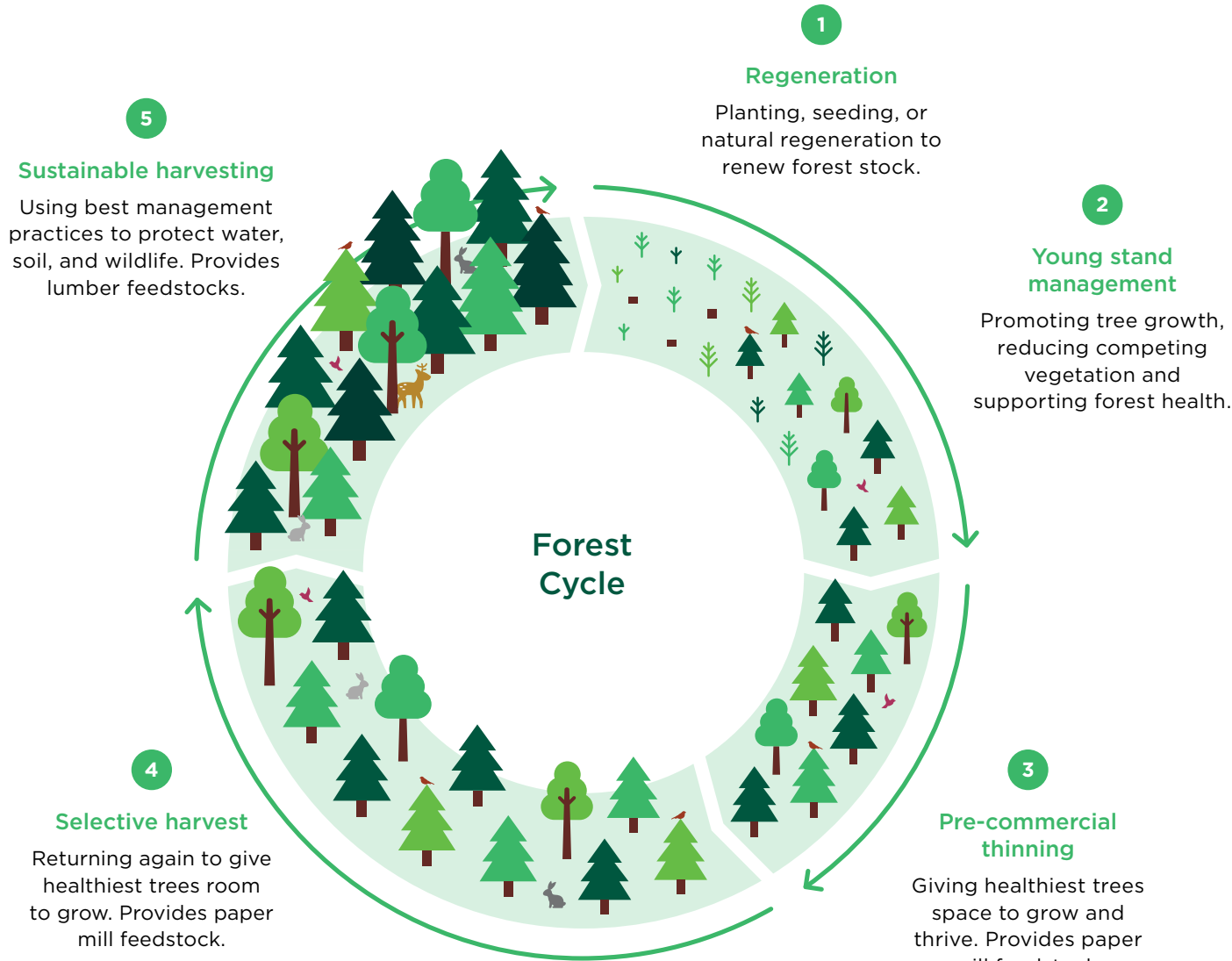
Forest certification and certified sourcing programs give consumers confidence that product packaging does not contribute to deforestation or biodiversity loss. These certification programs are broad in their reach,

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. In 2022, most of our facilities were compliant with one or more fiber sourcing certification standards.

ESG Vision 2025 Partners Goal	
Goal	Status
100% global facilities compliant with a fiber certification standard	96%



Sustainable Forestry Management



Graphic Packaging’s wood procurement team works with suppliers to implement best management practices for each tract of forest supplying our mills. Together our team and our suppliers plan harvesting to suit the unique characteristics and ecosystems present on each individual tract.

Our suppliers consider the landowner’s goals, such as preserving the land for the next generation, maintaining privacy, protecting habitat, or protecting old growth tree stands. During thinning and harvest activities, the loggers use appropriate harvesting methods to meet the needs of the landowner while protecting sensitive habitats and promoting regeneration to ensure harvest and growth rates are in balance.

Following harvest, most of the tree limbs, branches, and needles remain in the forest to provide wildlife habitat and promote nutrient cycling. This helps prepare the soils for forest regeneration and new tree growth.



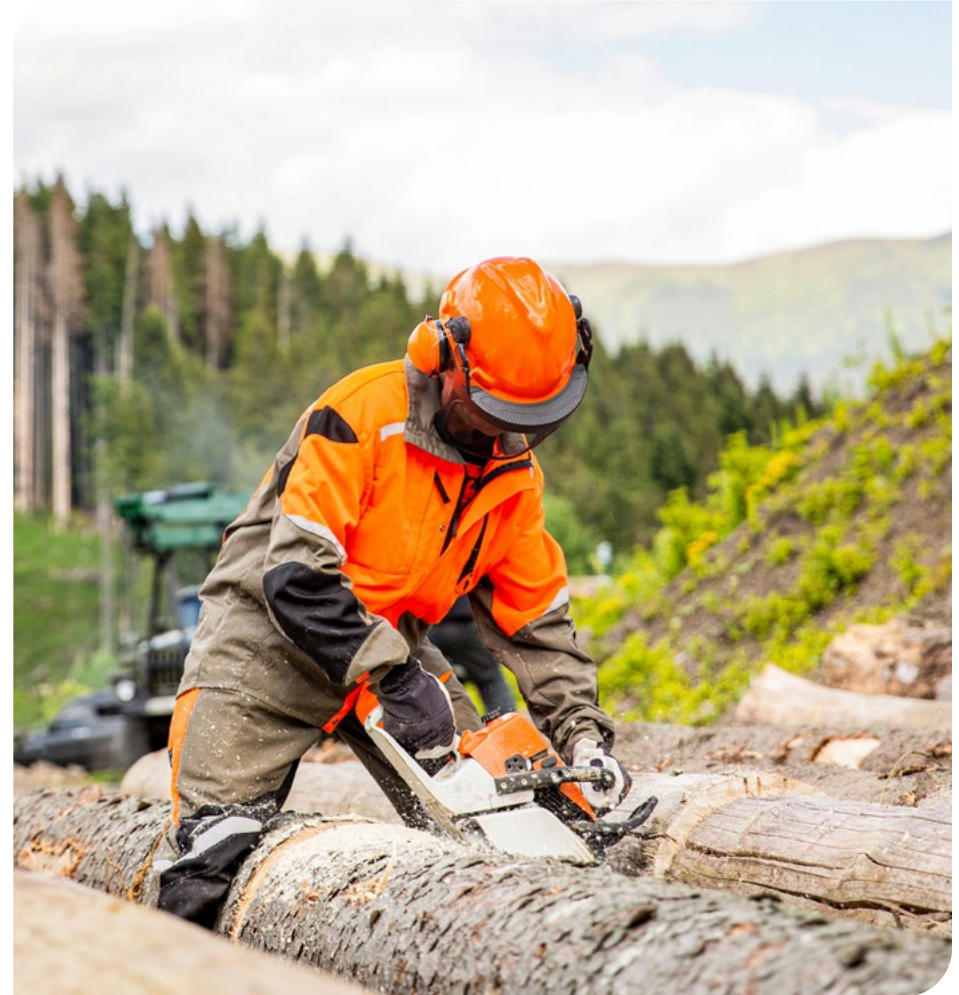
Supplier Engagement and Training

Graphic Packaging works within our supply chains and collaboratively with others to train our suppliers, including wood brokers, loggers, and landowners, to understand and implement forest best management practices that support a range of species and habitats during harvest activities and post-harvest to support forest regeneration and renewal.

We also collaborate with companies via the [Sustainable Forestry Initiative \(SFI\) State Implementation Committees \(SICs\)](#) and other partners in our sourcing regions to develop logger training and education programs that include practices to

protect water quality, biodiversity, worker safety, and forest aesthetics. We require our wood suppliers to complete these trainings to be eligible to deliver wood to our mills.

The SFI SICs also provide educational materials to family landowners to help them identify rare species and associated habitats on their land and implement practices to conserve and restore them. Restoration areas of focus include longleaf pine and late successional bottomland hardwood forests.





Conservation Partners

Healthy forests provide clean air and water, food, and habitats for unique plant and animal species, 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.

Amplifying the positive impacts of forests via conservation and restoration activities is central to our commitment to sustainable forest management and responsible sourcing. We also support the efforts of forest conservation organizations to develop actions that improve our own procurement practices. These strategic partnerships are essential for society to scale long-term impact and to develop sustainable solutions for critical forestry issues.



American Forest Foundation (AFF)

We support AFF's work to restore native longleaf pine ecosystems and late successional bottomland hardwoods near our West Monroe, Louisiana, mill and our Macon and Augusta mills in Georgia.

We also support AFF's American Tree Farm System program to provide family landowners with the resources they need to maintain their forests and be effective stewards of the land.

Georgia-Alabama Land Trust

We provide financial support to protect forests and woodlands against threats from development and other factors.

Friends of the Black Bayou National Wildlife Refuge

We are a long-time partner supporting the organization's efforts to provide habitats for waterfowl, endangered wildlife, neo-tropical migratory birds, and resident wildlife.

Forest Stewards Guild

We support the Guild's efforts to provide family landowners with educational tools centered on invasive plant management and impacts of climate on late successional bottomland hardwoods.



Collaborating to Scale Recycling Solutions

The circular nature of fiber-based packaging is core to our business strategy and forest material stewardship approach. Applying circular economy principles to fiber-based packaging begins with our responsible forestry commitment and ends with our efforts to take back and recycle fiber-based materials into new products. We emphasize the use of recovered materials throughout our process. In fact, around one-third of the packaging we produce is made with 100% recycled fibers.

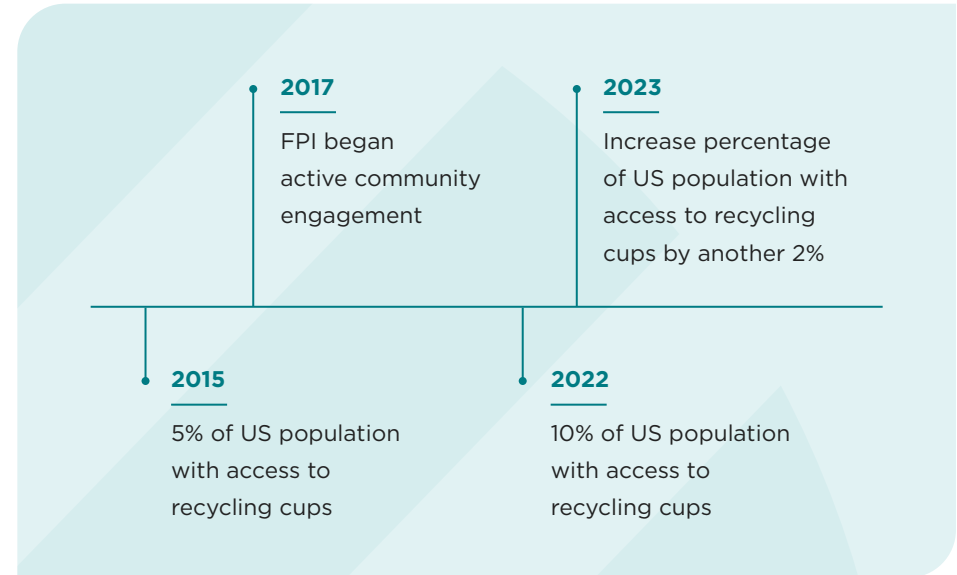
As governments and consumer brands around the world look to reduce packaging waste and the use of plastics in packaging, industry advocacy efforts become necessary to further increase the recovery of paper and paper-based packaging for recycling. Graphic Packaging works with industry associations, recyclers, and communities to drive acceptance of more fiber-based packaging materials.

[US paper industry recovery rates](#) are approaching 70% — 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 increasingly accepted and recovered to supply the growing demand for recycled fiber feedstocks.

Unfortunately, there is a 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 CRB paper machine in Kalamazoo, Michigan, 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. Paper cups are made from virgin fiber which is a highly desirable input for recycled paper mills. Without new wood fiber inputs, [The National Council for Air and Stream Improvement \(NCASI\)](#)



estimates that the North American fiber cycle would run out of recycled paper in approximately 6 to 11 months.

Graphic Packaging and the paper industry are actively working with the [Paper Cup Alliance](#), a subgroup of the Foodservice Packaging Institute, to increase community acceptance of paper cup recycling in the US. In early 2022, Graphic Packaging joined seven other mill companies in signing a joint commitment to accept paper cups and increase their recycling rate.

Together the 34 mills operated by these companies represent approximately 75% of recycled mixed paper consumption across the US and Canada. In early 2023, Graphic Packaging further demonstrated our commitment to increasing fiber circularity by announcing plans to build a new, state-of-the-art \$1 billion CRB mill in Waco, Texas. The new mill will be built with advanced paper pulping technologies, capable of processing 15 million paper cups per day into new recycled paperboard.



People

IN THIS SECTION

Our Employees

Engaging Employees

Creating a Diverse,
Inclusive Workplace

Creating a Culture of
Continuous Learning

Recognizing
Achievement

Evaluating Social
Compliance

Employee Safety
and Well-being

Preventing Injury

Our Community

Employee-Led
Community Outreach

Providing Access
to Education

Our Supply Chain





People

Graphic Packaging is committed to fostering an inclusive, high-performance, and safe workplace. Our culture is underpinned by our values and a long-term global 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.

We're creating a better workplace, centered on people's growth and sense of belonging, while renewing our local communities.

Our Employees

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 teamwork, innovation, and helping our customers succeed has always been strengthened by the perspectives and contributions of a diverse team.

Engaging Employees

We want our employees to feel their perspectives are valued, and they can make a difference when they speak up.

In 2020 and 2021, we used a survey to baseline employee engagement and solicit feedback to help shape our company culture. As Graphic Packaging leadership demonstrates our commitment to listen and act on that feedback, we aim to increase engagement.

We paused conducting an enterprise-wide survey in 2022 to focus on implementing programs to action the feedback we heard during the baseline surveys and will conduct our next engagement survey in 2023.

In the meantime, we are working on:

- 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

FOODSERVICE PULSE SURVEY

Hit hard by the pandemic and its effect on their core business of fast food and convenience businesses, our Foodservice leaders embraced the engagement survey, debriefed the results with their employees, collaborated on action plans that addressed the concerns and suggestions of their employees, and acted on them.

Once complete, they communicated with employees again, letting them know what was addressed and what could not be and why. The Foodservice team completed a "Pulse" survey in 2022 to assess progress. The survey showed an increase in overall engagement from 58% in 2021 to 69% in 2022, accomplished through their focused improvement efforts and ultimately legitimizing the voice of the employee and allowing it to influence our company.



Creating a Diverse, Inclusive Workplace

Diversity, Equity, and Inclusion (DEI) are too important to be left to chance. 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.

We recognize that inclusion starts with our leaders. Michael Doss, our President and CEO, has built a diverse and inclusive ELT that mirrors our intent for the future make-up of our company. We share diversity metrics on an ongoing basis to both highlight progress and drive 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.

Graphic Packaging's five Business Resource Groups (BRGs) are company sponsored and employee led. BRGs honor unique cultural experiences and allow members and allies alike to share experiences and resources. We plan to launch an additional BRG during the second half of 2023.

DIVERSITY SPEAKER SERIES

Our Diversity Speaker Series features a lineup of individual speakers helping employees learn new perspectives, develop new ideas, and raise awareness surrounding diversity topics. In 2022, we held seven events with speakers including Korean, Black, Hispanic, Indian, and military leaders who shared their experiences and insights with more than 3,500 employees.



Women @GPI+



AAPI+
Asian American Pacific Islander



Alianza+
Latin and Hispanic Employee Network



BEGN+
Black Employee Global Network



Pride+





Creating a Culture of Continuous Learning

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 continue investing in developing new and existing managers, expanding our offerings to help evolve the way leaders shape our organizational culture and positively impact our employee engagement. We strive to educate leaders in performance management, inclusive leadership, developing their teams and themselves, building trust, and leading by example.

We have also made a considerable investment in building a learning and growth structure for our hourly technical employees, including by piloting a standardized training process in 2022, which we will continue to implement nationally and then globally. This model contains structured role responsibilities, standardized training materials, and a robust learning process that includes a consistent feedback model and measured learning outcomes.



ESG Vision 2025 People Goals

Goal	Status
Top quartile employee engagement ¹	-
30 hours of training per employee per year	12.3 hours
Achieve 100% global packaging plants in compliance with a social responsibility audit	87%

1. A survey was not conducted in 2022. Our next survey will be in 2023.

GPI UNIVERSITY

GPI University uses technology to advance the learner experience. We offer integrated LinkedIn Learning, compliance training initiatives, hourly technical training, and leadership development components. In 2022, 84% of our salaried employees participated in over 30,000 courses and videos through GPI University.

Recognizing Achievement

Through our Graphic Honors event, we recognized 150 employees for their milestone service anniversaries and dedication and loyalty to the company. We also recognized 352 employees in our global Leadership and President's Award program, for their contributions and impact on business results.



Evaluating Social Compliance

We use the Supplier Ethical Data Exchange (Sedex) platform to screen for risks, complete annual self-assessments, document third-party social responsibility audits at our facilities, and share our social responsibility program and compliance results with our customers.

Our packaging plants are expected to complete a social responsibility Sedex Member Ethical Trade Audit (SMETA) audit once every three years

to check that they are compliant with applicable local, state, or national/regional requirements, as well as Graphic Packaging policies.

At year-end 2022, 87% of packaging plants were compliant with completing their third-party SMETA audit on schedule. We targeted completing audits at the highest risk locations first and will continue to report progress with the goal to achieve 100% compliance by 2025.



Employee Safety and Well-being

Delivering inspired packaging begins with Graphic Packaging’s focus on the safety and health of our people – our employees and contractors working under our direction at our facilities. We’re ensuring safe, healthy work environments to promote better physical well-being for everyone, every day.

Our goal 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 layered approach to safety begins with leadership commitment, our health, safety, and environmental (HSE) Policy, and safety principles. We set clear expectations defining safe actions and operating practices through our safety absolutes and minimum safety expectations (MSEs). Safety absolutes establish standards of conduct around HSE and create a culture for all employees to “Think About Safety Always” and to work in a safe and environmentally responsible manner 100% of the time.

MSEs are a combination of cultural and programmatic elements that take a facility-wide approach to managing potential risks through effective implementation of risk reduction and HSE programs. Culture elements focus on management leadership, training, HSE resources, and behavioral-based efforts. Programmatic elements are designed to reduce risk in our operations by implementing HSE programs consistently across our business.

We embrace a continuous improvement (CI) mindset that drives our HSE culture of caring for and engaging with our employees. Each operating site, with support from corporate HSE, develops a customized improvement plan designed to improve HSE program maturity at the facility along with implementing actions that all sites must complete. Plans are developed using a plan, do, check, act model, and facilities are expected to complete at least 90% of their identified improvement items.



Preventing Injury

The best way to prevent injuries is through proactively addressing potential hazards that could lead to an injury. Our Hazard Recognition, Evaluation, and Control (HREC) workshops train site management teams and HSE leaders on identifying, evaluating, and mitigating or controlling workplace hazards. HREC workshop participants learn to implement a hands-on approach to eliminate or mitigate risks to an acceptable level using a hierarchy of controls.

Complementary to the HREC program, our Hazard Mitigation program drives floor-based actions to identify and mitigate hazards on our shop floors. We set annual targets for proactive risk mitigation, and in 2022, our facilities exceeded our planned target by 35%.

Our focus is to eliminate LIFE injuries (also known as serious injuries and fatalities – SIFs). LIFE injuries are defined as serious, life-altering injuries that can cause significant disruption to the injured person’s health and well-being and can impact team morale at our sites. Our actions support the broader paper industry’s initiative to drive down rates for serious injuries and fatalities while improving our overall safety record.

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 2022, we were proud to have 34 facilities with zero recordable injuries and to have reduced the number of LIFE injuries by 60% versus 2021.



ESG Vision 2025 People Goals

Goal	Status
Continue progress toward aspirational target of zero incidents	
└ Target 1: Reduce employee lost time injury rate (LTIR) to 0.2	0.31
└ Target 2: Record zero employee LIFE injuries	4

PEER-TO-PEER ASSESSMENTS

We are implementing a peer-to-peer assessment process. As part of the peer-to-peer assessment, operational leaders from one plant conduct an onsite assessment of another location’s implementation of aspects of our MSEs including adherence to our HSE policies and requirements, closing corrective actions, progress completing safety plans, and machine guarding efforts. The key to the success of the peer-to-peer assessment is that it is owned and executed by our operational leadership and supported by our HSE community.

In 2022, our sites completed 51 peer-to-peer assessments, covering 43% of our operating locations. These peer-to-peer assessments drive HSE program maturity by identifying programmatic CI opportunities and build HSE knowledge across our global operations. We tracked findings and corrective actions through our HSE data management system. This enables us to trend CI opportunities and programmatic gaps and educate operations on top safety trends across the business.



Our Community

We believe the vitality of our communities is critical to the success of Graphic Packaging and that being a good neighbor is simply the right thing to do. Listening to and investing in our communities improves the health of our business, the lives of our employees and their families, our local environment, and our society.

We focus our community engagement strategy in three areas:



Putting Food on the Table

Through local food drives and our partnerships with the United Way, Atlanta Food Bank, and Atlanta's Community Assistance Center, we assist organizations that provide food security in our communities.

Preserving the Environment

We support conservation organizations and schools across the globe 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

From the Graphic Packaging Scholarship program to our support of youth organizations, such as Junior Achievement and The Boy Scouts of America, educating tomorrow's leaders ensures a pipeline of talent to shape our future workforce.



Employee-led Community Outreach

Each year, Graphic Packaging employees around the world volunteer with community organizations, sharing their time and talents to improve our communities.

One of the most widespread examples of this is the trees into cartons, cartons into trees (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. Since joining the program in 2008, we have planted more than 120,000 trees with students in North and South America and have now expanded the program to Europe.

TICCIT returned to live, in-person events in 2022 with over 800 students engaged in events throughout our global footprint to learn more about recyclable packaging and renewable forests. Example locations sponsoring activities included Igualada, Spain, and our US locations in Shelbyville, Oroville, Pacific, Crosby, Centralia, Perry, Sturgis, and Atlanta.



INVESTING IN EDUCATION

In Nigeria, Graphic Packaging supported the local primary education school system by building and donating new classroom blocks, a well, and sanitary facilities for the Methodist basic school Ayetoro in Ibadan Oyo state. This is the fifth school we have renovated in Ibadan since 2017.

PUTTING FOOD ON THE TABLE

In Indonesia, Graphic Packaging's Bawen packaging plant sponsored events to support local culture and traditions and also provided rice donations to community neighbors who had been impacted by rising food prices.

Providing Access to Education

Graphic Packaging partnered with Ghent University in Belgium on their new Masters in Science in Sustainable Food Packaging program launched in September 2022. Aimed at growing the next generation of packaging professionals, the program is intended to stimulate a switch toward 100% reusable, recyclable, compostable, or biodegradable packaging. As a gold program sponsor, we are sharing our industry expertise with students through guest lectures, sponsoring master's theses and facility visits.

Our employees also contributed their time and resources throughout the years in support of numerous education programs, including:

- School supply drives
- Science, Technology, Engineering and Math (STEM) events to inspire girls to pursue STEM careers
- Hosting job and career fairs
- Computer equipment donations to schools through InspiredU



Our Supply Chain

Graphic Packaging operates 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.

Our [Global Supplier Code of Conduct \(GSCOC\)](#) is inspired by the 10 principles of the UNGC and the UN Guiding Principles on Business and Human Rights. It 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 regulations and to adhere to internationally recognized ESG frameworks and standards covering ethical business practices, labor and human rights practices, and environmental stewardship.

Our procurement team considers both environmental and social impacts in its purchasing decisions and is committed

SUPPLIER DIVERSITY

Our supply chain and business leadership teams continue to focus on advancement of inclusion and equity principles in how we source goods and services for our operations.

We track our spend with woman-owned, minority/ethnically diverse, disabled veterans, and disabled-owned suppliers. In 2022, our spend with these suppliers was \$210 million across 258 individual diverse suppliers.

to increasing diversity within our supplier base. We track spend with both diverse suppliers and small businesses, using small businesses as a surrogate for local suppliers, to measure our impact. In 2022, we spent approximately \$291 million across 593 diverse and small business suppliers to purchase quality goods and services to support our operating sites in the US and Canada.





Planet

IN THIS SECTION

Climate Change

Value Chain Emissions

Water

Waste





Planet

Graphic Packaging, and the packaging sector as a whole, plays a central role in the transition to a low-carbon economy through the current and future demand for recyclable packaging materials made from renewable resources. As we grow to meet the demand, we must do so while reducing our impact on the planet.

We're shaping a better future through everyday actions like reducing our carbon footprint and aligning emissions and water use reductions with global goals.

Climate Change

We address climate change by taking prudent, practical, and cost-effective actions to reduce our GHG emissions as we grow our company.

We view energy use and GHG emissions as inextricably linked, and we tackle nonrenewable energy reduction as a key lever in reducing our operations Scope 1 and Scope 2 GHG emissions.

Energy is a critical input for us, and the way we source and use energy represents a significant portion of our operations GHG emissions. Today, we rely on biomass, natural gas, purchased electricity, and other fossil fuels. We are focused on maximizing our use of renewable energy sources, reducing nonrenewable energy use, and improving energy efficiency as part of our emissions reduction strategy.

The sum of our Scope 1 and Scope 2 emissions represents our operations emissions. Approximately two-thirds of our operations emissions are from

burning fuels, the rest from energy we purchase. Additionally, ~80% of operations emissions are found in our mills, with the remainder in our packaging divisions.

We measure operations GHG emissions intensity on a revenue basis at the enterprise level and for tracking progress toward achieving the ESG Vision 2025 emissions intensity reduction goal. In 2022, we saw a 20% reduction in intensity versus 2021 and a 26% reduction in intensity relative to the 2016 goal baseline, exceeding our 15% reduction goal by 73%.

However, total Scope 1 and 2 operations emissions increased 6% from 2021 to 2022 and have increased 20% relative to 2016 operations emissions, reflecting the growth of the Company. As we look ahead, we will be working to reverse this trend.

MILL PROCESSES AND OPERATIONS

A bubbling fluidized bed boiler at our Macon mill allows the facility to obtain 90% of its energy requirement from renewable biofuels, including black liquor, bark, and other renewable mill byproducts.

In 2022, we installed an advanced automatic process control system with energy management modules at two of our four largest mills to reduce operation variability and improve efficiency of power generation equipment. The work continues at the remaining two mills and is scheduled to be completed by the end of 2023.

Achieved

GHG emissions and nonrenewable energy intensity goals three years early

SBTs

We will set science-based GHG emissions targets by the end of 2023

A-

CDP climate response

69%

of annual global fuel use is from renewable biomass fuels

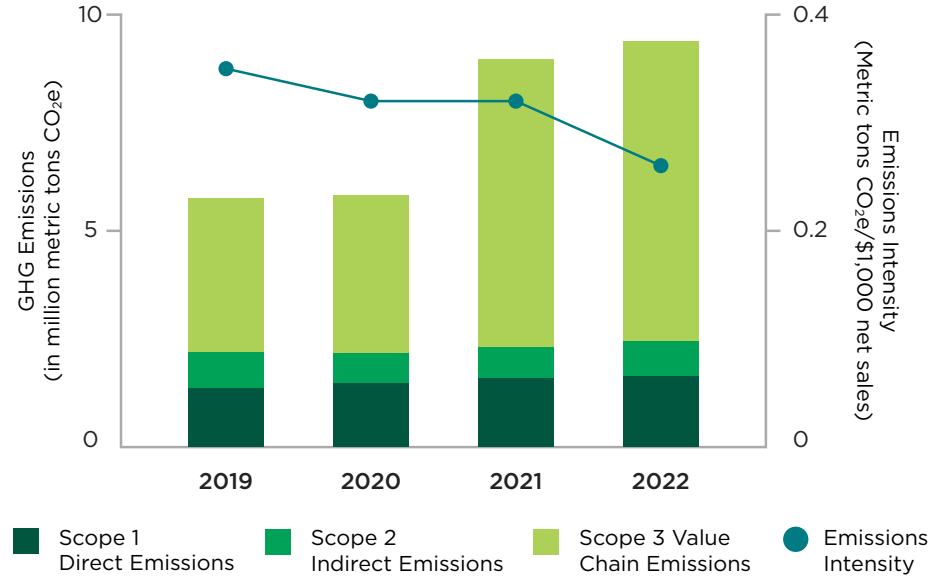


Value Chain Emissions

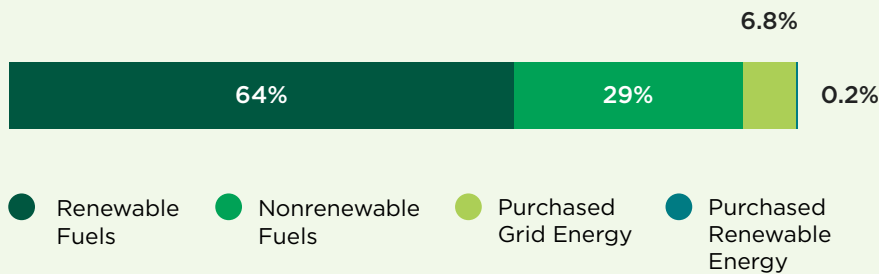
We are looking beyond our own operations emissions to understand and tackle our indirect (Scope 3) emissions in our value chain that are connected to our activities. These emissions are directly generated and managed by others and are not owned or controlled by Graphic Packaging. Collaboration with our suppliers, partners, policymakers, and other organizations is critical for encouraging collective action to reduce GHG emissions and the development and use of lower-carbon forms of energy.

In 2022, our operations emissions contributed 26% and value chain emissions contributed 74% of total GHG emissions connected to our activities. As we look ahead and identify a path to reduce our value chain emissions, we will partner with our suppliers on initiatives to reduce emissions associated with the goods and services we purchase and that result from transporting materials. And by working with our value chain to recover and reuse more of our fiber-based packaging, we will further reduce our impact on the environment with less waste sent to landfill and reduced GHG emissions.

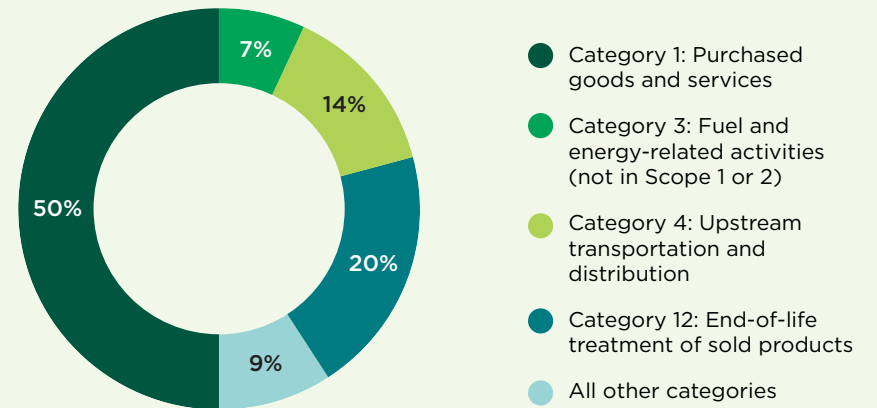
GHG EMISSIONS BY SCOPE



2022 ENERGY MIX



SCOPE 3 EMISSIONS





Water

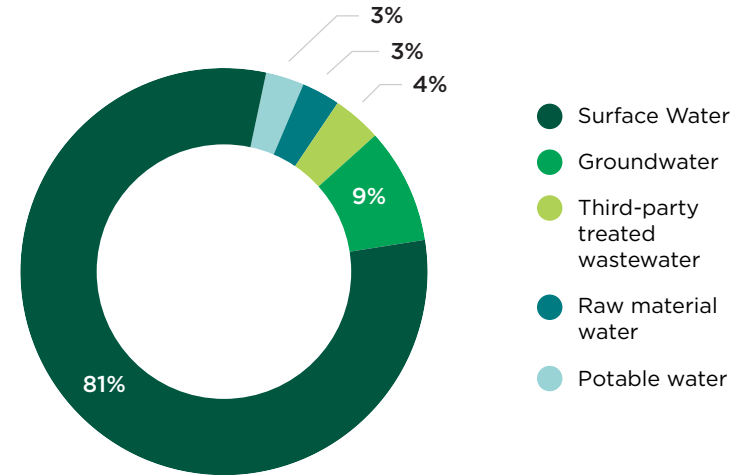
Manufacturing pulp and paper requires a substantial amount of water. Having access to sufficient quantities of clean, fresh water is essential for our operations, supporting our global value chain, and meeting the needs of our neighbors. Our water stewardship approach focuses on using water responsibly and on understanding water needs in the areas where we operate. Even though our mills operate in watersheds with ample water supplies, we work to reduce the amount of water we withdraw and responsibly return the water we borrow back to the environment. We also do our part to protect water quality by complying with local laws, adhering to discharge permit requirements, and maintaining our facilities to protect against spills and leaks.

We monitor mill water use and implement site-specific management practices to optimize water use and improve water discharge quality. Individual mills take action to reduce the amount of new water they withdraw from the environment by implementing recycling loops to reuse water wherever possible, for example, water

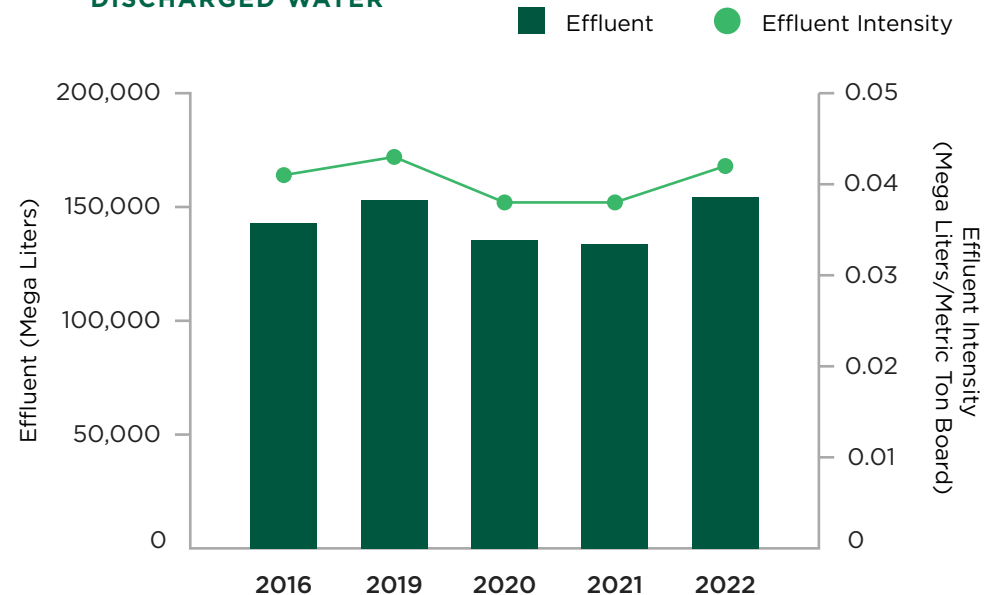
is recovered and recycled in the pulp, paperboard sheeting, steam, and equipment cooling systems. We also use reclaimed water and raw material water inputs in our manufacturing processes to offset the need to withdraw new water from the environment. In 2022, raw material and reclaimed water sources accounted for 7% of the total water needed to manufacture our products.

The mills represent most of our total water use and typically discharge their water to nearby surface water bodies, either directly following treatment in our facilities or through local publicly owned treatment works. In 2022, operations needs combined with heavy precipitation levels led to a water effluent intensity that was slightly higher than 2021 and is similar to our 2016 baseline value. Looking forward, our mills are focused on opportunities to reduce their water use, which will put us back on track to achieve our 2025 water goal.

WATER USE BY SOURCE



DISCHARGED WATER





Waste

We're making our packaging and manufacturing practices better every day to drive out waste and fuel a circular economy.

We align our waste minimization and management approach with the circular economy principles promoted by the Ellen MacArthur Foundation — eliminate waste and pollution, circulate products and materials, and regenerate nature. Our teams work to eliminate waste generation through improved product design, manufacturing process design, operations and maintenance practices, and material recovery. For example, our virgin mills help reduce timber industry waste by using sawmill wastes in addition to forest thinnings — waste trees that are not suitable for cut lumber or pole timber — as mill feedstocks. We then maximize tree material usage by recovering bark, branches, and black liquor biomass waste materials to burn for fuel and by recovering turpentine and tall oil byproducts for sale.

Our teams next seek opportunities to creatively recover and reuse materials, exploring how wastes could be repurposed as raw materials and recycled at their highest value. Our CRB mills use 100% recycled pre- and post-consumer paper feedstocks, including our packaging plant trimmings and off-specification products. Sophisticated pulping and fiber separation systems enable CRB mills to accept a wide variety of recycled, fiber-based materials, including foodservice packaging materials, like paper cups. In 2022, 55% of the CRB mill feedstocks were from post-consumer recovered materials, and we recovered and recycled 98% of paperboard waste from our packaging plants and mills.

A recorded 96% of our sites have active waste diversion programs and collectively recycled 1.1 million metric tons of materials in 2022.

ESG Vision 2025 Planet Goals	
Goal	Status
Reduce GHG emissions intensity by 15%	26%
Reduce nonrenewable energy intensity by 15%	23%
Reduce mill water effluent intensity by 15%	0%
Drive out waste in operations	
<ul style="list-style-type: none"> Target 1: Implement manufacturing waste diversion programs at all global packaging facilities 	96%
<ul style="list-style-type: none"> Target 2: Achieve 100% recovery and recycling of paperboard waste at global packaging facilities and mills 	98%





Global Reporting Initiative (GRI) Index

IN THIS SECTION

Forward-looking Statement

Graphic Packaging 2022 GRI Disclosures





Forward-looking Statement



This 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,” “goal,” “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 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 (SEC), including in our [Annual Report](#) on Form 10-K for the year ended December 31, 2022. 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.



Graphic Packaging 2022 GRI Disclosures

GENERAL DISCLOSURES

Graphic Packaging International has reported in accordance with the Global Reporting Initiative (GRI) standards for the period of January 1, 2022 through December 31, 2022.

GRI 2-1 ORGANIZATIONAL DETAILS

Graphic Packaging Holding Company, the parent company of Graphic Packaging International, LLC (Graphic Packaging), 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.

We maintain a global network of mills, packaging plants, machinery facilities, and innovation centers located across 22 countries and have a joint-venture interest in packaging operations located in Japan. Graphic Packaging will also partner with third-party contractors as necessary to complement our operations and extend our global reach.

Our commercial operations are supported by a network of sales 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 located at 1500 Riveredge Parkway in Atlanta, Georgia.

Read more about our global locations and the countries where we have significant operations on p. 17-18 of our [2022 Annual Report](#) on Form 10-K and on our [website](#).

GRI 2-2 ENTITIES INCLUDED IN THE ORGANIZATION'S SUSTAINABILITY REPORTING

See our 2022 Annual Report on Form 10-K Note 1, p. 46, and Exhibit 21.1 to the 10-K filed on February 9, 2023, for a list and descriptions of the entities included in the consolidated financial statements and in this ESG report.

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 2022 Annual Report on Form 10-K as filed with the SEC. The ESG data represent global operations within our operational control. Environmental data were collected through several information management processes (e.g., vendor invoices, instrument readings, monitoring, sample collection and analysis, engineering estimates, material balances). Certain data may include estimates and assumptions that are subject to inherent measurement uncertainty, for example, from accuracy or precision of conversion.

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 GHG emissions 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.



GRI 2-3 REPORTING PERIOD, FREQUENCY AND CONTACT POINT

Graphic Packaging reports annually on the ESG and economic performance of our Company, with regular updates to external stakeholders in the interim.

Our [2022 Annual Report](#) on Form 10-K and this 2022 ESG report present applicable data and information for the calendar year January 1-December 31, 2022. Significant policy or program activities occurring before or after calendar year 2022 may also be included as indicated in report content.

Previous ESG reporting content may be viewed on our [website](#). Feedback on this report or its contents and our sustainability performance can be provided via email at sustainability@graphicpkg.com.

GRI 2-4 RESTATEMENTS OF INFORMATION

Graphic Packaging may elect to restate previously reported information when there is a structural change to the company or when there are significant changes to calculation methodology or identified measurement errors that exceed a defined material threshold.

In 2022, we conducted a detailed review of the 2021 GHG inventory in preparation to use 2021 data as a baseline in developing science-based targets for future GHG emissions reductions. Our 2021 GHG data are restated in this report to reflect the improvements in calculation methodology and the incorporation of full-year emissions for the 2021 Americraft and AR Packaging acquisitions and corrections to the Scope 3 Category 5 waste emissions. The restated 2021 GHG inventory is approximately 2% lower than the previously reported 2021 GHG emissions.

Other restatements include correcting the 2021 waste inventory to account for misreported data at three manufacturing sites that resulted in an approximate 50% reduction in reported total waste, disposed waste, and recycled waste quantities, and minor restatements (considered de minimis) of 2021 community spending and political contributions data. In addition, our presentation for influent

water data and water consumption data were updated to reflect a refinement in our water balance approach, but this did not materially change the total reported annual volumes.

GRI 2-5 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 performance. Senior management is responsible for the collection, quantification, and presentation of sustainability disclosures and for the selection of the criteria, which management believes provides an objective basis for measuring and reporting on the sustainability disclosures.

We have implemented internal controls to self-assure that data are accurate and fairly represent ESG performance. 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.

Graphic Packaging did contract with a third-party to provide a limited level of assurance for our 2022 energy data, Scope 1, 2, and 3 GHG inventory data and 2022 water inventory data based on current best practices and in accordance with the International Standard for Assurance Engagements (ISAE 3000 and ISAE 3410). The assurance statement can be found [here](#).

GRI 2-6 ACTIVITIES, VALUE CHAIN, AND OTHER BUSINESS RELATIONSHIPS

Graphic Packaging is a global provider of fiber-based consumer packaging solutions that serves food, beverage, foodservice, and other consumer products companies. We are one of the largest producers of folding cartons in the US and Europe and leaders in the manufacturing of CRB, coated unbleached kraft (CUK) paperboard, and solid bleached sulfate (SBS) paperboard. We are also vertically integrated, enabling us to offer supply security to our customers.



We produce paperboard at our mills and purchase other grades of paperboard from third-party suppliers. We then transform — print, cut, fold, glue, and seal — the paperboard into folding cartons, containers, and other fiber-based consumer packaging at our packaging plants around the world. We also design and manufacture specialized, proprietary packaging machines that package beverage bottles and cans and nonbeverage consumer products. After installing our packaging machines at customer plants, we provide support, service, and advanced performance monitoring of the machines. This integrated approach to packaging solutions has strengthened our global capabilities and supply networks to support both local and worldwide customers.

Graphic Packaging’s global customers include many of the world’s most widely recognized consumer goods companies and brands with prominent market positions in the beverage, food, foodservice, health/beauty, and other consumer products market segments. Our packaging solutions serve as the interface between our customers and the end consumer and are also designed to meet evolving consumer expectations to both protect the products they purchase and minimize the amount of waste generated by their purchasing decisions. We strive to provide customers with innovative, sustainable packaging solutions designed to deliver marketing and performance benefits at a competitive cost through our proprietary packaging designs, commitment to quality and service, and resource efficient manufacturing operations.

Graphic Packaging 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.

2022 Sales by Market Served

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

2022 Sales by Region

Americas	EMEA	Pacific Rim
76%	22%	2%

Our value chain is made up of approximately 17,000 suppliers of raw materials, goods, and services located across our global operations. In 2022, we spent more than \$6.2 billion with suppliers globally.

Our primary raw materials 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 packaging manufacturing processes. Plastic films and resins may be laminated or extrusion-coated on paper and paperboard to meet certain packaging oil, grease, or moisture barrier requirements.



Graphic Packaging uses both internally produced and externally purchased paper and paperboard to manufacture our finished fiber-based consumer packaging solutions. We distribute our finished packaging products primarily in corrugated cases and, as needed, may use wood pallets, corrugated slip sheets, or shrink wraps for shipping.

Our 2022 net revenue totaled \$9.4 billion with total assets of \$10.3 billion. We report operating results through three segments: Americas Paperboard Packaging, Europe Paperboard Packaging, and Paperboard Mills. Revenue breakdown by business segment is available on p. 29 of our [2022 Annual Report](#) on Form 10-K.

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.

The Paperboard Mills segment includes the North American virgin and recycled paperboard mills and a laminating facility that produces our CRB, CUK, and SBS paperboard grades. In 2022, 73% of our paperboard was consumed internally to produce packaging. The remaining 27% of paperboard produced and sold externally to a wide variety of packaging converters and brokers makes up the Paperboard Mills Segment.

At year end 2022, Graphic Packaging operated seven mills in North America in addition to packaging plants, machinery plants, and innovation centers located throughout its global operations. Changes to the Company operating network and supply chain include:

- During first quarter 2022, Graphic Packaging began operation of its newest CRB machine in Kalamazoo, Michigan, transforming Kalamazoo into our most advanced CRB manufacturing operation. The facility achieved monthly design production levels during the year, and CRB network operations were optimized across the mill and packaging plant supply chain leveraging this new production capacity.
- In May 2022, Graphic Packaging closed the Battle Creek, Michigan, CRB mill, and in September 2022, we closed the Norwalk, Ohio, carton facility.
- In May 2022, we committed to sell the two folding carton plants in Russia and classified the facilities as held for sale; however, at the end of 2022, the two facilities were still operating as part of Graphic Packaging.
- Throughout 2022, the supply chain team effectively integrated the supply chain activities for the 30 newly acquired AR Packaging European locations into the Graphic Packaging network while responding to supply challenges triggered by the war in Ukraine and resulting energy crisis.
- During the first quarter of 2023, we announced the acquisition of a CRB mill in Tama, Iowa, and the planned investment in a new CRB mill in Waco, Texas. Graphic Packaging later announced in May 2023 the closure of the Tama CRB mill. These changes do not affect the information reported herein for the 2022 reporting period.

Read more about our value chain in [Disclosure 204](#) on p. 6-9 and p. 18-19 in our 2022 Annual Report on Form 10-K and on our [website](#).

**GRI 2-7 EMPLOYEES**

As of December 31, 2022, Graphic Packaging employed over 24,000 people across our global network of paperboard mills, packaging plants, innovation centers, and major offices located in 27 countries around the world.

Total Number of Employees by Region As of December 31, 2022

	Total	Asia Pacific	EMEA	South America	North America
Total employees	24,263	550	7,763	150	15,800
Percentage	100%	2%	32%	1%	65%
Employee status					
Hourly	72%	72%	64%	73%	75%
Salaried	28%	28%	36%	27%	25%
Employee status					
Full time	98%	99%	93%	99%	99%
Part time	2%	1%	7%	1%	1%
Employee gender					
Men	77%	77%	75%	93%	78%
Women	23%	23%	25%	7%	22%
Undeclared	<1%	0%	0%	0%	1%



An expanding employee base resulting from acquisitions has us relying on multiple employee management systems where individual sites have local controls for updating employee records as changes occur. Gathering employee data requires pulling separate reports from each system and aggregating them to compile global employee demographic data.

The data represent the global employee population by headcount as of December 31, 2022, and include all permanent, full-time, and part-time employees from our operations. The data exclude temporary employees, interns, co-ops, and contractors, unless otherwise stated. There was not a significant fluctuation in headcount from 2021 to 2022. Changes in headcount due to new hires and attrition are discussed in [Disclosure 401-1](#).

We sometimes rely on 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.

GRI 2-8 WORKERS WHO ARE NOT EMPLOYEES

Our total global workforce includes Graphic Packaging employees and contract workers who 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 December 31, 2022, approximately 2,500 contractors supported our operations, representing approximately 9% of the total global workforce headcount needed to support our operations. This number varies throughout the year based on business needs and seasonal plant activities. Data on numbers of contractors working under our control are collected following the methodology described in [Disclosure 2-7](#).

GRI 2-9 GOVERNANCE STRUCTURE AND COMPOSITION

The Graphic Packaging Holding Company Board of Directors oversees broad corporate policy and overall Company performance. The Board fulfills these responsibilities by 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 (CMDC)
- Nominating and Corporate Governance Committee (NCGC)

Oversight of ESG risks and opportunities is shared by the Board and its committees. The Board is responsible for oversight of our sustainability strategy, governance standards, goals, and performance and has assigned principal oversight of our sustainability policy and practices to the NCGC. Oversight of governance matters such as enterprise risk management (ERM), financial matters, and cybersecurity risk is assigned to the Audit Committee, while oversight of a wide range of human capital and social matters — such as employee attraction, development, and inclusion — is the responsibility of the CMDC.

Senior management regularly updates the Board and NCGC on potential environmental, social, and economic risks and opportunities, including climate; water; Health, Safety, and Environment (HSE); human capital and social issues; regulatory actions; and product stewardship matters. The NCGC considers current and emerging social and environmental trends, major legislative and regulatory developments, and other public policy issues that may impact our business operations or stakeholders. The NCGC reviews our policies and practices for consistency with ESG and climate commitments, including goals, metrics, mitigation plans, and external reporting. The Committee reviews the annual ESG report and advises the Board on approval. The NCGC also assesses the qualifications of directors and potential directors, with respect to relevant ESG matters and how those qualifications can be leveraged to allow the Board to better evaluate and address evolving ESG issues.



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

We publish the governance structure for Graphic Packaging, including Board membership, Board member tenure, Board member competencies, Board member commitments, the committees of our Board, committee charters and committee membership, on our [investor relations website](#), and on p. 3-9 of our [2023 Proxy Statement](#). All Board committee members are independent directors. See [Disclosure 405-1](#) for a summary of our Board social demographics.

GRI 2-10 NOMINATION AND SELECTION OF THE HIGHEST GOVERNANCE BODY

The NCGC is responsible 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 perspectives. The NCGC reviews annual self-evaluations to identify director qualifications, skills, experience, attributes, and diversity that would enhance overall Board effectiveness. Age-based retirement practices help the Board prepare for turnover and engage in succession planning.

The NCGC nominates directors based on their independence and the experience and expertise relevant to the impacts of the Company, including sustainability topics. When evaluating candidates, the committee considers integrity and character; sound, independent judgment; breadth of experience, insight, and

knowledge; business acumen; professional accomplishment; specialized skills (e.g., cyber and financial experts, climate experts); and individual qualities and attributes, including diversity in experience, gender, and ethnicity.

We present director nominations to our stockholders during our annual shareholder meeting process. Learn more about our Board members' expertise and diverse experiences and the process for nomination and selection of directors by viewing p. 10-17 of our 2023 Proxy Statement and our investor relations website.

GRI 2-11 CHAIR OF THE HIGHEST GOVERNANCE BODY

Our chairman, Mr. Philip R. Martens — who leads the Graphic Packaging Board of Directors as well as all other Board members with the exception of our Chief Executive Officer (CEO) — is independent and has no material relationships with the Company other than as a Graphic Packaging director. All our Board committees are composed of independent directors.

GRI 2-12 ROLE OF THE HIGHEST GOVERNANCE BODY IN OVERSEEING THE MANAGEMENT OF IMPACTS

We identify potential business risks and opportunities from economic, environmental, and social topics using input from internal business and function leaders, internal and external stakeholder input collected through external engagements, and the ESG topic prioritization process delineated in [Disclosure 3-1](#), and through our stockholder engagement process as described in [Disclosure 2-20](#). This data informs our [ESG materiality assessment](#) and is shared with our enterprise risk team for consideration in the ERM process.

The ELT reviews major risks annually to ensure alignment and communicates those risks to the Board. The CEO and ELT are responsible for managing risk with oversight from the Board and Board committees. The Board oversees the strategic planning process and reviews and monitors execution of the corporate business plan.



The Board is also responsible for overseeing overall risk management, including review and approval of the ERM approach and process implemented by management to identify, assess, manage, and mitigate risk. Each committee oversees specific risk areas relevant to their respective charters, including risks with economic and ESG impacts. This process includes an ongoing review of Graphic Packaging's comprehensive cybersecurity and information security programs and financial reporting practices.

In fulfilling its oversight responsibility, the Board receives various management and Board committee reports and engages in periodic discussions with Company leadership as needed. The risk management approach and process are reviewed at least annually, with key risks regularly evaluated at meetings of the Board and its committees.

This engagement enables the Board and its committees to effectively coordinate risk oversight and relationships. 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 and risk oversight processes for economic and ESG matters, see p. 7-9 in our [2023 Proxy Statement](#) and our [2023 CDP climate change response](#).

Business Continuity

Graphic Packaging prepares for the possibility that incidents may occur so 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.

Our integrated approach allowed us to successfully respond to 2022 events such as the continuing COVID-19 pandemic and supply chain disruptions, evolving geopolitical events and trade sanctions (including the Ukrainian war), and winter storm Elliot. We kept our employees safe and maintained continuity of operations.

Building resiliency into our day-to-day operations allows us to evolve and improve business continuity and develop strategies to address risks and opportunities.

These strategies include:

- Immediate response to accidents.
- Response and recovery guidance, direction, and oversight.
- Communications with internal and external stakeholders.
- Recovering critical processes and resources (i.e., people, technology, physical assets, and relationships).
- Restoring operations quickly and safely following an event.
- Recovering of critical IT infrastructure, applications, and data.
- Management of financial matters and control environment.

Stockholders 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
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. See also Disclosures [2-9](#) or [2-13](#).



GRI 2-13 DELEGATION OF RESPONSIBILITY FOR MANAGING IMPACTS

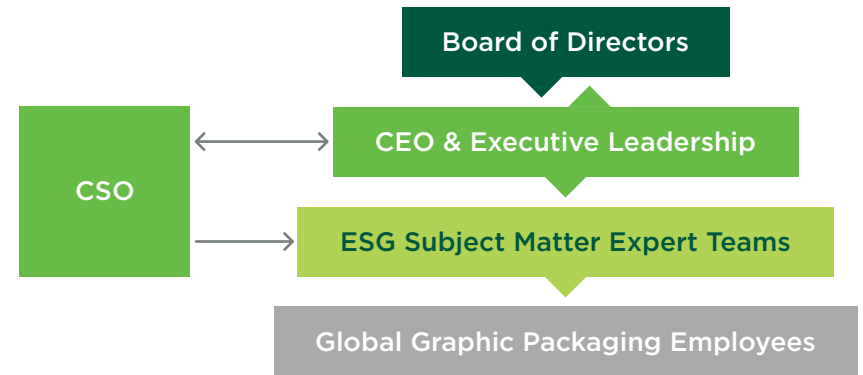
The Board delegates authority for day-to-day management of economic, environmental, and social risks and opportunities to the CEO and members of the ELT. Together, the CEO and ELT are responsible for embedding sustainability and ESG opportunities into our business strategy, plans, and budgets; for our mergers and acquisitions decisions; and for 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 ELT operationalizes governance of ESG matters through the Vice President (VP), Chief Sustainability Officer (CSO). The CSO works with the ELT and senior leaders from each of our business segments and major corporate functions to advance ESG initiatives and progress toward our ESG Vision 2025 goals. The CSO reports to Graphic Packaging’s Executive Vice President and 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 and ESG 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 ESG Vision 2025 program and make recommendations for short-, mid- and long-term action.
- Ensure continued progress is made toward achieving the ESG Vision 2025 goals.
- Track and report our progress to the NCGC and Board at a minimum during scheduled NCGC meetings.
- Track and report our progress to Graphic Packaging employees and external stakeholders.

ORGANIZATION CHART



Each of our ESG Vision 2025 goal plans has an ELT sponsor accountable for strategy, execution, and resource allocation; a goal leader responsible for achieving the goal; and a team of cross-functional subject matter experts. The goal leaders and their teams are responsible for developing the enterprise-wide plans to achieve the goal, establishing performance metrics, tracking and reporting progress to the CSO and ELT, and working with business segments to identify and pursue short- and mid-term opportunities to achieve our ESG goals.

Each goal leader supports business team leaders in establishing business-specific plans or teams for meeting business-level annual ESG Vision 2025 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.

GRI 2-14 ROLE OF THE HIGHEST GOVERNING BODY IN SUSTAINABILITY REPORTING

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



GRI 2-15 CONFLICTS OF INTEREST

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

Additional information may be found in our [2023 Proxy Statement](#) on p. 9 and on our investor relations website. Other public company Board memberships, supplier/purchaser relationships, and related party disclosures are disclosed in the relevant SEC filings for Graphic Packaging, including the 2023 Proxy Statement, and [2022 Annual Report](#) on Form 10-K, and quarterly 10-Q reports, as appropriate.

GRI 2-16 COMMUNICATION OF CRITICAL CONCERNS

The ELT reports any critical economic and ESG concerns to the Board. In 2022, there were no critical concerns communicated to the Board outside of the regular communications related to corporate risks.

GRI 2-17 COLLECTIVE KNOWLEDGE OF THE HIGHEST GOVERNANCE BODY

Directors are actively engaged beginning with the onboarding process that familiarizes them with Graphic Packaging’s senior executives, strategic plans and businesses, significant financial matters, significant environmental and social matters, core values including ethics and compliance programs, corporate governance practices, and other key policies and practices including our Code.

Directors continue to enhance their knowledge of ESG impacts (e.g., climate change; deforestation; circularity; cybersecurity; diversity, equity, and inclusion [DEI]; and supply chain management) by:

- 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 Company executives 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.
- Reviewing information on evolving ESG trends during NCGC committee meetings.
- Becoming familiar with ESG matters and best practices through other corporate business 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 ESG matters.

GRI 2-18 EVALUATION OF THE PERFORMANCE OF THE HIGHEST GOVERNANCE BODY

The NCGC oversees the annual self-evaluation process of the entire Board of Directors, committees, and the ELT. An effective tool in ensuring sound corporate governance practices, the process provides valuable insight regarding areas of effectiveness and opportunities for improvement. The NCGC establishes evaluation criteria, implements the process, and reports findings to the Board of Directors. The Board and each committee review evaluation results and take appropriate actions to address areas of concern.



GRI 2-19 REMUNERATION POLICIES

Graphic Packaging is committed to paying employees in a fair and equitable manner and to providing a fair or living wage for all employees. Our global total rewards tools 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 ensure 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. Our remuneration practices comply with all applicable laws and regulations in the countries where we operate.

Leaders review the base salaries of their employees during the annual compensation planning cycle, using salary increase guidance from the global compensation team, based on country and local market data. Compensation decisions are based on the guidelines as well as the employee's overall contributions and performance, including 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 ELT for their organizations and then by the CEO and Executive Vice President, Human Resources (EVPHR).

Policies governing senior executive and Board compensation are described in the Compensation Matters section of the [2023 Proxy Statement](#). Executive remuneration practices include provisions for fixed and variable pay, incentive payments, clawbacks, severance arrangements, and retirement benefits.

GRI 2-20 PROCESS TO DETERMINE REMUNERATION

The CMDC engages an independent consultant to advise on compensation review for Executive Officers, including the CEO, and the NCGC also engages the consultant to advise on compensation matters for the Board. This consultant has multiple safeguards and procedures in place to maintain their independence

including a rigidly enforced code; a policy against investing in client organizations; and separation from other administrative and consulting practices within their firm from a leadership, performance measurement, and compensation perspective.

Using benchmarking data compiled by the consultant from peers and industry surveys, the CMDC approves compensation recommendations for the Executive Officers and makes recommendations for the CEO's compensation, which is approved by the Board. The CMDC also establishes the performance goals associated with the short-term and long-term incentive plans and approves the results each year.

Employees in nonexecutive leadership positions and some sales roles are eligible to participate in an annual incentive plan. Colleagues who make greater contributions to our collective success have more opportunity for rewards. Additionally, employees in director level or higher leadership roles are eligible to participate in our long-term incentive plan, which is strongly linked to longer-term objectives of the organization. Performance stock units and restricted stock units are used as vehicles for these awards.

Our total compensation packages are competitive in the markets where we compete for talent, while allowing individual employee pay to vary based on performance, skills, and experience. We align our total rewards strategy globally, and provide various programs, in addition to base salary, including short-term and long-term incentives; health and welfare benefits; retirement programs; financial, physical, and emotional well-being programs; and monetary and social recognition. We routinely benchmark total rewards practices to ensure the plans are competitive and allow us to recruit and retain the talent we need to be successful.

Read more about our ELT and Board compensation program and the roles of the CMDC, NCGC, and the independent compensation consultant, in the Compensation Matters section of the 2023 Proxy Statement starting on p. 21.



Throughout the year, our Investor Relations (IR) team, which includes our Vice President of Investor Relations, some of our Executive Officers, and other designated spokespersons for the Company, speak with stockholders and prospective investors at investor conferences, in-person meetings, and phone conversations. The IR team maintains a very active and broad-based outreach program to solicit input on a variety of topics related to current business conditions, our business strategy, corporate governance structure, sustainability performance, and more. The Board and management team carefully consider the feedback from these meetings when reviewing the business, corporate governance, and executive compensation profiles.

Our most recent “Say on Pay” vote took place on May 24, 2023, and stockholders approved our proposal with 92% of the votes cast in support of the executive compensation program. The 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 considers stockholder input when evaluating executive compensation program design and decisions.

GRI 2-21 ANNUAL TOTAL COMPENSATION RATIO

In 2022, the ratio of CEO pay to the median worker pay was 251:1 and represents an 85% increase relative to 2021, reflective of Company business performance in 2022. For more information on how the CEO total compensation ratio was determined, see p. 38 and 45 of our [2023 Proxy Statement](#).

GRI 2-22 STATEMENT ON SUSTAINABLE DEVELOPMENT STRATEGY

Read a message from our CEO on p. 3 of this report.

GRI 2-23 POLICY COMMITMENTS

We are committed to operating responsibly, in line with the 10 principles of the United Nations Global Compact (UNGC), covering human rights, labor, the

environment, and anti-corruption, and to take action in support of broader UN goals. We also agree to support the UN 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 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.

GRI 2-24 EMBEDDING POLICY COMMITMENTS

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.** This 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.



Values are reinforced through our [Code](#), which applies to our Board, corporate officers, and our employees and subsidiaries worldwide. It forms the foundation for the ethical behaviors that guide everything we do and 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 17 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.

New employees receive 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.

Salaried employees complete annual Code training through GPI University, which reminds them of our core values, policies prohibiting discrimination and harassment, and commitment to acting ethically and with integrity. We conduct in-person training for our hourly workforce at our facilities and maintain training records locally. Employees receive additional ethics training, based on job profile, to provide comprehensive knowledge on potential risks related to individual job responsibilities (e.g., anti-corruption, anti-bribery, antitrust, anti-harassment, anti-slavery/human trafficking awareness, human rights).

Everyone in our Company is expected to comply with all applicable laws and regulations 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 Chief Compliance Officer (CCO) is responsible for overseeing our compliance program and works with the EVPGC in leading our compliance and risk committee. That cross-functional committee is 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.

Read more about our Code, business ethics policies, anti-corruption, and anti-competition practices in Disclosures [205](#) and [206](#) and our commitment to human rights in Disclosures [406](#), [408](#), [409](#), and [412](#).

GRI 2-25 PROCESSES TO REMEDIATE NEGATIVE IMPACTS

Graphic Packaging follows the same process for grievance mechanisms, seeking advice on Company policies and business conduct, and for reporting concerns about the organization’s business conduct. Read more about our reporting process in Disclosure 2-26, our Code, business ethics, anti-corruption, and anti-competition practices and 2022 activities in Disclosures [205](#) and [206](#).

GRI 2-26 MECHANISMS FOR SEEKING ADVICE AND RAISING CONCERNS

Our ethics and compliance engagement program shares messaging with our employees that encourages them to speak up through multiple platforms, including our Code, online videos and written messages, as well as in-person presentations by global business leaders 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 encouraged to listen, observe and speak up whenever an ethics question arises, to report any conduct inconsistent with our Code, our values, or the law, or to raise a concern or report a grievance.



Employees may ask questions or raise concerns by reaching out to their direct manager, business leadership, human resources (HR) representatives, our law department, or internal audit department, or by contacting the ethics hotline at any time. The multilingual 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, we provide suppliers with information on accessing the ethics hotline during the 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 during the ALERTline reporting process. As allowed by local law, callers to ALERTline may remain anonymous. Employees who raise concerns about potential misconduct are treated with respect and retaliation against anyone reporting a potential violation or grievance is not tolerated.

When a potential concern or impact is reported, we are committed to investigating the incident to identify root causes and take appropriate corrective actions to mitigate the incident. Graphic Packaging's trained investigators review all allegations and conduct investigations or direct them to the appropriate functions 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. An investigation team, led by HR, conducts a root-cause analysis for each substantiated incident to understand underlying causes and prevent reoccurrence. Appropriate business and HR leaders and experienced ethics and compliance professionals review substantiated Code violations to ensure a fair and consistent disciplinary response to confirmed violations. Employees are expected to cooperate with the investigation team during the investigation process and to provide feedback to help improve the process. Following the investigation, an appropriate response is implemented, which could include measures such as training, policy revisions, or disciplinary action. Anyone found in violation of our Code or who is dishonest

during an investigation is subject to disciplinary action up to and including termination or legal action. Substantiated negative impacts and violations are shared with the Board.

GRI 2-27 COMPLIANCE WITH LAWS AND REGULATIONS

Graphic Packaging's [Code](#) and [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 at our manufacturing locations are provided with environmental training to understand general and task-specific environmental compliance-related operating procedures and are encouraged to report any conditions or potential conditions that could result in a nonpermitted 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. 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 Operations 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 ELT and Board.

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



We use an 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 also ensures site environmental delegation of authority letters are in place, as well as current active permits, regulatory inspections, notices of violations (NOVs), consent orders, Occupational Safety and Health Administration (OSHA) citations, complaints received from regulatory agencies, and site Resource Conservation and Recovery Act 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.

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 2022, we received NOVs or letters from regulatory officials indicating potential permit deviations at our facilities. Graphic Packaging’s HSE team worked diligently with regulatory agencies to challenge and substantiate these potential violations, and when substantiated, took action to ensure corrective measures or responses to regulatory agencies were completed in a timely fashion and any further actions were mitigated. There were three incidents of noncompliance from 2019 operations that resulted in a formal enforcement action during 2022. One of those incidents resulted in a significant environmental regulatory fine or settlement.

Information regarding environmental matters is included in several areas of our [2022 Annual Report](#) on Form 10-K, including:

- Item 1 — Environmental and regulatory matters, p. 11
- Item 1A — Risk factors, beginning on p. 13
- Item 7 — Management’s discussion and analysis of financial condition and results of operations, p. 24
- Item 8 — Financial statements and supplementary data, Note 14 — Environmental and Legal matters, p. 78

GRI 2-28 MEMBERSHIP 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:

- 100% Recycled Paperboard Alliance
- 4evergreen
- American Forest and Paper Association
- American Forest Foundation
- Confederation of European Paper Industries
- Ellen MacArthur Foundation
- European Carton Makers Association
- EXTR:ACT
- Foodservice Packaging Institute
- Forest Stewardship Council
- Institute of Scrap Recycling
- National Association of Manufacturers
- National Council for Air and Stream Improvement
- PAC Global
- Paper and Packaging Board
- Paper and Paperboard Environmental Council
- Paperboard Packaging Council
- Recycled Paperboard Alliance
- Recycled Paper Technical Association
- Sustainable Forestry Initiative
- Sustainable Packaging Coalition
- The Paper and Paperboard Packaging Environmental Council
- US Composting Council

The above 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 or civic organizations in the communities where we operate.



GRI 2-29 APPROACH TO STAKEHOLDER ENGAGEMENT

Regular stakeholder dialogue is essential for understanding external concerns, conducting business responsibly, and for developing and implementing our sustainability strategies. Each of our business segments, functions, and locations is expected to regularly engage with its 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. These conversations shape how we define and execute our sustainability strategy, including ESG topic prioritization, risk management, and exploring new business opportunities. We identify our stakeholders as those entities that can affect or be affected by our actions, objectives, and policies.

Our key stakeholders include:

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

See [Disclosure 3-1](#) for more information.

GRI 2-30 COLLECTIVE BARGAINING AGREEMENTS

In 2022, approximately 62% of Graphic Packaging global employees were represented by labor unions and covered by collective bargaining agreements or by work councils in Europe. We implemented a cross-functional Labor Council in 2021 to enhance our focus on labor union relationships and believe that our current relations with employees and labor organizations are good.

For employees not covered by collective bargaining agreements, working conditions and terms of employment are consistent with local laws and regulations and are not influenced or determined based on other collective bargaining agreements. For more information on our labor practices, see Disclosures [402](#) and [407](#).



GRI 3-1 PROCESS TO DETERMINE MATERIAL TOPICS

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 [Disclosure 2-29](#)). We use the results of the assessment as critical input for our sustainable growth strategy and 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 in 2021 using the following three-step process and plan to repeat this exercise every three to five years. In 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 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 multipronged 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 that 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.



GRI 3-2 LIST OF MATERIAL TOPICS

Each year, Graphic Packaging reviews the ESG materiality assessment and ESG Vision 2025 goals to ensure priority topics remain relevant to our annual reporting process. The matrix shown below presents internal and external stakeholder priorities as of year-end 2022. This matrix reflects the relative importance of topics and lists topics in alphabetical order within each quadrant. The Manage quadrant in our current topic prioritization matrix highlights the 13 ESG topics that are the most important, or material, to our stakeholders and to Graphic Packaging. In 2022, we saw a slight increase in external prioritization for plastics alternatives and workplace culture, moving these issues up into the Manage quadrant.

Prioritization and effective management of potential opportunities and risks related to the topics in the Manage quadrant are integrated into our Company strategy, business models, risk management, and governance processes to drive continued commercial success and sustainable business growth. We also consider the prioritization results when determining the information included in our public disclosures, including this ESG report. Our current practices provide effective management for these prioritized topics, and no significant changes to our business strategy or reporting content were made in 2022.



Manage

We measure, evaluate, and report on our performance in these areas, either having set or planning to set goals and targets for each.

Measure

We measure, evaluate, and may report our performance in these areas to reduce impacts and realize business opportunities.

Monitor

We track views on these topics and proactively engage stakeholders to monitor the potential impact on our Company.



Product Innovation

IN THIS SECTION

Product Development

Quality Management

Our Products

Product Awards

Recyclable Products

Reducing LDPE

Customer Satisfaction

Product Stewardship





Product Innovation



GRI 3-3 Management of Material Topic

Consumers want to feel good about the choices that they make, and there is increased awareness of the environmental and social impact of their choices. They are seeking value in purpose and supporting brands that make a difference as they make a profit. Meeting the demand for packaging that delivers convenience and product safety, while also being composed of sustainable materials that can be recycled, is an ongoing challenge for the packaging industry.

The regulatory environment is also rapidly evolving, which is influencing decisions by brand owners and retailers and creating a pull for more environmentally friendly packaging solutions. In Europe, the [Green Deal](#) has created the framework for the transition to a circular, low-carbon, low-waste economy aiming for climate neutrality on the continent by 2050. In 2022, Canada announced plans to launch regulations on single-use plastic in foodservice and plastic multipack packaging; and in the US, both the federal and state governments are enacting legislation to address plastic waste and increase recycling rates. Requirements regarding recyclability also continue to grow in different regions.

To meet the growing consumer demand for sustainable products and to address regulatory changes, brands around the world are committing to reducing their use of single-use plastic packaging and setting goals to make their packaging 100% recyclable, reusable, or compostable. Initiatives like Plastics Pact from the [Ellen MacArthur Foundation](#) unite businesses, government institutions, NGOs, and citizens behind a common vision of transitioning away from unnecessary and problematic nonrecyclable plastics.

Global growth of e-commerce increases the amount of shipped packaging even as consumers expect brands to deliver lower waste options that reduce

environmental impact. 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. To meet the growing consumer demand for sustainable products and to address regulatory changes, brands around the world are committing to reducing their use of single-use plastic packaging and setting goals to make their packaging 100% recyclable, reusable, or compostable.

Graphic Packaging is working to develop resource-efficient and easily recyclable packaging solutions that use natural resources responsibly. We strive to be a partner for our customers, enabling them to shift toward more recyclable packaging and to shape how they think about their packaging products.

More than 94% of our product revenues comes from fiber-based consumer packaging made from responsibly sourced, renewable tree fibers, and most of our products can be recycled after use. By working closely with our customers to understand both their needs and end consumer expectations, we can continue to offer the value and quality that our customers expect through innovative packaging that helps solve the growing waste challenge.

For Graphic Packaging, our ESG Vision 2025 product innovation goals serve as a north star, guiding product development and stewardship.

ESG VISION 2025 PRODUCTS GOALS

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

Our innovation team considers multiple viewpoints and follows rigorous processes, and they create and bring to market new packaging solutions to help us reach our goals and help our customers achieve their own.



SOAR

Scoping Ideas, Opportunity Development, Align Expectations, Release to Market (SOAR) is a product development roadmap focused on improved decision-making, efficiency, and speed that uses a stage-gate review product development process to ensure success from concept to market.

Our new product development leaders work with sales and marketing to gain insights from customers and the broader market, develop new solutions, and incorporate them into portfolio planning. At each stage-gate review, market and sustainability deliverables and metrics are evaluated to determine whether the project should be allowed to move into the next phase. The SOAR process ensures innovations are strategically aligned with business growth objectives, coordinated enterprise wide, and supported by the appropriate resources.

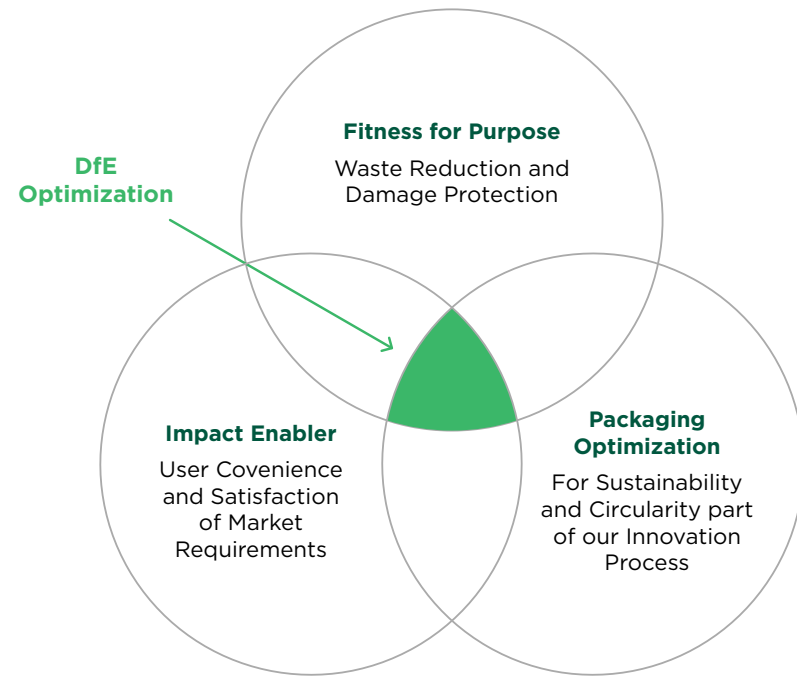
Design for Environment

The Ellen MacArthur Foundation’s first principle — design out waste and pollution — notes that a product’s environmental impact and its fitness for the circular economy are primarily determined during the design phase. By integrating DfE principles into our SOAR innovation process, we can evaluate and reduce the life cycle environmental impacts of a product — from raw material selection to managing the impacts of our operations and, finally, to understanding the recyclability of the product at the end of its useful life.

Life cycle analyses (LCAs) are one of the tools we may use to inform the DfE and new product development process, where appropriate. We have also developed a flexible framework with a set of 15 sustainability performance indicators that guide new product development and characterize progress in line with circularity and environmental sustainability targets. Indicators cover product composition choices, supply chain and manufacturing impacts, product performance and fitness for use, and product end of life. As the development process progresses through the stage-gates, the indicators are used to optimize the overall sustainability and

circularity performance of the package without overemphasizing a single criterion or attribute. Food safety as well as current and future regulatory compliance questions are also considered throughout the process, as appropriate. Currently, there is no universal solution that will address all sustainability needs. As such, we approach each new product idea holistically, seeking to find the best solution. This complexity sometimes requires trade-offs to find solutions that maximize alignment with our customers’ priorities while minimizing other impacts.

DESIGN FOR ENVIRONMENT



Voice of the Customer

We incorporate voice of the customer feedback and consumer insights early in the development process to ensure we understand the needs of our downstream partners and to inform how we develop new or improve existing products.



Quality Management System

Graphic Packaging considers safety, food safety, and product quality as core components of our continuous improvement strategy and culture. We follow a quality management system (QMS) 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. Production locations review quality metrics monthly and our VP, Global Quality formally convenes a team of quality system leaders across Graphic Packaging annually to review the effectiveness of our QMS.

Evolving Our New Product Development Process

In 2022, we focused on creating a more balanced and inclusive product development team structure. We took an approach to develop an organization that is centrally organized, regionally focused, and globally connected. By breaking down barriers between teams and business groups, we hope to source new project ideas from employees outside the innovation team as well as transfer product ideas from one sector to another.

At the end of 2021, we explored opportunities to seek new product ideas from our broader employee population. We organized a global innovation challenge during which 155 product ideas were submitted for substituting current plastic package formats with fiber-based options. From those submissions, we selected eight projects for further evaluation and advanced two through development in 2022 — alternative yogurt containers and trays for cookies and biscuits.

We have also been working with several partnerships to explore novel barrier technologies that we believe will be necessary for substituting paper for plastic in more applications. One of these collaborations, started in 2022, is called [F3 Film for Future](#) led by [VTT](#) Technical Research Centre of Finland to explore cellulose-derived coatings and films. Another example of collaboration (under the Swedish [Vinnova](#) project) is researching the effectiveness of dry-molded fiber as an alternative for single-use plastics.

The team was also focused in 2022 and into 2023 on standardizing QMS processes like food safety auditing and integrating recent acquisitions into the system. In 2022, six packaging plant locations (5% global locations) were certified to the International Organization for Standardization (ISO) 9001 QMS standard. We continued our active participation in industry working groups, including American Forest and Paper Association (AF&PA), Recycled Paperboard Technical Association, European Carton Makers Associations, and others, to stay abreast of new issues and customer concerns.

Our Products

Our innovative packaging solutions are used to package products for many of the world's most widely recognized brands in beverage, food, foodservice, healthcare, beauty, and homecare products, among others. We take pride in being part of life's everyday moments for billions of consumers.

The trends that drive consumer behavior are at the core of how we innovate. Our fiber-based packaging solutions are inspired by consumers and the changing world around us. Our product innovation strategy focuses on innovation platforms that have been strategically designed to respond to the underlying consumer trends that most impact packaging. With that in mind, we established three innovation platforms to focus our efforts: Plastic Alternatives, Strength Packaging, and Cooking Solutions. Within each of these platforms, we are building a multigenerational product innovation strategy and pipeline supported by design and premiumization enablers. We are excited about the future and the contributions that fiber-based packaging will bring to building a more circular economy.

**Major Brands by Market Segment**

Market segment	Primary brands
Beverage	KeelClip™, EnviroClip™, GripClip™, Cap-It™, QuikFlex™, Marksman™, AutoFlex™
Food	PaperSeal™, ProducePack™, DesignerWare™, PaperLite™, IntegraFlex™, and Boardio™
Foodservice	OptiCycle™, EconoPaxx™, ecotainer™, Hold&Go™
Consumer Goods	Z-Flute™, IntegraFlute™, IntegraPak™, and Fibrecote™
Healthcare & Beauty	Printallic™, Boardio™
Paperboard	AquaKote™, PearlKote™, OmniKote™, Everest™, Fortress™, Conquest™, PaceSetter™, PaceSetter Rainier™

We measure the effectiveness of our product innovation approach by tracking progress moving products through the SOAR product development pipeline and into commercialization. The innovation team has been highly successful introducing new products and has delivered ~\$460 million in new product revenue since our product innovation goal was launched in 2020, and we expect to surpass the \$400-\$700M in net new product sales by 2024, with more than 70% of this growth attributed to plastics alternatives solutions. New product innovations include products with improved recyclability performance, lower LDPE usage, and other enhanced performance attributes. We are doing our part to help reduce plastic packaging on store shelves, reducing reliance on finite fossil fuel resources, increasing use of renewable resources, and often improving packaging circularity to reduce waste.

ESG Vision 2025 Product Innovation Goals Progress

Goal	2022 result	Status
Deliver \$400 million-\$700 million in net new product sales	~\$460M ¹	On track
100% of sales from products that are recyclable ²	95%	Progressing
Reduce LDPE use by 40%	15% reduction	Progressing

1. Cumulative revenue measured January 1, 2020 through December 31, 2022.

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

Here are some of our most recent innovations launched in 2022, aligned with our innovation platforms: plastic substitution and reduction, strength packaging, and trays and microwave solutions.

Plastic Alternatives

Thanks to just three of the featured innovations from our plastics alternatives platform — [PaperSeal](#), [Boardio](#), and [KeelClip](#) — over half a billion plastic packages, were taken off supermarkets shelves and substituted with fiber-based alternatives. Our fiber-based packaging solutions are helping major consumer brands meet their pledges to eliminate problematic plastic packaging and the goals set by the Plastic Pacts industry groups.



KeelClip

KeelClip is a paperboard multipack solution that replaces plastic rings and shrink film in multipack formats for beverages and other food items. It provides an enhanced user experience and great merchandising appeal and is partnered with an integrated high-speed machinery solution.

Building on its 2021 launch success, KeelClip adoption continued growing in Europe throughout 2022, enabling global substitution of 360 million units of plastic packaging with our recyclable fiber-based packaging. Also, 2022 saw the first commercialization of KeelClip in the US. Liberty Coca-Cola Beverages, a Coca-Cola bottler, is now using KeelClip to improve sustainability performance across its distribution footprint. The installation of the KeelClip 1600 machinery will be used to package approximately 3.1 million cases of beverages per year and avoid creating 75,000 pounds of plastic in the North American supply chain. We are also seeing interest by our Canadian customers in response to Canada announcing regulations that will restrict the sale of plastic multipacks starting in 2024.

In 2022, we expanded the KeelClip product portfolio with the introduction of KeelClip G2, a new design option that uses less paperboard and includes pack-tightening benefits. The KeelClip G2 package design will be commercial in 2023.



EnviroClip

A clip-style solution that uses the least amount of paperboard material, EnviroClip has a smaller carbon footprint compared to other products in our multipack portfolio. Designed to accommodate both cans and polyethylene terephthalate (PET) bottles, EnviroClip offers several structural design options to best accommodate customer packaging and sustainability needs.



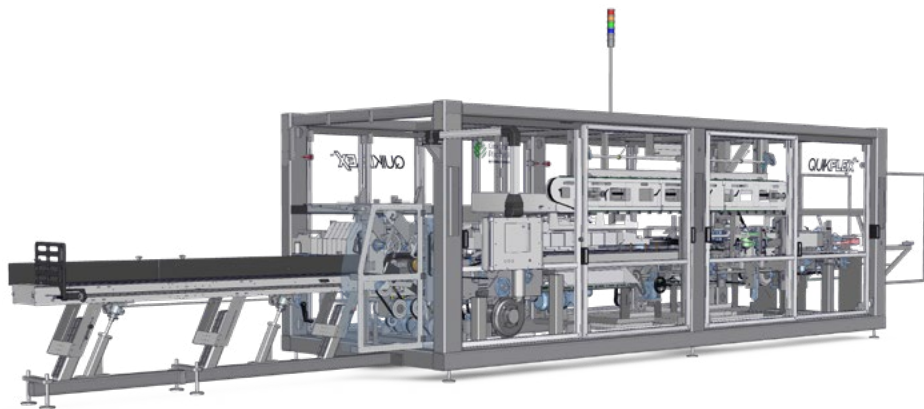
Multipack Machines

Graphic Packaging multipack machine designs evolve with carton designs to run lower caliper cartons; cartons requiring less paperboard; and various paperboard substrates, including recycled paperboard depending on customer need.

Most machines are designed to run a variety of package formats and styles on a single machine, eliminating the need for multiple machines. The Marksman and AutoFlex machines produce wrap and basket-style packs with locks at the base of the carton, which allows for products to ship flat and eliminates the need for hot melt glue, resulting in improved recyclability and lower energy consumption per package.

Machinery controls are designed to reduce energy use. Continuous motion platforms avoid the energy draw of ramping up and down during an intermittent motion process. This allows for faster production with more stability and lower power usage. We have also converted machine motors to higher efficiency motors, providing an average efficiency gain of 30% over traditional induction motors.

Using cartons with our multipack machines may also offer customers an energy savings benefit versus plastic shrink wrap packaging options. For example, our peer reviewed beverage multipack LCA suggests energy usage during the package filling stage may be reduced by a factor >3, which in turn converts into reduced Scope 1 and Scope 2 GHG emissions for our customers.



Boardio

Boardio is a fiber-based rigid container that provides an alternative to plastic, glass, and metal containers. Made from more than 80% renewable materials, our recyclable Boardio solution enabled ~38 million plastic packs to be replaced in 2022.

Multinational confectionery manufacturer Perfetti Van Melle partnered with us to create the first-to-market paperboard bottle in the gum category that offered a more than 80% reduction in plastic use without losing the structural integrity or barrier performance of a rigid plastic tub.

Foodservice Solutions

We have a broad range of solutions for food service including cartons, trays, buckets with multiple shapes and barrier properties, as well as cups and are working to expand our portfolio. We are focused on our cup offerings, improving recyclability and reducing use of fossil-based barrier coatings. Our insulated cups provide a recyclable alternative for foam cups, which are seeing increased regulatory pressure.

Hexagonal Carton

As part of its environmental strategy and within the framework of European regulations, we supported McDonald's France in reducing the volume of single-use plastic packaging by replacing its old, molded fiber, plastic lidded bowls with an Award-winning one-piece recyclable hexagonal paperboard alternative. Today, nearly 100% of its single-use packaging is no longer made of plastic.



Boardio



Foodservice Packaging



Hexagonal Carton



Multi-use Cups



Multi-use Cups

Focus Brand’s Auntie Anne’s®, the iconic pretzel restaurant with approximately 1,150 locations in the US, is excited to add our new multi-use, SF1® certified paperboard cups in 16, 22, and 30 oz sizes, to their stores. The cups will be used for Auntie Anne’s delicious pretzel nuggets and refreshing cold drinks. In total, we anticipate supplying Auntie Anne’s with over 100 million cups and 25 million lids annually.

Trays and Cooking Solutions

We manufacture a range of paperboard trays to suit an array of needs and product applications — pressed trays and bowls for both conventional and microwave cooking; trays for takeout and to-go foods for the foodservice industry; and new innovations in high-barrier paperboard trays for fresh and processed meats, dairy, and more.

PaperSeal

The multi-award-winning PaperSeal tray portfolio continued its expansion and success in 2022 with its first commercialization in the United States. Grocery retailer New Seasons Market introduced PaperSeal for its Partner Brand Fresh Pasta, substituting their plastic tray with a fiber-based tray to reduce total package plastic components by 91%.

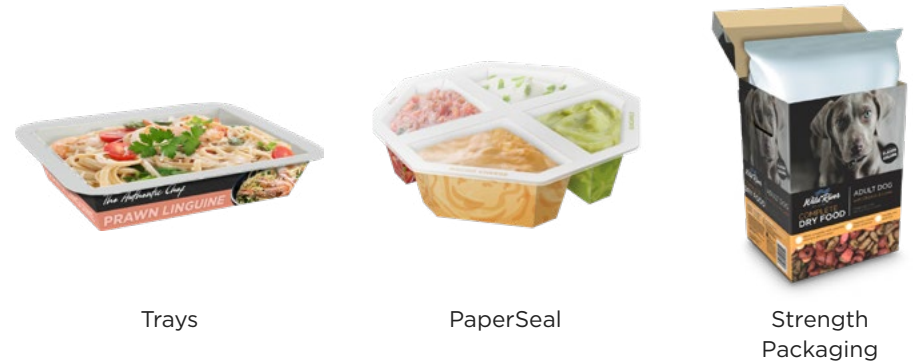
PaperSeal also continued to gain traction in Europe. French seafood processor Le Marin Vendéen places quality and freshness at the heart of its operations and wanted a paper-based packaging solution for its retail customer Grand Frais. Their goal was to reduce plastic packaging for their premium chilled seafood range, while retaining overall pack performance. PaperSeal was able to match the functionality, convenience, and efficacy of the brand’s plastic packaging, retained product quality and freshness, and achieved excellent performance when stored and cooked. By partnering with Graphic Packaging, Le Marin Vendéen has successfully implemented a paper-based solution that reduces plastic usage by 85%.

Strength Packaging Solutions

Our strength packaging solutions align with our DfE methodology in that they often allow minimizing the required amount of material while also providing advantages in that they can be handled in the supply chain. We have a range of options that align with specific challenges. For example, the Z-Flute cartons are engineered through a process that involves strategic lamination to the inside of the load-bearing areas, providing the compression strength performance of a corrugated box in a paperboard carton.

Self-palletized Cartons

McCall Farms is a large-scale producer of canned fruits and vegetables with nationwide distribution. To help the company expand into club stores, we developed a carton (c.a. 469 gsm) CRB that self-palletized and was designed for high-speed setup and filling on standard carton machinery. The compact size of the carton resulted in an increased number of filled cartons per pallet. This is aligned with one of the advantages that our strength packaging line often provides in terms of reduced volume for the packed goods versus, for example, corrugated counterparts allowing the optimization of packs per pallet and per trucks leading to savings in shipment and potentially in transport-related emissions.



Trays

PaperSeal

Strength Packaging



Award-winning New Products

In 2022, Graphic Packaging was honored to receive 25 individual packaging innovation awards for some of our latest innovations, including Boardio, PaperSeal, and other custom solutions. The honors were bestowed by a range of institutions, from large global organizations to local industry associations. Notably, the WorldStar awards, among the most prestigious in the packaging industry, celebrate the best and brightest innovations.

Ricardo De Genova, Senior Vice President, Global Innovation and New Business at Graphic Packaging, said, “The WorldStar awards are particularly resonant for us, since winners are chosen by judging consensus that a pack is ‘superior in its category and market’ and ‘considerably above class standard in execution and innovation.’ We are proud to work with our customers on packaging projects that make a real difference to brands, consumers, and the environment alike.”

We take pride in the many packaging industry awards that recognize our innovations and focus on evolving our packaging offerings. Highlights from 2022 awards are included below:

WorldStar Awards

- BelleHarvest apple carton
- PaperSeal tray
- Estrella Damm rounded corner pack
- Boardio (with Perfetti Van Melle, Mentos Pure Fresh Gum as well as with Club Coffee, Loblaws)

PAC Global Awards

- Estrella Damm rounded corner pack
- Nestlé tapered hinged-lid confectionary carton
- Boardio (with Club Coffee, Loblaws)

AmeriStar Awards

- PaperSeal for New Seasons Market

Paperboard Packaging Competition Awards

- Boardio (with Perfetti Van Melle, Mentos Pure Fresh Gum) – Paperboard Package of the Year
- White Castle Love Cube – Richard DePaul award for Creative Converting and Design
- Take smart fridge beer pack – Innovation of the Year

European Carton Excellence Awards

- McDonald’s hexagonal carton

Good Design Award Japan

- Paper scrubber

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





Recyclable Products

We aspire to have 100% of our revenue come from selling products that can be recycled after use and improve packaging circularity. We measure the recyclability of our products according to four 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) or Ellen MacArthur Foundation’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 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, Circular Economy for Flexible 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 European Union (EU) countries requirements.

Conditionally recyclable. We define conditionally recyclable products as those that require specialized recycling technologies or products that require the consumer to separate package components for recycling. We also included in this category certain products that would require further analysis or validation testing to confirm broader product recyclability claims. Finally, semi-finished materials that can be converted to different final products downstream are also included in this category.

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 Ellen MacArthur Foundation 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 2022, 95% of revenue was from products meeting these recyclability criteria, similar to 2021 progress.

ESG Vision 2025 Product Recyclability Goal Progress				
Recyclability category	2019	2020	2021	2022
Widely recyclable	81%	79%	66%	66%
Locally recyclable	16%	18%	15%	14%
Conditionally recyclable	-	-	14%	15%
Not recyclable	3%	3%	5%	5%
Percentage revenue from recyclable products ¹	97%	97%	95%	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. Most fiber-based packaging sold in general retail environments is considered widely recyclable, and fiber-based packaging is one of the most recycled packaging materials, with 82% recovery in EU-28 (Eurostat 2020 EU-27) and ~68% recovery in US ([AF&PA 2022](#)) for all paper and paperboard. Some foodservice and flexible packaging products are also classified as widely recyclable depending on their composition. Machinery products are considered recyclable, due to their ability to be refurbished or recycled at end of life.



Products categorized as locally recyclable represent approximately 14% of our revenue and include many foodservice packaging items such as paper cups. Foodservice packaging represents approximately 20% of our revenue 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, which are technically recyclable. Because 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 15% of our revenue and include those with plastic content that may be above a defined content threshold in some countries, making them less suitable for collection and recycling at standard paper mills but could be sorted toward specialized recycling technologies that are less widely available. Board sold on the external market, turpentine, and tall oil additives, which 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 2022, we reviewed and reduced the plastic components and coatings in our composite packaging to less than 10% of the total package composition where needed in preparation for changes in the UK On Pack Recycling Label (OPRL) criteria. The OPRL is revising the maximum allowable plastic content contained in paperboard-based packaging for the packaging to be considered recyclable. Following circularity by design guidelines, we also revisited the structure of our flexible plastic-based packaging (both with and without a barrier layer) to transition to more recyclable plastic monomaterial structures, with and without barrier, as well as to coated paper where possible. As such, in 2022 we increased our portfolio of mono polyethylene (PE) and mono polypropylene (PP) products

with the Ecotop™ mono (with barrier) and Transoflow mono (without barrier) product lines. These products are recyclable according to guidelines from CEFLEX, Recyclclass, and OPRL, for example. These monomaterials are currently used to replace multilaminates in a variety of packaging (e.g., lidding films and pouches) and enable us to integrate the production of the lids, membranes, or barriers for some of our fiber-based primary packaging solutions.

We work across the value chain to help advance recyclability of our fiber-based consumer packaging and increase access to recycling. We have active roles in several broad industry alliances focused on increasing product circularity in our sector, harmonizing design for recycling guidelines, harmonizing recyclability tests, and other initiatives. See Disclosures [2-28](#) and [306](#) for information on organizations where we engage.

Reducing LDPE Use

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 polymer-coated packaging products. LDPE is typically applied to paper packaging products to create a water and grease barrier for many foodservice and food packaging applications.

LDPE usage reductions in 2020 and 2021 were largely driven by a lower demand for in-store dining and foodservice packaging due to the pandemic. As customers returned to in-store dining in 2022, we saw an increase in LDPE usage relative to 2021 due to increased demand for foodservice packaging and customer preference for LDPE coated packaging.

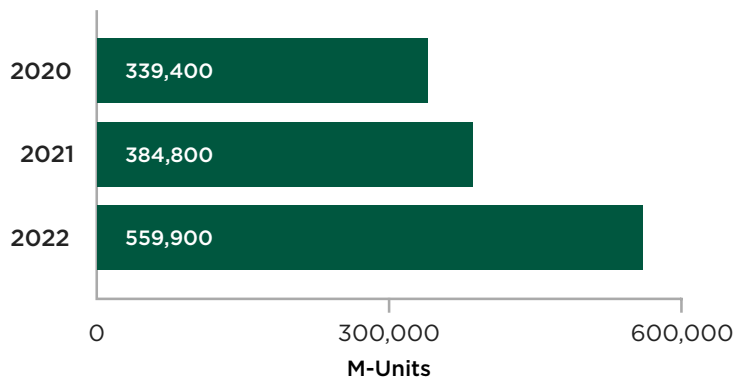


ESG Vision 2025 LDPE Reduction Goal Progress				
Beverage	2019	2020	2021	2022
40% reduction in LDPE usage ¹	4%	16%	19%	15%

1. Only includes LDPE resin we extrude ourselves.

In 2022, we continued improving and offering our OptiCycle dispersion coated cups, which can replace LDPE-coated cups, but the product is still not being largely adopted by customers due to the higher costs associated with the new OptiCycle dispersion technology. However, bio-based polylactic acid (PLA) coated cup alternatives, which in certain applications can also replace LDPE-coated cups, saw increased sales growth by 45% last year.

PLA COATED CUPS EVOLUTION



We are developing other non-LDPE coated cups using biodegradable and bio-based polymer coatings, which should be available for market deployment in the upcoming months. We continue testing the impact of reducing LDPE thickness on product performance in different packaging formats (including cups, trays, and flexible materials) as part of our strategy to meet evolving recyclability requirements. We see increasing demand for bio-sourced or recycled alternatives to virgin fossil fuel-resins, and for biodegradable options to help improve packaging

sustainability. In 2022, our European flexibles sites in Lund and Halmstad were certified to trade with sustainable materials on mass balance with the International Sustainability & Carbon Certification Plus scheme. This enables us to incorporate second generation renewable polymers (circular biomaterials, e.g., waste material from forestry and food industry) into our portfolio of flexible packaging.

All in all, our fiber-based packaging options use a significantly lower amount of plastic in the barrier coating than what is used to make the 100% plastic packaging alternatives they are replacing. Market adoption of new barrier alternatives and the transformation of our product portfolio will ultimately determine our success in achieving our 40% reduction goal. The 2021 acquisition of AR Packaging added new packaging formats that use LDPE coatings. While not tracked as part of the current reduction goal, these new applications provide additional opportunities for us to rethink our materials use and strategy for developing more circular packaging.

Customer Satisfaction

Collecting feedback from customers (e.g., voice of the customer) ensures we understand the needs of our downstream partners and informs how we develop new packaging innovations or improve existing products. We solicit feedback following a rotating schedule that spans an approximately 2.5-year timeframe to survey all our major customers on their satisfaction with Graphic Packaging as a supplier on various dimensions including customer service, fill rates, quality, innovation, and sustainability performance. We focus mainly on “Net Promoter Score” and “Competitive Ranking” and set quantitative targets internally to improve those key performance indicators (KPIs).

Our 2022 voice of the customer survey results indicated our customers are most concerned with companies procuring renewable energy and setting science-based GHG emissions reduction targets. We are working on these items, as well as improving customer communications on our ESG program. Our innovation team is also considering feedback requests to provide information on our product carbon footprints and increasing our use of recycled content.



GRI 416 PRODUCT STEWARDSHIP

416-1 ASSESSMENT OF THE HEALTH AND SAFETY IMPACTS OF PRODUCTS AND SERVICES

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

Because our paperboard is commonly used in food packaging applications, our products must comply with applicable food safety regulations. Our facilities follow globally recognized standards including the British Retail Consortium standards (a widely used certification standards for food quality and safety developed by British retailers), Food Safety Systems Certification 22000 (a complete certification Scheme for Food Safety Management Systems based on ISO standards), and the Safe Quality Food Program (a rigorous and credible food safety and quality program that is recognized by retailers, brand owners, and foodservice providers worldwide). At year end 2022, 59% of our packaging facilities were Global Food Safety Initiative certified.

Our continuous improvement commitment to product safety and quality summarizes our commitment to:

- Maintain a food safety culture.
- Continually improve the food safety management system.
- Comply with customer and regulatory requirements to supply quality products that 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.

Graphic Packaging’s product innovation team monitors evolving regulations and requirements to ensure ongoing compliance for new and existing products. This team is also responsible for systematically assessing safer raw material alternatives and eliminating hazardous substances as part of our commitment to product stewardship.

We initiated an effort to phase out the intentional addition of per- and polyfluoroalkyl substances to our food packaging to comply with evolving state regulations regarding the use of these chemicals. This required the coordination of Product Stewardship, Legal, Procurement, Operations, and various other groups within the Company to expedite the transition.

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

In 2022, Graphic Packaging had two incidents where incorrect cartons were included in pallets shipped to our customers. These errors contributed to the packaging being filled with incorrect product, which led to customers recalling impacted product.



Economic Topics

IN THIS SECTION

Economic Performance

Supply Chain Sustainability

Business Practices

Cybersecurity and Data Privacy





Economic Performance



GRI 3-3 Management of Material Topic

Our economic performance contributes directly to our ability to drive long-term, sustainable growth for our Company, advance our ESG initiatives, and deliver economic benefits to the communities where we operate. Vision 2025 guides our business strategy and sets measurable goals under the pillars of People, Planet, Partners, and Profit.

We report on our structure and financial performance through our [Annual Report](#) on Form 10-K and other required filings with the SEC. These documents are available in the Investors section of our [website](#) and on the SEC’s website.

GRI 201-1 DIRECT ECONOMIC VALUE GENERATED AND DISTRIBUTED

See the Financial Highlights section on p. 2 in the wrap for our 2022 Annual Report on Form 10-K and also the ESG data summary on [p. 179](#) in this report.

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

We recognize climate change is a serious global issue that presents both opportunities and challenges for our business, our partners, and our communities. Climate-related issues for Graphic Packaging are likely to be driven by changes in physical climate parameters, regulations or public policy, changes in technology, and product demand.

For example, emerging global regulations restricting the use of single-use plastic packaging and recently enacted plastic and foam bans in some US states promote the adoption and use of our recyclable, fiber-based consumer packaging products but also pose risks to some foodservice packaging. With this in mind, we invest in research and development (R&D) to innovate new packaging solutions and manufacturing processes that enable our operations, customers, and consumers to reduce their GHG emissions, carbon footprint, and waste footprint.

We continue tracking and managing climate-related opportunities and risks through the annual enterprise risk assessment and ESG materiality assessment processes (read more in [GRI 2-12](#), [GRI 3-1](#), and [GRI 3-2](#)) 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 2022 Annual Report on Form 10-K Risk Factors discussion p. 13-17, the [2023 CDP climate change response](#), the [Task Force on Climate-Related Financial Disclosures \(TCFD\) reporting index](#), and in Disclosures [302](#) and [305](#).

GRI 201-3 DEFINED BENEFIT PLAN OBLIGATIONS AND OTHER RETIREMENT PLANS

Graphic Packaging provides detailed disclosure about pension and post retirement obligations beginning on p. 26 of our 2022 Annual Report on Form 10-K.



Supply Chain Sustainability



GRI 204, 308, 414 PROCUREMENT PRACTICES, SUPPLIER ENVIRONMENTAL AND SOCIAL ASSESSMENTS

GRI 3-3 Management of Material Topic

In 2022, Graphic Packaging spent more than \$6.2 billion with over 17,000 suppliers across our global operations. We operate an extensive, integrated global supply chain that includes suppliers for raw materials, energy, freight carriers, warehousing, and other goods and services. We work to choose suppliers and other third-party partners who share our commitment to operate responsibly, generate value for us and our customers, and help our customers meet consumer expectations. We recognize that actions across our supply chain can positively or negatively influence a wide range of stakeholders, potentially creating social, environmental, or economic impacts.

Our global sourcing teams are engaged in efforts around supply chain transparency, supplier compliance, risk management, and collaboration opportunities. Their actions are guided by procurement principles based on our ongoing commitments to key stakeholders and internal standards outlined at Graphic Packaging. They:

- Source for the lowest total cost of ownership.
- Meet business requirements legally and ethically.
- Provide equal opportunity to potential suppliers.
- Minimize potential environmental or social impacts within the supply chain.

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).
- Indirect procurement (e.g., pallets, fuel, electricity, manufacturing parts, services).
- Logistics procurement (e.g., transportation and warehouse services).

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. We also expect them to consider potential environmental impacts in daily business decisions and to seek opportunities to reduce their impact by conserving natural resources, recycling, and reducing material use and by implementing pollution controls in their operations.

Global Supplier Code of Conduct

Our [GSCOC](#) establishes clear expectations for upstream supply chain partners (including vendors, contractors, agents, and other providers of goods and services) and invites them to join us in our commitment to work responsibly, with the needs of our stakeholders as our focus. It defines our supplier expectations for fully complying with applicable laws and regulations; for adhering to internationally recognized ESG frameworks and standards covering ethical business practices, labor and human rights practices, and environmental stewardship; 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 requirements 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 focused on developing and implementing our supply chain sustainability programs first in this region, and once established will leverage them to other global regions. The GSCOC and other sourcing documents are provided to suppliers during the onboarding process in the US, and the GSCOC is available to all suppliers through our external supplier portal. We strive to include our GSCOC and certain ESG requirements in new US and European supplier agreements and in newly updated agreements with existing suppliers.

A signed acknowledgment of the GSCOC, or approved waiver by the Vice President, Procurement (VPP), is required of all new suppliers to demonstrate understanding 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 noncompliance 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

Responsible wood fiber procurement is an important component of our supply chain, and we choose suppliers that share our commitment to respect our natural resources and safeguard against deforestation. [Graphic Packaging's Sustainable Forestry Policy](#) describes expectations for wood buyers and suppliers regarding how they source, harvest, and deliver wood fiber to our mills. Wood and wood chip supplier contracts require commitment to avoiding 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 wood suppliers. These trainings are offered through independent third parties in coordination with individual state Sustainable Forestry Initiative® (SFI®) State Implementation Committees (SICs). Training records are maintained and verified on the respective organizations' websites. Graphic Packaging's 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 to incorporate new learnings and best practices.

We assess wood supplier conformance to our Sustainable Forestry Policy using supplier risk assessments and field audits. Our wood supplier due diligence system 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 (roundwood, wood chips, pulp), harvested tree species, country and state of harvest, current complaints against the supplier, and whether an individual management plan is needed to control risk for a particular supplier.

We complete field tract inspection audits of suppliers during harvesting activities to verify compliance with the Sustainable Forestry Policy and local best management practices. 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 (HCVs), risk of violation of traditional and civil rights, evidence of genetically modified trees, labor, applicable certifications, and whether state timber harvesting best management practices are being followed. Risk assessments are completed on all new wood suppliers, and we target auditing 50% of existing wood suppliers each year, so that each supplier is audited at least once every two years.



ESG VISION 2025 SUSTAINABLE SUPPLY CHAIN GOAL

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

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

To achieve our goal, we pursue certifications for our facilities under the SFI Standard: SFI 2022, Section 4 (Chain of Custody), SFI 2022, Section 5 (Certified Sourcing), 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](#).

In 2022, we continued to make progress toward certifying our global mills and packaging facilities, including the Americraft and AR Packaging facilities acquired in 2021, on our journey to achieve our Vision 2025 goal with 100% certification compliance for all global facilities. At year-end, 96% of Graphic Packaging global mills and packaging plants were certified to at least one virgin fiber certification standard (certified sourcing or Chain of Custody [COC]), and 92% of global sites were certified to at least one of the COC standards. We also continued to invest in our team and in streamlining our global certification processes.

ESG Vision 2025 Supply Chain Goal Progress

Goal	2022 result	Status
100% Locations compliant with one or more fiber certification standard ¹	96%	On track

1. Locations includes mills, packaging plants, Atlanta HQ, and Japan sales offices.

Supplier recognition

Graphic Packaging chooses suppliers that are committed to improving their sustainability performance and helping to improve ours in turn. We recognize companies that share our ethos and 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 VP, Supply Chain (SVPSC) and VPP work directly with the CSO and the 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, Global Procurement Policy, and Sustainable Forestry 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.



We train global buyers annually 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 Procure to Pay (P2Pay) training prior to the assignment of the buyer role. Buyers participate in monthly roundtables conducted with P2Pay 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 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 [GRI 2-23](#), [205](#), and [206](#), our ESG governance process in Disclosures [2-9](#) and [2-13](#), and employee business ethics training in Disclosures [205](#) and [206](#).

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 may 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 2-26](#)) 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. Over the past few years, we addressed several improvement opportunities identified through the assessment process, and in late 2021/early 2022, we improved our EcoVadis sustainable procurement rating by 60% and our overall sustainability rating by more than 50%, achieving gold certification for our efforts. Our next EcoVadis assessment will be completed during 2023. 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.





2022 Sustainable supply chain highlights:

- Graphic Packaging successfully addressed multiple 2022 supply chain challenges (e.g., geopolitical events in Europe and the resulting energy crisis, continuing COVID-related supply chain pressures, winter storm Elliot) with minimal business disruptions.
- The logistics team enabled a new trade lane from West Monroe to New Orleans, resulting in a 37% year-over-year decrease in traveled miles, transport GHG emissions, and reduced transit times to port.
- The logistics team also optimized the Macon mill transportation strategy by switching tuck transport volumes to rail from the mill to the ports of Savannah and Charleston. When accounting for the 17% increase in volume shipped in 2022 versus 2021, they realized an equivalent 30% decrease in trucking miles along this transportation route.
- Of the in-scope Graphic Packaging managers and salaried professionals in North America who have responsibility for administering the COC program, 88% have completed their annual fiber certification COC training. These leaders are accountable for training and ensuring their staff comply with the COC program requirements.
- We facilitated in-person professional logger training sessions in Macon, Georgia, and Minden, Louisiana, (a total of 75 loggers were trained during two different sessions) and sponsored additional professional logger training through SFI SICs.
- Our procurement team continued to increase year-over-year spend with diverse suppliers, with 2022 spend 12% higher across all supplier groups versus 2021 spend.
- In August 2022, we hosted our annual supplier recognition event to bring together approximately 30 top suppliers that exemplify our values and model our GSCOC.

- In 2022, we held 11 P2Pay roundtables with an average attendance of approximately 170 buyers during each session; all 290 invitees received the presentation deck prior to and the recording after the call.
- In-person and online peer-to-peer training was offered, with 71 new buyers completing the training online, 26 on-site and seven via virtual training.

As our procurement sustainability strategy matures, we will continue to 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 by 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 continuing COVID-19-related challenges throughout 2022 and supply chain issues created by geopolitical events in Europe.



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

Our procurement team considers both environmental and social impacts in its purchasing decisions and is committed to increasing diversity within our supplier base. Our Global Procurement Policy describes our approach and provides direction to our North America buyers to include diverse suppliers (minority-owned, woman-owned, service-disabled/veteran-owned, disabled-owned, or businesses with owners from other diversity groups) in 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.

Growing a diverse supplier base allows us to contribute to the economic well-being of the local communities where we live and work, providing value to both our Company and throughout our value chain. We set annual, internal targets for growth with diverse suppliers and to identify new diverse suppliers to include in our supplier database. We leverage memberships in various diverse supplier focused organizations, including the Women’s Business Enterprise National Council (WBENC), the National Minority Supplier Development Council, The Georgia Minority Supplier Development Council, 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 and Michigan Diversity Council 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.

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

When looking across all diverse and small business supplier groups, we spent approximately \$291 million across 593 suppliers on quality goods and services to support our operating sites in the US and Canada. Graphic Packaging also tracks diverse supplier spend across a subset of diverse suppliers in support of customer supply chain diversity initiatives. This supplier subgroup includes woman-owned, minority/ethnically diverse, disabled-veteran, and disabled-owned suppliers. Spend in 2022 for this subgroup of diverse suppliers was \$210 million across 258 suppliers.

To date, our supplier diversity efforts focus on our US and Canada spend, which represents approximately 76% of our total global spend. As supplier diversity practices evolve in other global regions, we will evaluate adjusting our approach. In 2023, the supply chain is focused on continuing our efforts to diversify our supply base and continuing to inform and include diverse suppliers during bidding to ensure we are supporting and engaging our local communities. Diverse suppliers provide competitive edge and innovation that are paramount for our entities to succeed.

2022 North America Diverse Supplier Spend¹

	Spend (\$ million)	Percentage total NA spend ¹
Defined diverse supplier group ^{2, 3}	210	5.5%
Ethnically diverse suppliers ^{3, 4}	105	2.7%
Women-owned suppliers ³	68	1.8%
Disabled and disabled veteran-owned suppliers ³	37	1.0%
Other diverse supplier groups ^{3, 5}	3	<0.1%
Small businesses	78	2.0%
All diverse supplier and small business groups ³	291	7.5%

1. Defined as US and Canada addressable spend, excluding spend for capital projects.
2. Includes woman-owned, ethnically diverse, and disabled-owned suppliers.
3. Includes both self-declared and certified diverse suppliers.
4. Includes African, Native, Asian, and Hispanic suppliers.
5. Includes veteran and other diverse supplier groups.



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

In 2022, 100% of new wood suppliers were screened using the Company's PEFC/SFI/FSC due diligence process.

This screening process includes verification of:

- No illegal harvesting including trade in The Convention on International Trade in Endangered Species of Wild Fauna and Flora listed species.
- No controversial wood sources are harvested.
- Forest activities follow applicable state, provincial, federal, or international laws.
- Forest activities are not contributing to regional declines in habitat conservation and species protection (including biodiversity and special sites, Alliance for Zero Extinction sites and key Biodiversity Areas, threatened and endangered species).
- Sourcing is not from conversion sites in regions experiencing forest area decline.
- Forest activities are implemented where the spirit of the ILO Declaration on Fundamental Principles and Rights at work (1998) is met.
- Forest activities occur in regions where the spirit of the United Nations Declaration on the Rights of Indigenous Peoples (2007) is met.
- Fiber is not sourced from areas without effective social laws.
- Conflict timber is not sourced.
- Sourcing does not include genetically modified trees via forest tree biotechnology.
- Risk level for sourced wood materials has been evaluated.
- Substantial complaints against the supplier related to environmental or social practices in the prior calendar year have been evaluated.

In 2022, all new wood suppliers were determined to be low-risk suppliers based on these criteria, and no risk remediation plans were required. In addition, 50% of new suppliers were also audited as a part of our regular supplier tract inspection process.

GRI 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, and supplier self-reports. 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, and environmental damages. In 2022, no significant supplier environmental or social incidents were reported through the ALERTline.

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 2022, we completed audits with 132% of targeted wood suppliers (66% of total wood suppliers were audited versus the 50% target). No significant wood supplier environmental or social concerns were identified during the audits. The EU team also worked with suppliers to confirm that all paperboard purchased in Europe in 2022 was conflict free.



Business Practices



GRI 205, 206 BUSINESS ETHICAL CONDUCT

GRI 3-3 Management of Material Topic

At Graphic Packaging, we operate with integrity, and all employees are expected to comply with all applicable laws and regulations 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 CCO has responsibility for oversight of our compliance program. The CCO works with the EVPGC in leading the compliance and risk committee. That cross-functional committee is 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. It establishes appropriate ethics and compliance policies and procedures, including 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 are 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; nonretaliation; 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, 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 policies may be stricter than the applicable local laws. When this happens, we follow company policies, including but not limited to the following:

- Anti-Bribery and Anti-Corruption Policy
- Anti-Harassment and Anti-Discrimination Policy
- Anti-Slavery and Human Trafficking Policy
- Antitrust Policy
- Child Labor and Remediation Policy
- Confidential Information Policy
- Conflict Minerals Policy Statement
- Conflicts of Interest Policy
- Disability Accommodation Policy
- Disclosure Policy
- Financial Reporting Policies and Procedures
- Global Procurement Policy
- Global Supplier Code of Conduct
- Human Rights Policy
- IT 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
- Social Media Policy
- Sustainable Forestry Policy
- Travel and Entertainment Policy
- Whistleblower Policy
- Workplace Violence Policy
- Health, Safety, and Environment Policy



Publicly available policies can be reviewed by visiting the [Graphic Packaging disclosures page](#) (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 the 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 GPI University platform to train salaried employees on our Code, reminding them of our core values, policies prohibiting discrimination and harassment, and business ethics. We conduct in-person training for our hourly workforce at our facilities and maintain training records locally. Employees receive additional ethics training, based on job profile, to provide comprehensive knowledge on potential risks related to individual job responsibilities (e.g., anti-corruption, anti-bribery, antitrust, anti-harassment, anti-slavery/human trafficking awareness, human rights, data privacy).

New employees receive 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. We review the Code and other relevant policies 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 audits with identified higher risk areas. Assessments include risks from corruption, bribery, and

other ethical business practices. We also perform a fraud risk assessment at least every three years and update the Fraud Risk Management Program based on the results.

Our internal audit team uses risk assessment results to prioritize the plan for operational, regulatory/compliance, and internal controls over financial reporting audits, which is shared with and approved by senior management and the Board Audit Committee. We also perform corruption, bribery, fraud risk, and other ethical practice audits. All audit observation results are tracked to closure. In addition, senior executives are accountable for monitoring the action plan and due dates associated with key strategic areas and identified risks identified by the enterprise risk assessment.

We assess 100% of our 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. Assessments determine overall risk based on financial, compliance, operational, and strategic factors, including the following elements:

- Sales
- Volume
- Working capital
- Time since last audit
- Previous audit rating and 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
- Complexity of operations



Individual element scores are weighted and aggregated to determine an overall site risk rating. The CCO and the compliance and risk committee review our global operations footprint quarterly to evaluate potential corruption or fraud risk and report findings to the Board during the annual compliance assessment. 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. This team also oversees our fraud management program with oversight from the Board Audit Committee. Internal audit processes are used to verify sufficient internal controls are in place to ensure accurate accounting practices. The Company is also audited annually by a reputable, external public accounting firm.

We 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. We conduct regular internal audits to monitor and validate suppliers. We conduct financial, Office of Foreign Assets Control, legal, privacy, cybersecurity, and contractual risk audits on all new suppliers through questionnaires, analysis, and required documentation.

Our fraud risk management program addresses fraud vulnerabilities and improves 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:

- 1. Control Environment
- 2. Risk Assessment
- 3. Control Activities
- 4. Information and Communication
- 5. Monitoring Activities

On behalf of the accounting and finance departments, our internal audit team performs a fraud risk assessment and recommends updates to the management program based on allegations, investigations, and the risk assessment.

Assessment and program updates are reviewed and approved by the Chief Accounting Officer, the Corporate Controller, the CCO, and financial and controls experts.

Ethics governance

Accountability and transparency are core components of our ethics and compliance program. Our EVPGC, the CCO, and the compliance and risk committee — composed of executives in HR, 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, and general best practices. This team is responsible for ensuring our ethics and compliance investigation processes meet high standards for responsiveness and adherence to compliance policies. The committee periodically reviews ethics and compliance statistics, conducts periodic risk assessments and internal audits, monitors trends, and evaluates the effectiveness of our ethics and compliance programming.

The EVPGC reports monthly on legal and compliance matters to the ELT and quarterly to the Audit Committee on ethics and compliance initiatives and related metrics, including reports on all alleged material violations of the [Code](#). Each November, the EVPGC and the CCO (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 Board 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 [2-23](#) and [2-26](#).



Program effectiveness

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. We look for opportunities to improve our systems and compliance performance. Improvement opportunities and corrective actions identified through audits and 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 2022, 99% of global salaried employees completed training on the [Code](#), which includes an employee certification that they acknowledge and agree to be bound by the Code. In addition, 99% of salaried employees completed the anti-harassment training, 96% completed the anti-bribery/anti-corruption training, and 96% completed modern slavery training, demonstrating good reach across our global salaried employees. Due to integration activities, global salaried employees included in the 2022 training did not include employees from the AR Packaging acquisition in 2021. These salaried employees will be enrolled in GPI University and included in ethics trainings in 2023.

Training completion rates for hourly employees were lower (46% for Code and 46% for anti-harassment training) due to challenges administering the in-person trainings during the ongoing 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 University 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 online training program in the future.

Ethics and Compliance Training¹

	2019	2020	2021	2022
Code of Conduct — global salaried employees	89%	94%	97%	99%
Anti-harassment — global salaried employees ²	96%	94%	97%	99%
Anti-bribery/anti-corruption — global salaried employees ³	92%	87%	89%	96%
Preventing modern slavery in the supply chain — global salaried employees ⁴	97%	N/A	90%	96%
Data protection and privacy — global salaried employees ⁵	N/A	N/A	89%	96%
Trade sanctions compliance memo — global salaried employees	99%	42%	100%	98%

1. Training data for global salaried employees. 2021 and 2022 data exclude employees from the AR Packaging acquisition. AR Packaging employees will be included in 2023 training events.
2. Training in 2019 and 2020 was US only. Global salaried employees trained in 2021 and 2022.
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. No training assigned in 2020. 2021 and 2022 training assigned to all global salaried employees.
5. New training for 2021.

In 2022, we investigated and closed 100% of calls made to the ALERTline by December 31, 2022. For total investigated cases, 29% were substantive with 8% of those matters 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 2022 included discrimination or harassment, HSE 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, up to and including employee termination.



Throughout 2022 and during the first quarter of 2023, we implemented the following enhancements to our ethics and compliance program:

- We revised our [Code](#) and translated it into multiple new languages to make it accessible for our approximately 5,000 new employees across Europe and Asia.
- We activated ALERTline across new AR Packaging and South Korea locations and introduced the service to employees.
- We created an Anti-Discrimination and Harassment Policy, and a Child Labor and Remediation Policy.
- We updated our Antitrust Policy and launched global online antitrust training.
- We updated our Human Rights Policy and Corporate Disclosure Policy. We notified all employees of the Corporate Disclosure Policy, including new employees from the AR Packaging acquisition who may not have had previous experience working at a public company and awareness of regulatory requirements around disclosure.
- Teams assessed 100% of global business operations sites for business ethics risks and completed regulatory compliance risk assessment and annual enterprise risk assessments.
- We established a third-party risk management committee composed of legal, IT, cybersecurity, supply chain, internal audit, HSE, and business representation and developed a Third-Party Risk Management Policy and Inherent Risk Questionnaire for screening new suppliers.
- Audits were initiated of several third-party vendors, cloud services, product sustainability claims, and staffing agencies.

GRI 205-1 OPERATIONS ASSESSED FOR CORRUPTION-RELATED RISKS

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 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. Recent audit activities over corruption and bribery have been performed at locations in China, Mexico, Indonesia, Nigeria, Brazil, and Poland.



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

We train all salaried employees, including our ELT and top 100 company leaders, regularly on anti-corruption/anti-bribery topics. In 2022, 96% of salaried employees (excluding employees from AR Packaging acquisition) completed the training, with good coverage across our global regions.

Anti-corruption/Anti-bribery Training by Region¹

	Americas	EMEA	APAC
Targeted employees completing training in 2022	96%	99%	100%

1. Training data for global salaried employees, excluding employees from the AR Packaging acquisition. AR Packaging employees will be included in 2023 training events.

We share 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 and European suppliers. Read more in [Disclosure 204](#).

GRI 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 2022, there were no confirmed corruption cases reported to the Compliance Committee through the ALERTline or other channels that involved employees or business partners.

Information on litigation matters involving Graphic Packaging is provided in our [2022 Annual Report](#) on Form 10-K, p. 20.

GRI 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.

Our [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 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 reporting 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 2022, live antitrust training was provided for our sales teams in the North and South America regions during annual team meetings, and 98% 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 2022, there were no legal actions against the Company nor any fines/settlements paid by the Company regarding anti-competitive behavior, antitrust, or monopoly practices. Information on litigation matters involving Graphic Packaging is provided in our [2022 Annual Report](#) on Form 10-K, p. 20 and p. 79.

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

The Chief Financial Officer is responsible for tax risk management and governance, with oversight by our Board of Directors. Day-to-day responsibility is delegated to the VP 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 considering 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.
- Considering tax in overall business planning in the same manner as other costs and benefits.

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 our 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 Graphic Packaging’s commercial activities. The tax team ensures that transfer pricing for cross-border transactions reflects an “arm’s-length” or market price, based on the functions, assets, and risks of the parties involved.

We do not engage in tax planning or tax structures that lack appropriate business substance. Our profits are fully subject to tax in the jurisdictions where we have substantive business operations. We do not operate in tax havens or “secrecy jurisdictions” nor have any stateless or “nowhere” income that is not taxed.

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. We regularly seek advice from external advisors, where appropriate, to ensure compliance with changes in tax law and that nonroutine transactions are appropriately considered.



Our approach to tax planning, reporting, and risk

Our tax strategy is aligned with our business strategy and 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.

We are 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 business activities. The level of tax risk that we accept is consistent with achieving certainty in tax affairs.

In relation to specific issues or transactions, the tax team is responsible for identifying and managing any tax risks. 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 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. Graphic Packaging strives to ensure that all operations acquired comply with the tax principles and approach to tax planning from the date of the acquisition.

We rely on external tax advisors where appropriate. The VP 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 our legal and procurement departments, if appropriate. Such terms must adhere to corporate governance and risk management policies, including our [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.

The VP Tax or the appropriate local finance leader, in the case of certain international subsidiaries, should approve any work outsourced to external advisors and ensure that the Company's tax principles are adhered to.

207-3 STAKEHOLDER ENGAGEMENT AND MANAGEMENT OF TAX CONCERNS

We seek a transparent and constructive relationship with 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, we disclose all relevant facts and identify transactions or issues where 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 or corrected as soon as reasonably practical after they are identified.



207-4 COUNTRY-BY-COUNTRY REPORTING

In 2022, the Company recognized an income tax expense of \$194 million with an effective tax rate of 27.2%. Read more about the differences between our tax results and the statutory tax rate in our [2022 Annual Report](#) on Form 10-K on p. 28 and in Note 9 starting on p. 71.

Consolidated Income Tax Expense (\$ million)

	2019	2020	2021	2022
Income tax expense	\$76	\$42	\$74	\$194
Effective tax rate	21.6%	17.0%	25.7%	27.2%

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 and will assess additional disclosure annually. Read more about the Company’s tax reporting practices (including a tax breakdown by US versus International tax expenses) in Note 9 starting on p. 71 in the 2022 Annual Report on Form 10-K and in our [UK Tax Strategy Policy](#).

GRI 415 PUBLIC POLICY

GRI 3-3 Management of Material Topic

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.

We appreciate regional differences in certain legislative and regulatory frameworks, and these regional perspectives are a strong consideration in our government policy strategy. The United States represents a higher material impact to our Company, and we participate through legally allowed advocacy efforts and by making political contributions to candidates, parties, and causes. In addition, Graphic Packaging employees in the US 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 (Graphic Packaging-PAC). Graphic Packaging supports these activities to promote open and transparent civic engagement.

In the rest of the world, and more specifically in Europe where we have a strong presence in many countries, we engage in policy advocacy through membership in industry associations. We work with the industry associations to promote a science-based approach to policies and for harmonized laws in the EU versus country-specific regulations.



We may 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.

Public Policy Focus Areas	
Carbon neutrality of biomass	Energy generated from biomass residuals is integral to manufacturing our products and is the primary source of energy in our virgin mills. The energy generated from biomass represents approximately 64% 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 and will work to ensure the inclusion of similar language in future trade agreements. While we also align with the principles of the EU deforestation regulation, we feel that some proposed levels of tracking (e.g., plot level GPS coordinates) may not be needed when using wood and derived products with sustainable forestry certifications and chains of custody.
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, which currently demonstrate high recycling and recovery rates. We do not support Extended Producer Responsibility (EPR) frameworks for materials with high recycling and recovery rates such as paper and paper-based packaging but do understand that there may be potential value that these frameworks offer for increasing recycling rates for packaging materials with low recovery rates. Where EPR schemes are already in place, we support fee structures scaled using actual material recovery (e.g., lower fees for highly recovered materials), which will encourage the use of materials that are highly recovered.
Infrastructure	We support government and private investments to upgrade energy, water, and transportation infrastructure where we operate.
Product bans	We generally oppose policies that limit consumer choice by placing a ban or fee/tax 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. We support policies that provide public access to recycling and that ultimately increase material recovery. We support harmonized approaches for packaging waste collection systems and recyclability testing as well as best practices to ensure that materials remain in the recycling stream and recycling rates increase.
Mandatory composition requirements	We do not support mandated composition requirements on packaging as this should be determined based on fitness-for-use and other criteria established in DfE methodology. We advocate for policies that recognize recycled content and also the renewable attributes of materials in support for advancing circular resource use models.
Transportation	As a large freight shipper, we support policies that make our truck, port, and rail shipments more efficient and competitive and support the transition to a low carbon emissions transportation.
Workforce	We support diversity and inclusion as well as efforts at state, federal, or international levels of government to focus on, fund, and implement programs that address workforce education, the skills gap, and training opportunities.



Political contributions

The Graphic Packaging-PAC is a voluntary, nonpartisan 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 Graphic Packaging-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 Graphic Packaging-PAC, less banking fees, goes directly to supporting candidates either directly or through payments to industry trade associations' PACs. The Graphic Packaging-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 Graphic Packaging-PAC. A Board of Directors made up of Graphic Packaging executives provides oversight for Graphic Packaging-PAC and reviews and approves all political contributions and other payments.

The Graphic Packaging-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.

In the United States, 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. Graphic Packaging-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 Graphic Packaging-PAC.

Trade association and 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 elected officials, appointed leaders, and the public.
- Supporting informed, sound public policy decisions.
- Engaging in cross-industry initiatives to advance paper-based material use, recovery, and recycling.

Many trade and business associations have diverse memberships and views on matters of public policy. Graphic Packaging endeavors to be a leader in 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 ensure 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 NGOs sometimes engage in advocacy-related activities, as well. Memberships in and contributions to trade associations and civic organizations are reviewed by our VP of Government Affairs (VPGA) and follow the same authorization process as for political spending activities.

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 Graphic Packaging-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 ELT and the Board on our public policy activities. Read more about our ESG governance structure in Disclosures [2-9](#) and [2-13](#) and about our policies in Disclosures [2-23](#), [205](#), and [206](#).

We complement oversight of our overall government affairs program with external consultants, outside legal counsel, and periodic audits.

GRI 415-1 POLITICAL CONTRIBUTIONS

US Political Contributions, Lobbying, and Trade Association Expenses¹

	2019	2020	2021	2022
Political campaigns	\$16,000	\$19,000	\$0	\$7,000
Political organizations	\$10,500	\$10,000	\$ 17,500	\$17,500
Lobbyists or lobbying organizations	\$505,000	\$389,000	\$492,000	\$520,000
Trade associations ¹	\$2,468,000	\$2,612,000	\$2,186,000	\$2,963,000

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

Trade Association¹ Memberships With Dues Exceeding \$25,000 Paid by Graphic Packaging In 2022

- 100% Recycled Paperboard Alliance
- American Forest and Paper Association
- European Carton Makers Association
- EXTR:ACT
- Foodservice Packaging Institute and Paper Cup Alliance
- Forest Resources Association
- German Folding Carton Association
- National Association of Manufacturers
- National Council for Air and Stream Improvement
- Paperboard Packaging Council
- Pro Carton
- Recycled Paper Technical Association

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

**US Candidates or Organizations¹ that received Graphic Packaging-PAC Political Contributions in 2022**

Committee name	Party	Amount
State Level		
ForestPAC (GA)	N/A	\$5,000
National Level		
Business Industry PAC	N/A	\$2,500
American Forest & Paper Association PAC	N/A	\$5,000
Individual candidates		
US Congressman Glenn Thompson (Friends of Glenn Thompson)	Republican	\$1,000
US Congressman Dave Joyce (Friends of Dave Joyce)	Republican	\$1,000
US Congressman Sanford Bishop (Sanford Bishop for Congress)	Democrat	\$2,500
Senator John Boozman (Boozman for Arkansas)	Republican	\$1,000
Senator John Thune (Friends of John Thune)	Republican	\$500
Senator Tammy Duckworth (Tammy for Illinois)	Democrat	\$500
US Congressman Bruce Westerman (Westerman for Congress)	Republican	\$500

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



Cybersecurity and Data Privacy

GRI 418 CUSTOMER PRIVACY

GRI 3-3 Management of Material Topic

Society relies on digital tools and data more today than ever before. This extensive digital exposure increases the risk of unauthorized access to, and use of, our Company's internal systems and information as well as information belonging to our customers and other stakeholders. Criminals and criminal organizations have attempted to gain unauthorized access to internal systems and information resources through various access points, including both systems access and through employees.

Unauthorized access to systems and information can lead to blackmail, fraud, damage to information and fixed assets, and spreading of share price-sensitive information. The loss of intellectual property, trade secrets, or other sensitive business information or disruption of operations could negatively impact Graphic Packaging'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 employees and contractors are a part of our cybersecurity initiatives, supported by security awareness programs focused on common safe practices across the enterprise.

Wherever possible, our policies and standards follow National Institute of Standards and Technologies 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 policy includes 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 cybersecurity across the enterprise beginning with the global IT leadership team and dedicated IT 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 cybersecurity is to employ a single strategy across all business units and deploy common tools and processes in all locations.

Our approach to cybersecurity 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, multifactor 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, which is managed by a 24/7 cybersecurity 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 learning management system. The first includes general cybersecurity awareness for safe computing practices. The second includes IT and cybersecurity modules that review policies across the Company. As part of our annual IT security risk assessment, we published fully updated IT and cybersecurity policies and subsequently updated our training curriculum in 2022.



We employ a multitiered 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, third parties interacting with Graphic Packaging are required to execute nondisclosure agreements. Our 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.

We have 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. Incident response is supported by global team members and managed security service providers, complemented by multiple threat intelligence sources globally.

Graphic Packaging takes precautions to protect business operations continuity if 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 daily, encrypted full system backups at a secure off-site location, for both our main IT systems and systems supporting local operations, in accordance with our IT policies. 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 records. The program provides guidance on 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. We review and update the policy periodically to reflect best practices. Employees are trained each

time the policy is updated. The program applies to all employees and is overseen by the law department and the EVPGC.

The Board of Directors entrusts the Audit Committee to periodically review the cyber risk of the Company. The Audit Committee works with the Senior VP, Chief Information Officer (CIO), and Chief Information and Security Officer to review the strategy, 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 during scheduled committee meetings, including a detailed report out of the annual, enterprise-wide information security risk assessment.

Our security program continues to mature based on a multiyear roadmap. The Comply-to-Connect (C2C) initiative will deploy network access control capability to prevent unauthorized devices from connecting to Graphic Packaging network globally once fully implemented. We deployed C2C at several sites in North America in 2022 with more deployments planned for North America and Europe in 2023 and beyond. Our vulnerability program 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. We use these to identify potential risks and implement opportunities to further enhance system effectiveness.

Enterprise-level IT risks are also identified within our enterprise compliance and risk organization as part of program and technical implementation. Risks also may be identified and reported by employees, who are encouraged to report suspicious emails using the "Report Phishing" button feature available in their desktop and mobile device email programs. Employees are further encouraged to escalate suspected cybersecurity concerns to their immediate managers, to the information security department, or through the ALERTline. Substantiated risks are tracked and reviewed monthly by our enterprise compliance and risk committee, made up of senior leaders across the enterprise. This group identifies KPIs associated with core risk areas and adds KPIs as needed to track and manage potential risks.



In 2022, we advanced the following information security initiatives:

- Launched a comprehensive awareness and assessment campaign that leveraged email newsletters, in-person events, webinars, and phishing assessments to educate employees about latest cybersecurity threats.
- Continued work to improve intrusion detection, prevention, and effective processes to manage information security incidents and to address cyber risks related to automation and production management systems across our mill and packaging plants.
- Formed a Privacy Committee with representatives from legal, IT, HR, internal audit, and training.
- Automated cookies consent on public website.
- Implemented data subject access request process for non-European locations.
- Updated Graphic Packaging data classification standards.
- Conducted online security training and implemented phishing and mobile device management tool.
- Completed annual information security risk assessment and ISO 27001 benchmark assessment in June 2022.

We also started the work to expand the cybersecurity training program by designing new online and instructor-led training materials to accommodate all global employees, as well as targeted training for specific employee groups. These materials include courses on security awareness, mobile device security, secure coding for developers, and information security policies for salaried and hourly employees, as well as a paper-based attestation for nonemployees. Training material enhancements were also completed to include 16 language translations and subtitling a training video.

Read more about our governance and risk management processes in Disclosures [2-9](#), [2-10](#), [2-12](#), and [2-17](#).

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

We recorded no substantiated information security incidents or complaints concerning breaches of customer privacy or losses of customer data in 2022.



Environmental Topics

IN THIS SECTION

Sustainable Forestry

Climate Change

Water Stewardship

Waste and Recycling





Sustainable Forestry



GRI 301, 304 MATERIALS AND BIODIVERSITY

GRI 3-3 Management of Material Topic

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 sustainable forest stewardship practices that will maintain healthy, diverse forest ecosystems for generations to come.

Graphic Packaging's four virgin fiber mills are in the southeastern US, a region referred to as "the wood basket 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 79% of our fiber inputs on a dry fiber

basis come from virgin fiber and are the primary ingredient for our paperboard manufacturing process. We do not own and manage forest lands for wood production, instead we source nearly all the virgin wood fiber our mills use from local third-party suppliers and then transform the fibers into paperboard and other valuable byproducts.

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:

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

Local, responsibly sourced fiber

Freshly harvested wood fiber is necessary for meeting specific packaging performance and durability needs due to its longer fiber lengths. It is also needed to meet health and safety requirements for certain food packaging applications. Fresh wood fiber inputs are also an integral element needed to sustain the fiber recycling loop by providing new material inputs to replace fiber losses. Without fresh wood fiber inputs, the [NCASI](#) estimates that the North American fiber cycle would run out of recycled paper in approximately 6 to 11 months due to system losses from nonrecoverable paper uses (e.g., tissue papers, sanitary papers, building construction papers), contaminated materials, recycled paper exports, and fiber breakdown during recycling. Read more on paper recycling in [Disclosure 306](#).



Graphic Packaging sources the wood fiber materials we need from local, sustainably managed working forests where renewal and biodiversity are safeguarded. This approach supports green jobs and economic opportunities in our communities and helps reduce our carbon footprint through a connected supplier network and shorter haul distances. With a locally rooted supply chain, we typically source wood from within 60 miles of each mill, which equates to a combined wood basket area on the order of 21 million acres of forest land. Each year, approximately 175,000 acres, or less than 1% of the forests in the wood basket, are harvested to supply wood inputs for our paperboard mills.

Harvest areas are typically scattered throughout the entire wood basket area and are interspersed with forest stands at different growth stages. Randomly distributing the harvest locations throughout the wood basket helps to create a mosaic of forest habitats and ages that meet the needs of a rich and diverse community of forest dwelling species. This approach also more closely mimics natural forest decline and regeneration patterns that follow cycles of natural wildfire events prior to human fire prevention intervention.

In 2022, approximately 71% of the wood purchased for our mills was coniferous species, primarily loblolly pine, but also some shortleaf pine, slash pine, and longleaf pine. We source these trees from sustainably managed pine “plantations,” where the land is managed specifically to grow trees. The trees are grown in rows, managed as a crop, and replanted following harvest. Plantations are incredibly productive and generate more wood per acre than naturally regenerated forests, helping reduce harvest pressure on naturally regenerated pine forest stands. Plantations comprise between 31% and 42% of the forests in our supply basins. Across the Southern region, it is estimated that pine plantations in the South contain 47% of the region’s live pine volume and account for 82% of annual harvested pine volumes ([US Department of Agriculture \[USDA\], 2019](#)). Trees harvested for paper production are generally the result of thinning activities that remove trees not suitable for lumber production, the plantations’ primary end market.

Sustainably managed hardwoods, including poplar, oak, ash, and smaller volumes of other hardwood species account for the remaining 29% 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. During natural hardwood regeneration, new trees sprout from cut stumps or from residual roots. In other circumstances, healthy “seed trees” are left after harvests to distribute acorns or other seeds. 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](#) used in our products, can be found on our [website](#).

A recent study conducted by the US Forest Service found that 45% of wood flowing into supply chains in the US South originates in forests owned by family landowners (sometimes called smallholders) (USDS FS, Butler, personal communication, March 17, 2023). These landowners often do not participate in forest certification programs due to the administrative costs and complexity of maintaining the certifications ([USDA, 2021](#)). As a result, most of the wood Graphic Packaging purchases is grown in sustainably managed but noncertified forests.

Our local sourcing approach enables our team of wood procurement professionals to work directly with our suppliers to support landowner (large and small) engagement. This approach helps 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.



In the regions where we source our wood, small landowners face increasing pressures to convert their lands to other land uses, especially development, which results in permanent loss of forests. Smallholders must also bear the costs of management of their forests and pay increasing property taxes as land use values grow around them. Because we prioritize using sustainably grown wood fiber, these landowners have a market that can reward their stewardship with a revenue flow that helps to keep them on their land and sustainably managing their forest.

Additionally, our sourcing programs are designed to link these landowners (through our trained wood suppliers) to resources and technical expertise to support their stewardship including on water protection and conservation of biodiversity. 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 fiber sourcing due diligence system to guide our fiber sourcing operations. We pursue both COC and fiber sustainable sourcing certifications under the SFI, PEFC, and FSC standards. All our mills and our corporate wood procurement program 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. Certification programs apply to both virgin wood and recycled fiber operations, for which there are specifically calibrated standards and requirements.

COC certification ensures we can trace wood fiber from certified, sustainably managed forests to our mills and packaging plants and then through the supply chain to our customers via third-party audits to the COC certification standards. For noncertified forests, the SFI fiber sourcing and FSC controlled wood programs outline necessary steps to demonstrate the 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 HCVs or forests with exceptional conservation value (FECVs) and imperiled species.

The assessments screen for controversial sources including areas at risk for forest conversion, species loss, corruption, impacts to sensitive ecosystems, impacts to indigenous peoples, and exploitative or unfair labor practices. If a risk is identified, we implement control measures to mitigate the risk when possible. For example, in some geographies, we will only source 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 forest material stewardship approach. Applying circular economy principles to fiber-based packaging begins with our responsible forestry commitment and ends with our efforts to take back and recycle fiber-based materials into new products. Read more about Graphic Packaging's recycling efforts and collaborations in [Disclosure 306](#).

We produce 100% recycled board in our North America CRB mills and are investing in expansions and upgrades to meet growing customer demand for fiber-based packaging made with recycled materials. These highly efficient recycled fiber mills use recovered paperboard clippings, off-spec carton products from our packaging 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 increasing demand for recovered materials and reducing pressures on using new forest wood materials.

Graphic Packaging is also 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, reusing mill scrap/broke wastepaper to increase mill efficiency, and incorporating recycled fiber, where we can, into the paperboard production. Our virgin fiber mills process wood fiber waste and byproducts from other industries and lumberyards, including wood fiber waste and small diameter/rejected wood that is not suitable for the structural timber market. Our two CUK mills also have installed small recycled fiber recovery process systems that enable them to use recycled paper feedstocks in the CUK manufacturing process. These actions together enable Graphic Packaging to increase circularity in our operations by creating high-quality 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](#) reflect our values 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 ELT and Board as part of broader ESG program updates. This governance approach helps ensure transparency, accountability, and strategic support for our sustainable forestry programs.



Program effectiveness

Our forest fiber sourcing program is audited annually by both internal auditors and by accredited, [external third-party auditors](#), and audit findings are logged and tracked through completion. We review audit results and our Sustainable Forestry Policy annually with our leadership team to ensure 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 2022, we received a “B” score on our response for the third year in a row and are implementing the new learnings from CDP to further refine our approach.

We also maintain a public inquires 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 SFI, PEFC, and FSC to address a reported concern. No complaints were received in 2022.

Read more about our values and policies in Disclosures [2-23](#), [205](#), and [206](#); our ESG governance process in Disclosure [2-9](#) and [2-13](#); and our forest management approach in Disclosures [204](#), [301](#), and [304](#), and in our 2023 CDP forest response on our [ESG disclosures page](#).

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

Graphic Packaging transforms both new wood fiber and pre- and post-consumer recycled fiber materials into paperboard at its North America mills. In 2022, our mills consumed approximately 9.4 million metric tons of new wood fiber and

1.3 million metric tons recycled fiber. All new wood came from sustainably managed forests, which met the criteria for SFI Fiber Sourcing, PEFC Controlled Sources, and FSC Controlled Wood, with approximately 22% of purchased new fiber also meeting SFI, PEFC, or FSC COC requirements. Approximately 55% of the recycled fiber inputs for our mills was from post-consumer recycled materials.

Purchased Fiber (Metric Tons)			
	2020	2021	2022
New wood ¹	9,149,000	9,155,000	9,385,000
Sustainably sourced ² new wood fiber ¹ (excluding COC fiber)	6,823,000	6,962,000	7,326,000
SFI/PEFC COC	1,927,000	1,799,000	1,677,000
FSC COC	399,000	394,000	382,000
Recycled fiber ³	1,030,000	1,226,000	1,260,000

1. New 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 Recycled Paperboard Alliance (RPA)100 certification.



The following table summarizes 2022 papermill production by board type and saleable byproducts. In addition to producing paperboard, Graphic Packaging also recovers turpentine and tall oil byproducts for sale and bark and black liqueur byproducts for fuel use in the boilers at the four virgin paper mills (see [Disclosure 302](#)).

2022 Paper Mill Production Volumes			
	Percentage total production	Percentage recycled content	Total production (metric tons)
Paperboard production			
Coated unbleached kraft (CUK)	40%	11%	1,489,000
Sulfate bleached substrate (SBS) ¹	29%	0%	1,071,000
Coated recycled board (CRB)	31%	100%	1,137,000
Total paperboard	100%	-	3,698,000
Byproduct production			
Turpentine	9%	-	6,000
Tall oil/soap	91%	-	63,000
Total byproducts	100%	-	69,000
Total mill saleable products	-	-	3,761,000

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

In addition to 100% of our CUK and SBS paperboard meeting the SFI Certified Sourcing, FSC Controlled Wood standards, and PEFC controlled sources requirements, 100% of CRB paperboard complies with the RPA-100% paperboard certification standard and the FSC COC recycled content standard. In 2022,

approximately 73% of Graphic Packaging produced board was consumed internally at our packaging plants, and the remainder was sold to external customers.

Graphic Packaging transforms both its own produced paperboard and externally purchased paperboard into finished cartons and other fiber-based consumer packaging solutions. The following table summarizes total consumed board by board type and source that was used to make consumer packaging products. Recycled board represents approximately one-third of the total board used to manufacture fiber-based cartons and packaging in 2022.

Total Consumed Paperboard Materials (Metric Tons)		
	2021	2022
Virgin fiber board	2,147,000	2,357,000
Internal board	1,820,000	1,818,000
External board (NA source)	151,000	133,000
External board (outside NA source)	176,000	406,000
Recycled fiber board	1,064,000	1,210,000
Internal board	691,000	841,000
External board (NA source)	228,000	185,000
External board (outside NA source)	145,000	184,000
Total consumed paperboard	3,211,000	3,567,000
Percentage virgin board	67%	66%
Percentage recycled board	33%	34%



Advancing a global system

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. Historically, we have focused on materials purchased in North America because this region represents roughly 80% of the fiber-based products we sell (including external board sales). This program leverages a risk assessment and due diligence system that ensures we only procure low-risk materials that originate from noncontroversial sources. This means that all the board we purchase into our North American operations are of low or negligible risk of being produced in connection with deforestation, illegal harvesting, corruption, human rights violations, adverse impacts to biodiversity, and other sustainability concerns. Drawing on systems developed for North America, in 2022, Graphic Packaging began developing the building blocks of a company-wide program to harmonize our management approach for purchased paperboard. Graphic Packaging has confirmed with board suppliers that 100% of purchased board in Europe in 2022 is conflict-free.

GRI 301-3 RECLAIMED PRODUCTS AND THEIR PACKAGING MATERIALS

In 2022, our two CUK and four CRB paperboard mills used approximately 1.3 million metric tons of reclaimed pre- and post-consumer recycled paper materials to make new CUK or new CRB paperboard products that contain approximately 11% and 100% recycled fiber content respectively. Recovered cuttings and paperboard scraps from our own packaging plants make up 20% of our recycled material inputs. The remaining 80% was sourced from purchased pre- and post-consumer recovered fiber materials, with post-consumer recovered fiber making up approximately 55% of the recovered fiber used in our CBR paperboard. Graphic Packaging also purchased 370,000 metric tons of external recycled paperboard for use in its global packaging 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 may be 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. In 2022, six machines were returned by customers to be refurbished for future resale and 14 machines were recycled.

GRI 304-1 OPERATIONAL SITES OWNED, LEASED, MANAGED IN, OR ADJACENT TO PROTECTED AREAS AND AREAS OF HIGH DIVERSITY 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 approximately 60 miles of each facility. The corresponding wood baskets include numerous protected areas that are owned 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, see the PAD-US and search for the mill location. Specific areas, levels of protection, and classification of ownership of each protected area are provided by unit.

Graphic Packaging does own 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 sustainably harvested on occasion for use at our Texarkana facility. This woodland is in the South-Central Plains Ecoregion, characterized by a range of important and rare species, including Sequoyah slimy salamander, pine-oak jewel flower, and the Oklahoma grass-pink. These are species that have been ranked as imperiled or critically imperiled and are associated with pine plantations or mixed conifer stands that Graphic Packaging has identified and prioritized, along with others, for protection and management support in its sourcing. If these woodlands are harvested, any known sites of imperiled species or ecosystems would be identified and protected or enhanced. Similarly, special sites, such as known areas of significance to Indigenous Peoples or historic features such as the Civil War sites common in this region, would be likewise protected. Water features, such as streams and vernal pools, would be buffered and best management practices (BMPs) would be implemented to maintain cover, prevent runoff and sediment, and to maintain water temperatures for fish and aquatic species.

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

We follow sustainable sourcing practices (in accordance with SFI Fiber Sourcing and FSC Controlled Wood certification programs) and support biodiversity conservation efforts. We engage loggers, wood brokers, and wood suppliers before, during, and after harvests to promote using forest stewardship BMPs in our wood baskets.

We also require binding agreements with all our suppliers to mitigate the risk that material supplied to Graphic Packaging originates from converted forests. We verify that any wood potentially associated with conversion is limited, fully legal, and does not harm any forest land with HCVs.

Preharvest screening

Our procedures start with understanding landscape connectivity and potential risks within our sourcing regions. This includes an analysis of FECVs, leveraging the [NatureServe Explorer Pro](#) tool, and expert consultation of biologists and other specialists. In this process, we analyze the potential impact of tree harvesting to globally ranked critically imperiled or imperiled species found in the sourcing area.

We then develop groupings of species according to habitat and likelihood of impacts or opportunities to enhance with forest management activities. Based on these groupings, we develop recommendations to guide in-woods activities and promote species and biodiversity conservation. We provide a summary of the analysis and recommendations to all our wood suppliers to drive conservation impact across our sourcing activities.

The FECV 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. Prior to harvesting, our fiber supply team uses these analyses and geographic information system screening tools, along with on-the-ground forest track inspections to ensure we do not purchase wood from illegal logging and deforestation/forest conversion activities or from areas with important species or HCV.

Graphic Packaging works with local agencies 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](#).



Supplier engagement and training

Graphic Packaging works within our supply chains and collaboratively with others to train our suppliers, including both loggers and landowners, to understand and implement practices to support a range of species and habitats. We also work with NGO partners to protect rare species and ecosystems in the regions where we source.

Through ongoing dialogues with our wood suppliers, we gather information about harvesting practices and the geographies of sourcing to ensure that our analyses of species and risk is up to date and reflects the current range of potential impact. We use our data on FECV to create reference summaries that we provide to our new wood fiber suppliers to mitigate risk and maximize potential conservation impacts on biodiversity. These reference summaries include information on the potential presence and habitat needs of globally imperiled and critically imperiled species in the wood basket. We also collaborate with other companies via the SFI SICs and other partners in our sourcing regions to update logger training programs. We require our suppliers to complete these trainings to learn about recommendations for BMPs to protect specific species and habitat groupings most likely to be affected by harvesting.

Graphic Packaging also partners with the SFI 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 on each individual tract as well as the landowner's long-term land management goals.

During harvest, the loggers, foresters, 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. Often, Graphic Packaging purchases wood from selective thinning activities that remove unhealthy or excess trees, resulting in a healthier tree stand for timber harvest and improved wildlife habitat.

Aquatic or riparian species are most likely to be affected by harvesting operations because they depend on water remaining cool, clear, and free of sediment and runoff. 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 followed for planning harvest routes and building roads within forest tracts to minimize runoff and sediment deposition into water bodies.

Forest harvesting can have a positive or negative impact on a diverse array of forest-dwelling species. Each species has habitat requirements that reflect its life cycle and adaptation to forests of different ages, stand structures, and blend of tree species. 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 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 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 critical for creating and maintaining diverse habitats and supporting forest conservation goals across the mosaic. Harvesting BMPs such as retaining old trees and protective, dense thickets are important practices that support forest biodiversity for different species. "Retention" trees provide age and structural diversity within stands that, over time, turn into sturdy decaying wood. A group of retention trees may complement vegetation around waterways or other valuable microhabitats created by sloping and shade, herbal plant communities or rocky outcroppings. Riparian buffers provide both edge habitat and mature forest cover for species that prefer these forest features, while leaving standing and fallen decaying wood and stumps provides habitats for species that prefer dead trees for nesting or food sources. We work with suppliers' state forestry commissions during harvest to implement monitoring for BMPs. These operations are also subject to third-party audit.

Post-harvest practices

Reforestation is essential to protecting biodiversity and maintaining forest cover. 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 can accelerate natural hardwood forest regeneration. Distributing branches and small tree debris across the landscape can reduce soil erosion and runoff, and larger debris can provide habitat for smaller ground dwelling species to nest or hide. These measures are designed to both provide important habitat and to ensure the next generation of forests thrive as soon as possible.

Graphic Packaging typically inspects harvested tracts that supply wood to its facilities during harvest activities. While the Company works in partnership with state forestry commissions to monitor post-harvest activities, we have undertaken a more robust approach with our own Company foresters inspecting tracts regularly during harvest activities. In fact, the Company has exceeded its own goals in this area, performing forest origin inspections on tracts representing most of the volume supplied to our facilities every year. Inspections involve checking that trees remaining on site have not been damaged, and that lasting infrastructure is in place to protect water, avoid sedimentation, and other impacts.

Graphic Packaging closely monitors 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 related to population growth and economic development have been identified through the [FSC National Risk Assessment](#) and other analyses. The FSC analysis associated risk of forest loss/conversion with population growth and other economic development indicators, not harvesting activities. Forest loss trends present challenges to long-term fiber supply availability, and we follow these analyses closely to understand potential risks within our wood basket and ensure we are not contributing to forest loss.



External collaborations

Amplifying positive impacts on forests via conservation and restoration activities complement our commitment to sustainable forest management and responsible sourcing. We support the efforts of forest conservation organizations to develop actions that improve our own procurement practices. These strategic partnerships are essential for society to scale long-term impact and to develop sustainable solutions for critical regional and global forestry issues.

Our long-term 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 HCV. 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.

We are a longtime partner in the Black Bayou conservation initiative. The Black Bayou region, near our West Monroe facility, provides a variety of habitats for waterfowl, endangered wildlife, neo-tropical migratory birds, and resident wildlife. Bottomland hardwood forests support a spectrum of species including prothonotary warblers, while bald cypress swamps harbor broad-banded water snakes, a multitude of frogs, and iconic species such as the American alligator, anhingas (large darter birds), and great blue herons.

We have recently established partnerships with the Forest Stewards Guild to expand outreach and education to family landowners with a specific focus on late successional bottomland hardwoods. The Guild offers a set of high-quality educational tools centered on invasive plant management and impacts of climate on late successional bottomland hardwoods specific to the alluvial Coastal Plains and Mississippi Alluvial Valley, where Graphic Packaging sources.

We support AFF's American Tree Farm System program to provide family landowners with the resources 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.

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

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 working 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.



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, 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. Many of these species are associated with aquatic or marine environments, which are protected using BMPs, which we require across our operations. Aquatic species may be affected by changes in forest cover and shading, which can increase water and soil temperatures. Additionally, these species may be affected by runoff, water running over land and collecting sediment as it flows. Luckily, several studies have found the implementation of BMPs during harvesting are effective measures for preserving water quality and protecting aquatic species (NCASI, 2012; National Association of State Foresters). 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.

In 2022, Graphic Packaging launched a new program that begins with an assessment of the known presence of critically imperiled and imperiled species (G1 and G2 species) in its fiber supply basins. The assessment uses United States [Environmental Protection Agency \(EPA\) Level 3 Ecoregions](#) as a first analytical layer. Then, within each Ecoregion, species are categorized by forest type and habitat type. Summaries of this analysis, including ecoregional maps, are made available to suppliers along with management recommendations to protect and enhance habitats of those imperiled and critically imperiled species, by habitat type. Graphic Packaging is working to incorporate the results of these analyses across its primary sourcing operations, including via collaborations with other companies to infuse into logger training and broader landowner engagement initiatives.

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

GRI 3-3 Management of Material Topic

The packaging sector plays a central role in supporting the transition to a low-carbon economy due to the current and future demand for recyclable packaging made from renewable, nonfossil-based materials. As Graphic Packaging grows to meet this demand, we must do so while reducing our operation’s Scope 1 and Scope 2 GHG emissions, eventually decoupling GHG emissions from production growth. We are also looking beyond our own emissions to encourage Scope 3 emissions reductions across our value chain. Collaboration with our commercial partners, policymakers, and other stakeholders is critical to encouraging collective action for the development and use of lower-carbon forms of energy to deliver the GHG emissions reductions needed for society to achieve net zero emissions by 2050.

We pursue prudent, practical, and cost-effective actions to reduce our emissions as we grow our business. 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 the following goals and measure progress versus a 2016 baseline.

ESG VISION 2025 CLIMATE GOALS

- Reduce GHG emissions intensity by 15%.
- Reduce nonrenewable energy intensity by 15%.

Accomplishing GHG emissions reductions requires expertise, innovative thinking, and teamwork across the Company. We rely 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 paper manufacturing technical 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 and explore opportunities to source renewable power.
- **Continuous improvement team.** Operations experts who train and work with the mill and packaging plant continuous improvement resources to identify opportunities to reduce energy use, chemical costs, and other consumables use, driving both cost and emissions reductions.



Our teams are focused on optimizing our manufacturing footprint to reduce our nonrenewable energy use and deliver GHG emissions reductions.

- We are increasing the use of renewable biomass energy in the virgin mills and exploring opportunities to source renewable energy to supply cleaner electricity and fuels to our packaging plants and mills.
- We are optimizing the CRB manufacturing circuit to shift CRB production to more efficient, lower intensity mills; this allows us to shutter older, higher cost, resource intense production lines.
- We use engineering software solutions to help us optimize the energy balance within the mills and identify improvement opportunities to lower energy use.
- We are exploring technology options, such as carbon capture and storage/use, to address hard-to-abate thermal energy emissions.
- We are working to reduce energy use through more efficient motors and pumps, transitioning to LED lighting, and improvements to compressors and heating, ventilation, and air conditioning (HVAC) systems, and switching to electric forklifts and service vehicles where possible.
- We are seeking opportunities to optimize fiber content in paperboard, while maintaining product performance, to decrease energy and materials use and GHG emissions per ton paperboard.
- We are participating in cross-industry collaborative programs, like the Department of Energy Better Plants program, that enable us to learn about and leverage emerging technology solutions.

Governance

Our CSO works with the mills Executive Vice President (EVP) and leaders from our packaging 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 ESG Vision 2025 nonrenewable 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 packaging plants are accountable for successful program execution and delivering energy and GHG emissions reductions. Read more about our ESG governance process in Disclosures [2-9](#) and [2-13](#).

Emissions reduction actions are guided by our [Code](#), HSE policy, and our commitment to the UNGC. 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 2-3](#). 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 data analysis processes use third-party resources to aggregate and calculate annual GHG metrics, thereby reducing opportunities for manual errors. We are currently working to implement a centralized data management system to further simplify and streamline our environmental data management process, and we plan to complete this process by the end of 2023 in preparation to comply with proposed SEC reporting requirements and evolving reporting requirements in the EU.



Measuring progress

Graphic Packaging evaluates the effectiveness of our climate management approach through third-party data assurance and assessments and by measuring progress toward our 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 ISAE 3000 and ISAE 3410. The assurance letter for our 2022 GHG emissions data can be found on our website. In addition, some of our facilities elect to have their energy management systems certified to ISO 50001. As of December 31, 2022, 17 sites (15% of 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 2022, we achieved an “A-” leadership rating for the third year in a row and are implementing the new learnings from CDP to further refine our climate management approach. Refer to our [2023 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.

We measure operations GHG emissions intensity on a revenue basis at the enterprise level and for tracking progress toward achieving the ESG Vision 2025 emissions intensity reduction goal. We saw a 20% reduction in intensity from 2021 to 2022 and a 26% reduction in intensity relative to the 2016 goal baseline, exceeding our 15% reduction goal by 73%. Total Scope 1 and 2 operations emissions increased 6% from 2021 to 2022 and have increased 20% relative to 2016 operations emissions, reflecting the growth of the Company. GHG emissions intensity reductions are largely due to revenue growth from expanding less energy-intensive packaging operations, continued product demand for plastic packaging alternatives, and from favorable product pricing.

Similarly, we see a 24% reduction in nonrenewable energy intensity relative to the 2016 baseline, exceeding our 15% target by 57% and achieving our goal. Our

progress reducing nonrenewable energy intensity is also attributable to business growth as discussed above. Absolute nonrenewable energy use has increased by approximately 22% relative to 2016 baseline nonrenewable energy use.

ESG Vision 2025 Climate Goals Progress			
Goal	2016 baseline	2022 result	Status
Reduce operations GHG emissions intensity by 15% (metric tons CO ₂ e/\$1,000 revenue)	0.35	0.26	Achieved
Reduce nonrenewable energy intensity by 15% (MWh/\$1,000 revenue) ¹	1.40	1.07	Achieved

1. Prior reporting was on an MMBTU/\$1,000 revenue basis. For 2016 and 2022 these nonrenewable intensity values are 4.79 and 3.70 MMBTU/\$1,000 revenue, respectively.

We also use our stakeholder engagement, [ESG materiality assessment](#), and annual enterprise risk assessment processes to help us stay abreast of external stakeholder ESG priorities and update our ESG strategy as appropriate. Evolving climate change science shows us that society needs to take more aggressive action to limit global warming this century. In response, we formally confirmed our intent to develop, validate, and establish near-term science-based emissions reduction goals by the end of 2023, aligning our climate actions with the reductions needed to meet the goals of the Paris Agreement and UN SDG 13. Our proposed targets were submitted to the Science Based Target initiative (SBTi) during 1Q2023 and will be reviewed by the SBTi later in 2023.

We selected 2021 as the base year for our new targets, and through the target setting process, we enhanced our 2021 inventory to incorporate more robust emissions accounting methodologies and include emissions associated with the full year operations of our 2021 Americraft and AR Packaging acquisitions. As a result, our 2021 energy consumption and GHG emissions data have been restated in this report. However, we have not restated our 2016 baseline as the change is <5% of total emissions in the reporting year and does not trigger a restatement per our defined restatement threshold.



2022 Highlights

In 2022, Graphic Packaging advanced several key projects that will be instrumental in delivering nonrenewable energy and GHG intensity reduction benefits. Examples are highlighted below:

- We sourced 69% of our fuel from renewable biofuels and 64% of total energy from renewable energy sources.
- We began production during the first half of the year on our Kalamazoo line 2 paper machine (K2), with the machine achieving full design production during the second half of the year. This new energy-efficient capacity enables us to retire less efficient production lines, like the Battle Creek, Michigan, mill, which was shut down in May 2022. Updated estimates predict K2 will reduce CRB mill platform GHG intensity per ton paperboard by 3%, and nonrenewable energy intensity by 1% versus 2021 performance. However, due to the net capacity add for the project, absolute GHG emissions and absolute purchased energy will both increase.
- The Kalamazoo team also implemented several energy efficiency projects, including installing a heat exchanger to recover dryer waste heat, improving the wastewater surge tank inlet flow, installing more efficient paper dryers, and numerous other small energy efficiency projects. Together these projects are estimated to reduce site energy use by ~110,000 MWh per year. In addition, the new boilers installed for the K2 machine are 10% more efficient than the older boilers supporting the K1 and K3 machines and will provide K2 with steam while using 735,000 MMBTU less gas per year than would be used by older boilers.
- The West Monroe mill installed a camera on the lime kiln, which will help optimize operation and save 30,000 MWh per year in natural gas usage.
- We completed mill process control system upgrades, including installing an advanced automatic process control system with energy management modules at two of our four largest mills to reduce operation variability and improve efficiency of power generation equipment. The work continues with the remaining two mills

scheduled to be completed by the end of 2023. Design estimates predict the control systems will save on average ~375 MMBTU of natural gas annually at each mill.

- In February 2023, we announced plans to build a new \$1 billion CRB mill in Waco, Texas, building on the proven technology used in the K2 paper machine. This investment supports our efforts to replace less efficient CRB assets with more efficient and environmentally sustainable manufacturing. This new asset is expected to reduce CRB mill GHG intensity per ton paperboard by approximately 20% and absolute GHG emissions by approximately 10% (versus 2021 baseline) once all CRB circuit optimization efforts are completed.

Several packaging plants also implemented projects during 2022 to reduce their GHG emissions or energy use, such as installing new or upgrading existing printers, gluers, UV lamps, air compressors, heating and ventilation systems, and other projects. Example projects are highlighted below:

- Upgrades to the boilers at the Carol Stream packaging plant are expected to deliver a 36% reduction in natural gas usage at the site.
- Projects at the Carol Stream, Fort Smith, Gateshead, Lund, Rotherham, and Winnipeg packaging plants are together expected to provide 4,800 MWh per year in electricity savings.
- Transformer upgrades at the Cholet packaging plant are expected to provide 500 MWh per year in electricity savings.
- Upgrades to HVAC systems at the Elk Grove, Frankfurt, Gateshead, Graz, and Lund packaging plants are expected to collectively deliver ~2,400 MWh per year in energy savings.
- Energy efficiency projects at the Cholet, Gateshead, and Graz packaging plants are together expected to provide 600 MWh per year in electricity savings.



- Many of our plants upgraded lighting to LED fixtures with some plants installing motion detection sensors in office and warehouse spaces to further reduce site energy usage. Projects at the Carol Stream, Fort Smith, Gateshead, Lund, Rotherham, and Winnipeg packaging plants are together expected to provide 4,800 MWh per year in electricity savings.
- Energy monitoring systems were installed at seven of our EU packaging plants so the sites can monitor equipment energy consumption to help reduce energy usage and costs in the production processes.
- A third-party solar power project installed in 2021 at the Requejada packaging plant provided 17% of the site's electricity needs during 2022.

The 2022 EU energy crisis created an opportunity for those locations to review their energy usage and identify opportunities to reduce their consumption. Starting in the third quarter of 2022, all EU sites began implementing energy savings programs. Initiatives were grouped in three categories, immediate, short/medium term, and long term with 90% of all immediate actions implemented and the remaining actions in progress. Example energy savings opportunities included using zoned temperature controls in different factory areas; powering down equipment during weekends and down time; installing LED lighting, motion detectors, and timers; recovering heat from machines to warm up production areas; using roof top solar water heaters; improving building insulation and more. Leveraging best practices across sites and rewarding staff ideas was encouraged. Many UK sites participated in local energy savings schemes, and several of our German sites renewed their ISO 50001 energy certification. Furthermore, operational excellence programs continue to be implemented at more sites to guide performance and operational

sustainability improvements. Continuous improvement tools such as dashboards and key performance indicator monitoring are being used to evaluate energy efficiency improvements, which was on average 2% last year for the participating EU facilities.

Our logistics team was also actively working to reduce their transportation GHG emissions. Programs implemented in 2022 to establish more efficient trade lanes and switch truck volumes to rail, led to reducing material transit emissions by approximately 1,500 metric tons CO₂e per year. The team is also exploring optimizing warehousing activities at one of our mills, which could reduce transport emissions by an additional 1,500 metric tons CO₂e per year.

**GRI 302-1 ENERGY CONSUMPTION WITHIN THE ORGANIZATION**

Energy is a critical input for Graphic Packaging's operations, and the way we source and use energy represents a significant portion of our operations' GHG emissions. Today, we rely on biomass, natural gas, and other fossil fuels to power our operations. Over the past three years, renewable fuels represented on average 69% of the fuel mix consumed in our facilities.

2022 FUEL MIX

● Renewable Fuels ● Natural Gas ● Other Fossil Fuels

Total Nonrenewable Fuel Consumption by Fuel Type (MWh)

Fuel type	2019	2020	2021 ¹	2022
Coal	20,800	10,800	0	0
Diesel	58,000	59,600	79,700	84,700
Fuel oil 1, 2, 6	5,100	5,200	4,000	125,000
Gasoline	4,300	4,800	5,000	7,700
Kerosene	400	300	300	500
Liquified petroleum gas	0	0	8,600	4,400
Natural gas	6,916,700	7,630,700	7,686,400	7,869,400
Propane	46,200	47,200	46,600	51,300
Other (waste oil, ethanol)	26,000	5,000	24,700	300
Total nonrenewable fuel	7,077,500	7,763,600	7,855,300	8,143,300
Mills nonrenewable fuel	6,828,300	7,521,900	7,500,000	7,775,200
Packaging nonrenewable fuel	249,200	241,700	355,300	368,100
Percentage nonrenewable fuel in total fuel	29%	31%	31%	31%

1. Numbers restated from last year. See [Disclosure 2-4](#) for further details.

**Total Renewable Fuel Consumption by Fuel Type (MWh)**

Fuel type	2019	2020	2021 ¹	2022
Bark	5,303,600	4,792,900	5,455,000	5,570,400
Black liquor	11,701,900	12,075,000	11,929,700	12,105,500
Other biomass (e.g., sludges, railroad ties)	600,800	395,500	457,500	543,000
Other renewable fuel (e.g., biogas)	0	0	1,400	10,300
Total renewable fuel consumption	17,606,300	17,263,400	17,843,600	18,229,200
Mills renewable fuel	17,606,300	17,263,400	17,842,200	18,218,900
Packaging renewable fuel	0	0	1,400	10,300
Percentage renewable fuel in total fuel	71%	69%	69%	69%

1. Numbers restated from last year. See [Disclosure 2-4](#) for further details.

Graphic Packaging uses a mix of self-generated and purchased energy to power our mills and packaging operations. Virgin mills are able to use recovered bark and biomass wastes (e.g., black liquor biomass waste from pulping operation), as well as purchased biomass materials, to self-generate steam and electricity, and throughout our operations we use purchased fossil fuels to generate steam and electricity and operate mobile equipment and other stationary equipment. We seek opportunities to use combined heat and power (CHP) cogeneration systems, where thermal energy (steam) and electricity are generated from one integrated process

and fuel source. We also capture waste heat from gas fired generators, dryers, and other process units and use the heat to generate steam, preheat various process flows, or in other heating uses.

In 2022, Graphic Packaging generated 17.2 million MWh of steam (71% from renewable fuel) and 1.9 million MWh of electricity (69% from renewable fuel). Total electricity needed to power our operations is defined as the sum of the self-generated electricity from the CHP or other electricity generation operations and purchased electricity. In 2022, global operations used a total of 3.8 million MWh of electricity, of which 35% was supplied by renewable sources.

Total consumed energy (defined as total purchased electricity, heating/cooling, and steam, plus total consumed fuels) in 2022 was 28.3 million MWh, with 64% from renewable sources. Energy quantities for 2022 are ~3% higher than 2021 largely due to the K2 paper machine startup and equipment downtime at one of the mills that led to the need to purchase additional grid-supplied electricity.

2022 ENERGY MIX

- Renewable Fuels
- Nonrenewable Fuels
- Purchased Grid Energy
- Purchased Renewable Energy



Total Energy Consumption (MWh)				
Energy type	2019	2020	2021 ¹	2022
Purchased nonrenewable electricity	1,559,000	1,468,500	1,689,900	1,910,000
Purchased renewable electricity	0	0	31,800	41,200
Purchased district heating/cooling (nonrenewable)	0	0	10,600	6,100
Purchased district heating/cooling (renewable)	0	0	0	5,800
Purchased steam	0	0	0	0
Total nonrenewable fuels	7,077,500	7,763,600	7,855,300	8,143,300
Total renewable fuels	17,606,300	17,263,400	17,843,600	18,229,100
Total energy	26,242,800	26,495,500	27,431,300	28,335,500
Nonrenewable energy	8,636,500	9,232,100	9,555,900	10,059,400
Renewable energy	17,606,300	17,263,400	17,875,400	18,276,100
Percent renewable energy	67%	65%	65%	64%

Total Energy Consumption (MWh)				
Energy type	2019	2020	2021 ¹	2022
Total mills energy	25,331,100	25,586,900	26,185,700	27,044,600
Mills percent renewable energy	70%	67%	68%	67%
Total packaging energy	911,700	908,600	1,245,500	1,290,900
Packaging percent renewable energy	0%	0%	3%	4%

1. Numbers restated from last year. See [Disclosure 2-4](#) for further details.

GRI 302-2 ENERGY CONSUMPTION OUTSIDE THE ORGANIZATION

See [Disclosure 305-3](#).

GRI 302-3 ENERGY INTENSITY

We measure nonrenewable energy intensity on a revenue basis at the enterprise level. Total nonrenewable energy consumption includes purchased nonrenewable energy and fuels and saw a 5% increase year over year from 2021 to 2022 (22% increase versus 2016 baseline) due to bringing the new K2 paper machine online and equipment downtime at one of the virgin mills. In 2022, nonrenewable energy intensity was 1.07 MWh/\$1,000 revenue, 20% lower than 2021 and 24% lower than the 2016 baseline value. The observed reduction relative to the 2016 baseline intensity and achieving our ESG Vision 2025 goal is attributed to continued strong growth in sales revenue, which compensates for the increase in nonrenewable energy use.



We also measure energy intensity on a per unit production basis at the mills and packaging division levels. Mills total energy intensity (renewable plus nonrenewable energy) was 7.31 MWh/metric ton saleable board with a corresponding nonrenewable energy intensity of 2.39 MWh/metric ton saleable board. Mills total energy intensity decreased relative to 2021 even though total energy use increased, reflecting the impacts of our K2 paper machine investment and increased energy-efficient board production in our CRB portfolio. Packaging total energy intensity was 0.36 MWh/metric ton converted board.

GRI 302-4 REDUCTION OF ENERGY CONSUMPTION

Graphic Packaging's operations teams are focused on maximizing our use of biomass energy, reducing nonrenewable energy use, and improving energy efficiency as part of our GHG emissions reduction strategy. The COE experts work closely with the mills to map energy use throughout the mill system, monitor energy consumption and cost, and pursue energy-related improvement opportunities. The COE team monitors and tracks monthly energy usage, comparing to baseline usage, to proactively identify and correct drifts from baseline operating conditions. Similarly, continuous improvement and procurement resources in our packaging divisions work with the plants to identify and implement projects to improve energy efficiency and explore renewable energy opportunities.

See earlier climate [Disclosure 3-3](#) for a discussion of recent emissions reductions projects.

GRI 305-1 DIRECT (SCOPE 1) EMISSIONS

Graphic Packaging follows the Greenhouse Gas Protocol and includes all locations within our operational control, as described in [Disclosure 2-3](#). This GHG 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.

Total Nonrenewable Fuel Consumption by Fuel Type (MWh)

	2019	2020	2021 ¹	2022
Nonrenewable energy intensity (MWh per \$1,000 revenue)	1.40	1.41	1.34	1.07
Mills total energy intensity (MWh per metric ton saleable board)	7.10	7.16	7.51	7.31
Mills nonrenewable energy intensity (MWh per metric ton saleable board)	2.17	2.33	2.40	2.39
Packaging total energy intensity ² (MWh per metric ton converted board)	-	-	0.34	0.36

1. Numbers restated from last year. See [Disclosure 2-4](#) for further details.

2. New reporting metric, starting in 2021.



We report GHG carbon dioxide equivalent (CO₂e) emissions for gases covered under 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:

- Chlorodifluoromethane (HCFC-22)

We sourced emissions factors for Scope 1 emissions calculations from the:

- US EPA Greenhouse Gas Emission Factors Hub, UK Department for Energy Security and Net Zero (DESNZ) and the Department for Business Energy and Industrial Strategy (BEIS) 2022 GHG Conversion Factors (formerly known as the Department for Environment, Food, and Rural Affairs), and 100-year global warming potential factors from the Intergovernmental Panel on Climate Change Fifth Assessment Report (AR5, 2014).

On-site landfilling emissions at mills are calculated in accordance with the US EPA Greenhouse Gas Reporting Program (Subpart TT) methodology.

The following table presents our total Scope 1 emissions, including biogenic emissions. 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 equivalent to

carbon that was originally removed from the atmosphere during tree growth and will again be removed from the atmosphere as the forests regenerate, causing no net new addition of CO₂ to the atmosphere. In 2022, most of Graphic Packaging’s total direct emissions were from carbon neutral biogenic sources 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.

2022 Direct GHG Emissions by Source Type¹

Source	GHG emissions (metric tons CO ₂ e)	Percentage direct emissions
Nonrenewable fuel emissions	1,503,500	20%
Refrigerant/fugitive emissions	10,600	<1%
On-site waste emissions ¹	112,800	2%
Renewable biomass fuel (biogenic emissions) ²	5,935,800	78%

1. New emissions category beginning in 2021.

2. 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 2022 were 1.6 million metric tons CO₂e, with most of our Scope 1 emissions (96%) occurring in the US and 95% of GHG emissions generated by the mills division. Total Scope 1 emissions were up slightly in 2022 (1.5%) relative to 2021, largely due to increased fuel consumption from the startup of the new K2 paper machine.

Total Reportable Direct (Scope 1) GHG Emissions ¹ (Metric Tons CO ₂ e)				
	2019	2020	2021 ¹	2022
Total Scope 1 emissions ²	1,318,700	1,441,500	1,604,100	1,626,900
Mills Scope 1 emissions	1,272,000	1,395,800	1,532,600	1,549,400
Packaging Scope 1 emissions	46,700	45,700	71,500	77,500

1. Values restated from last year. Please see explanation in climate [Disclosure 3-3](#) for further details.

2. Excludes biogenic emissions per the GHG Protocol accounting methodology.

GRI 305-2 ENERGY INDIRECT (SCOPE 2) 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 electricity emissions are calculated using the:

- US Emissions and Generation Resource Integrated Database (eGRID); Canada National Inventory Report (NIR); UK Department for Energy Security and Net Zero (DESNZ) and Department for Business Energy & Industrial Strategy (BEIS); and International Energy Agency (IEA) emissions factors.

Market-based electricity emissions are calculated primarily using the:

- US Residual Mix factors (Green-e® Energy Emissions Rates) CO₂e coefficients from eGRID subregion energy mixes for US locations and European Residual Mix factors for European locations.

In regions where residual mix factors are not available, the location-based emission factors from the Canada NIR and IEA are used.

Both market-based and location-based emissions increased in 2022 relative to 2021, primarily due to increased demand from the startup of the new K2 paper machine and increased electricity purchases rather than self-generation of electricity at the West Monroe mill. Of interest is the trend of market-based emissions being larger than location-based emissions. Location-based emissions accounting strictly considers the energy mix of the local grid supplying power to customers, whereas market-based emissions consider actions by companies to claim the environmental attributes of clean electricity generation through market instruments such as renewable energy certificates (RECs). Market-based emissions accounting provides a pathway for companies to reduce their Scope 2 emissions at a more aggressive rate than the local electricity grids may be incorporating clean power. Companies that do not procure clean electricity through these mechanisms are left with a “dirtier grid” from a market-based accounting perspective, resulting in higher emissions.



To date, Graphic Packaging has relied heavily on self-generation of electricity from renewable fuels to decarbonize our electricity use, rather than procuring clean electricity through market instruments such as RECs. As we develop our decarbonization pathway in support of achieving science-based emissions reduction targets, we will consider all available options, including increasing renewable energy procurement supported by RECs.

Total Indirect Energy (Scope 2) GHG Emissions (Metric Tons CO ₂ e)				
	2019	2020	2021 ¹	2022
Total Scope 2 emissions (market-based)	824,200	680,400	714,500	828,400
Mills Scope 2 emissions	505,300	391,200	359,500	469,800
Packaging Scope 2 emissions	318,900	289,200	355,000	358,600
Total Scope 2 emissions (location-based)	757,500	652,200	680,100	830,600
Mills Scope 2 emissions	445,300	364,700	347,100	482,600
Packaging Scope 2 emissions	312,200	287,500	333,000	348,000

1. Values restated from last year. Please see explanation in climate [Disclosure 3-3](#) for further details.

GRI 305-3 OTHER INDIRECT (SCOPE 3) EMISSIONS

Our activities are connected to various sources of indirect GHG emissions that occur along our value chain, such as those 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 GHG Protocol's Corporate Value Chain (Scope 3) Accounting and Reporting Standard.

In 2022, we further refined our analysis approach for Scope 3 emissions by updating our calculation methodology for some of our inventory measurements. These changes were applied to both the restated 2021 inventory and to the 2022 inventory calculations. Category 1 emissions calculations were enhanced so that emissions from Graphic Packaging's major commodities are now estimated using a volume-based approach, improving the accuracy of emissions accounting in this category. Our 2022 Category 4 emissions calculations were enhanced to leverage activity data from North American operations, resulting in a more accurate estimate compared to the previous spend-based approach.

Emissions associated with on-site waste treatment that were previously reported in Category 5 were reclassified as Scope 1 emissions. Category 12 emissions calculations were enhanced to reflect more appropriate end-of-life treatment pathways, incorporating higher levels of recycling as documented by industry data. Additional information on our calculation approach is presented in the [2023 CDP climate change response](#) and in the 2021 ESG Report.

The higher reported 2021 and 2022 Scope 3 emissions are due to improvements in measurement methodologies and data availability and not changes in activity. Graphic Packaging continues to refine our measurement approach as we work toward developing a more robust GHG inventory in support of setting science-based targets (SBTs). Total 2022 Scope 3 emissions are in line with 2021. The one notable exception is Category 4 due to methodological updates as noted above. Estimated Scope 3 Category 1 value chain emissions from purchased goods and services to manufacture products and Category 12 product end-of-life treatment represent the largest contributions (70%) to value chain emissions.

**Scope 3 Indirect Emissions (Million Metric Tons CO₂e) by Category¹**

	2019	2020	2021 ²	2022	2022%
Total Scope 3 emissions³	3.50	3.58	6.65	6.93	100%
Category 1: Purchased goods and services ³	1.99	2.14	3.35	3.49	50.4%
Category 2: Capital goods	0.13	0.26	0.21	0.13	1.9%
Category 3: Fuel and energy-related activities (not in Scope 1 or 2)	0.04	0.03	0.50	0.46	6.7%
Category 4: Upstream transportation and distribution ⁴	0.52	0.30	0.55	0.99	14.2%
Category 5: Waste generated in operations ⁴	0.04	0.03	0.18	0.19	2.7%
Category 6: Business travel	0.02	0.01	<0.01	<0.01	<0.1%
Category 7: Employee commuting	<0.01	<0.01	0.03	0.04	0.6%
Category 8: Upstream leased assets	0.77	0.77	0.08	0.10	1.4%
Category 10: Processing of sold products ⁵	-	-	0.15	0.12	1.8%
Category 11: Use of sold products ⁵	-	-	0.03	0.02	0.3%
Category 12: End-of-life treatment of sold products ⁴	0.00	0.04	1.56	1.37	19.8%
Category 15: Investments ⁵	-	-	<0.01	<0.01	<0.1%

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

2. 2021 values restated from last year. Please see explanation in climate [Disclosure 3-3](#) for further details.

3. Total Scope 3 emissions may differ from the sum of the individual category emissions due to rounding.

4. Emissions are restated in 2021 due to 2022 calculation methodology refinement.

5. New reporting category starting in 2021 due to methodology refinement.



Total GHG emissions: operations and value chain

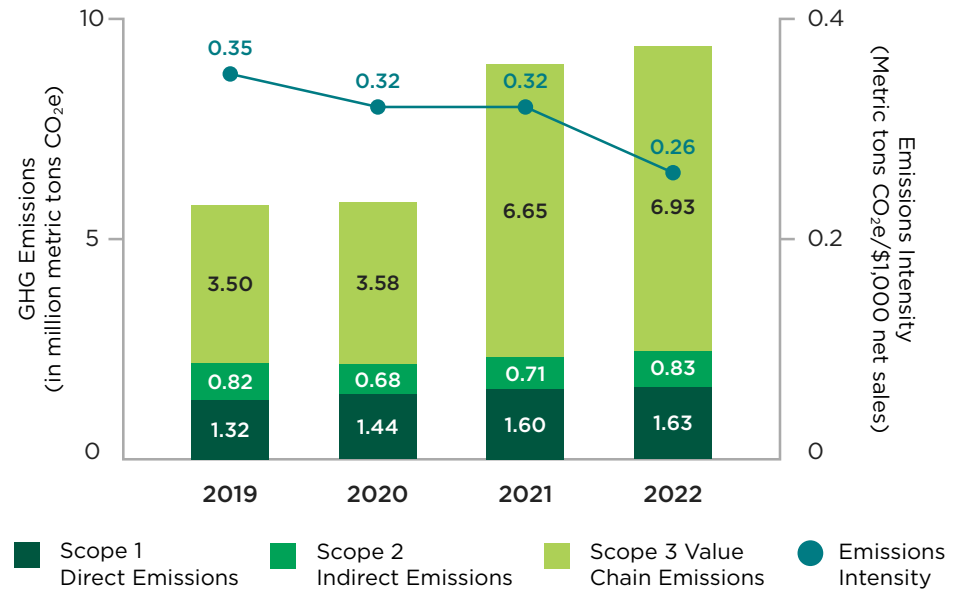
The sum of our Scope 1 and 2 emissions represents our operations emissions. Approximately two-thirds of our operations emissions are from burning fuels in our operations, the rest from energy we purchase. We saw an increase in 2022 total operations emissions relative to 2021 due primarily to new operations demand from the startup of the K2 paper machine.

Total Operations (Scope 1 and Scope 2) GHG Emissions (Metric Tons CO ₂ e)				
	2019	2020	2021 ¹	2022
Total operations emissions	2,142,900	2,121,900	2,318,600	2,455,300
Total Scope 1 emissions	1,318,700	1,441,500	1,604,100	1,626,900
Total Scope 2 emissions (market-based)	824,200	680,400	714,500	828,400
Mills operations emissions	1,777,300	1,787,000	1,890,400	2,019,200
Packaging operations emissions	365,600	334,900	428,200	436,200

1. Values restated from last year. Please see explanation in climate [Disclosure 3-3](#) for further details.

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 2022, operations emissions contributed 26% and value chain emissions contributed 74% of total emissions connected to Graphic Packaging activities.

GHG EMISSIONS BY SCOPE



GRI 305-4 GHG EMISSIONS INTENSITY

We measure operations GHG emissions intensity on a revenue basis at the enterprise level and for tracking progress toward achieving the ESG Vision 2025 emissions intensity reduction goal. We saw a 20% reduction in intensity from 2021 to 2022 and a 26% reduction in intensity relative to the 2016 goal baseline, exceeding our target 15% reduction. Total Scope 1 and 2 operations emissions increased 6% from 2021 to 2022 and have increased 20% relative to 2016 operations emissions. Reductions in GHG emissions intensity are largely due to revenue growth from expanding less energy-intensive packaging operations, continued product demand for plastic packaging alternatives, and from favorable product pricing.



Mill GHG emissions intensity is measured on a per ton saleable board basis and, for the packaging divisions, on a per ton converted board basis. In 2022, mill GHG intensity was 0.55 metric tons CO₂e/metric ton saleable board, up 2% compared to 2021, and packaging GHG intensity was 0.12 metric tons CO₂e/metric ton converted board, consistent with 2021 values.

GHG Operations Emissions Intensity				
	2019	2020	2021 ¹	2022
Emissions intensity (metric tons CO ₂ e/\$1,000 revenue)	0.35	0.32	0.32	0.26
Mills emissions intensity (metric ton CO ₂ e/metric ton saleable board)	0.50	0.50	0.54	0.55
Packaging emissions intensity ² (metric ton CO ₂ e/metric ton converted board)	-	-	0.12	0.12

1. Values restated from last year. Please see explanation in climate [Disclosure 3-3](#) for further details.

2. New reporting metric, starting in 2021.

GRI 305-5 REDUCTION OF GHG EMISSIONS

See climate [Disclosure 3-3](#) and [Disclosure 302-4](#) for a discussion on emissions reductions projects and approach.

GRI 305-6 EMISSIONS OF OZONE-DEPLETING SUBSTANCES

Graphic Packaging uses immaterial quantities of HCFC-22 for HVAC and cooling applications. In 2022, 0.66 metric tons of HCFC-22 were released to the atmosphere.

GRI 305-7 NITROGEN OXIDES, SULFUR OXIDES, 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.

Our 2022 combined nitrogen oxide (NO_x) and sulfur oxide (SO_x) emissions have been relatively consistent for the period 2019-2022. We began reporting volatile organic compound (VOC) and particulate matter (PM10) emissions in 2021, and 2022 values were similar to 2021 reported values. Current reported data are for the mills division only, and we are working on including the packaging divisions in the annual ESG reporting process.

Mills Division Air Emissions (Metric Tons)

Emissions type	2019	2020	2021	2022
NO _x	5,400	5,200	5,100	5,500
SO _x	1,400	1,800	1,300	1,300
VOCs ¹	-	-	4,600	4,100
PM10 ¹	-	-	1,600	1,600

1. New reporting metric, starting in 2021.



Water Stewardship



GRI 303 WATER AND EFFLUENTS

GRI 3-3 Management of Material Topic

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 for meeting the needs of the communities near our mills and packaging plants.

Manufacturing pulp and paper requires a substantial amount of water. According to the [University of Minnesota](#), the US benchmark for water use by 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 materials through mill process equipment, heat transfer and equipment cooling, steam generation, washing wood pulp and process equipment, and for potable uses. In contrast, packaging plant facilities use a relatively small amount of water, primarily for steam generation, equipment washing/cleaning, cooling, and potable uses.

Graphic Packaging’s water stewardship approach focuses on using water responsibly and on understanding water needs in the watersheds where we operate. We work to reduce the amount of water we withdraw from local water resources and responsibly return the water we borrow back to the environment.

We recognize that the communities near our mills expect us to responsibly steward shared water resources and use water wisely.

ESG VISION 2025 WATER GOAL

- Reduce mill water effluent intensity by 15%.

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

We rely on the skills of the following subject matter experts to work with our mills to achieve our water intensity goal.

- **Mills COE.** A team of paper manufacturing technical experts who lead water and energy audits in the mills and develop and implement technology solutions to increase water recycling/reuse within the mills, 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.

Our operations teams monitor mill water use, work to improve water management practices, and monitor water availability in the watersheds where we operate. We then determine the need for site-specific actions to optimize water use or improve discharged water quality at our facilities. Individual mills take action to reduce the amount of new water they withdraw from the environment by implementing



recycling loops to reuse water where possible and exploring alternate sources of water, such as treated, reclaimed water.

Examples of 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. In addition to reusing evaporated water, paper machine white water is also used to limit the need for freshwater make-up on the pulp washers.
- **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 sheeter 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. In 2022, recovered steam condensate returned to the boilers typically provided 55%-70% 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 water efficiency and upgrade equipment to increase recycled water volumes or reduce water use. The COE also works with third-party experts to complete water and energy audits to identify opportunities to improve overall water use and reduce costs. Monthly benchmarking calls address both energy and water improvement opportunities given the water/energy synergy connected with water heating and steam generation. For example, a call in 2022 led to the installation of a condensate polisher at the Kalamazoo Mill. This project will improve the quality of condensate and allow it to be reused in the boiler, reducing energy use by approximately 20,000 MWh per year and water use by approximately 60 million gallons per year.

Our mills also focus 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 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 and develop preventive measures. Comprehensive spill response plans outline actions to mitigate releases and prevent materials from reaching nearby water bodies.

Governance

Graphic Packaging's water stewardship strategy is guided by our Code, commitment to the UNGC, and our HSE policy. Our continuous improvement philosophy drives our efforts to reduce natural resource use, manage compliance across our global operations, and reduce costs. The mills EVP is our executive sponsor for our water stewardship program. They work with the CSO to assess water-related opportunities and risks, set water strategy, charter programs to advance water initiatives, monitor external stakeholder concerns, and provide regular updates to the ELT. The mills EVP works 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, the leadership teams at each mill, with assistance from the COE, are accountable for successful goal program execution, and delivering water use reductions. Read more about our ESG governance process in Disclosures [2-9](#) and [2-13](#).

The Graphic Packaging water inventory management plan provides direction and guidance for collecting, maintaining, verifying, and reporting water data. Our 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. Data analysis processes use third-party resources to aggregate and calculate cumulative annual environmental metrics.



Measuring progress

We independently assess our water stewardship approach and performance through third-party evaluation using the CDP water security response, and in 2022 we received an “A-” score on our 2022 CDP water security response. We engage a third-party assurance partner to provide limited level of assurance of our 2022 water data using current best practices and in accordance with ISAE 3000 and ISAE 3410. Please refer to our 2023 CDP water security response for more information on our approach to managing water. A copy our CDP response and data assurance letter can be accessed on our [website](#).

We also evaluate the effectiveness of our water stewardship approach by measuring progress toward achieving our ESG Vision 2025 water intensity goal. In 2022, mill water effluent intensity on a per unit production basis increased relative to 2021 and represents a 2% increase relative to the 2016 baseline value. The increase in intensity is largely due to reversing a 2021 change in the river water intake system at one virgin mill, increased surface water usage at two virgin mills, and increased potable water use at the Kalamazoo mill. We are working to understand the underlying causes for these increases and will adjust our stewardship approach as needed to ensure we get back on track to achieve our water goal. Current capital projects in planning to be completed by the end of 2024 are projected to reduce water use by approximately 3.6 billion gallons per year.

In 2022, the Company’s focus was commissioning the new K2 paper machine and achieving design production capacity during the second half of the year. Although CRB mills water use intensity increased slightly in 2022 relative to 2021 reported values, the increase is expected to be temporary. The CRB mill circuit should see an approximate 10% decrease in water intensity relative to 2021 once the circuit optimization work is completed. In 2023, Graphic Packaging announced its intent to build a new \$1 billion CRB mill in Waco, Texas. This new facility will continue the trend toward commissioning new, more water efficient CRB mills, while enabling the retiring of less efficient assets.

2022 Water stewardship highlights

- The Carol Stream packaging plant implemented several water efficiency initiatives in 2022 that collectively will reduce annual water use by 28%.
- The Graz packaging plant solvent recovery system reconstruction project will reduce site water use by 450 kiloliters per year.
- The Igualada packaging plant osmosis wastewater treatment project will reduce site water use by 500 kiloliters per year.
- The Augusta mill implemented improvements to the wastewater treatment system as part of a longer-term capital project to reduce discharged biological oxygen demand and ammonia concentrations to help improve water quality in the Savannah River.

ESG Vision 2025 Water Stewardship Goal Progress			
Goal	2016 baseline	2022 result	Status
Reduce mill effluent intensity by 15% (megaliter/metric ton saleable board)	0.041	0.042	No progress



GRI 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 potable water, treated municipal wastewater, or from water entrained in wood fiber raw materials. Our packaging plants predominantly rely upon purchased, potable water for their operations. Currently, all the water we source is from freshwater sources, with most 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 where the water may undergo additional treatment. Consumptive water uses include water contained in products or in waste sludges, 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 monitor water withdrawal and discharge volumes along with effluent water quality for potential impacts. We screen 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 or the need to develop site-specific water use reduction goals. Current efforts are focused on 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 at the Reuse Facility require Graphic Packaging to treat the water upon receipt as the incoming water does not consistently 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 2022, the site received on average 4.3 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 total maximum daily load (TMDL) 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 GA EPD followed a multistakeholder 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 GA EPD in developing a revised facility national pollutant discharge elimination system discharge permit and implementation schedule to improve the quality of its discharged water to help increase oxygen levels in the Savannah River. The mill is making capital investments that will reduce discharged water volumes by approximately 3.5 billion gallons per year and support reducing effluent biological oxygen demand (BOD) and suspended solids discharges and increasing oxygen levels in the Savannah River basin. The \$40 million plus multiyear capital project includes reducing BOD loading to the mill water treatment ponds through improved filtration, stock wash recovery, and water reduction, installing additional aerators and mixers in the ponds, and improvements in effluent treatment time. Equipment installation began in 2018 and is expected to continue through 2025. The new discharge limits will first take effect in October 2024.

GRI 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, BOD, phosphorous, nitrogen and adsorbable organic halogen compounds (AOX), as well as DO, water temperature, and pH. Monitoring and reporting may be conducted daily, monthly, or annually depending on sites' operations and environmental permits. During 2022, total reported process water discharges from the three virgin mills that discharge directly to surface water included 190 metric tons ammonia nitrogen, 160 metric tons AOX, and 3,320 metric tons BOD. Discharges are within allowable permit limits and meet local water quality protection needs. Effluent water from the CRB mills and one virgin mill 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 track and investigate any incidents that result in a release to the environment, and where needed, make improvements to guard against future recurrences. In 2022, Graphic Packaging experienced no significant spills but did have two water-related noncompliance incidents from 2019 operations that resulted in a formal enforcement action in 2022. Read more about our environmental compliance approach in [Disclosure 2-28](#) and spills reporting in [Disclosure 306-3](#).

**GRI 303-3 WATER WITHDRAWAL**

This year, we updated our influent water analysis approach to differentiate between water withdrawals from local watershed sources versus other influent water sources. Water withdrawal sources include surface water systems, groundwater, and purchased potable water, whereas other influent water sources include water entrained in raw materials, third-party recycled/reclaimed water, and recovered storm water. We make this distinction to better understand and communicate how we can reduce the need to withdraw new water from our local watersheds by optimizing our use of other water sources such as reclaimed water, raw material water, or other alternate water sources.

In 2022, 100% of our water withdrawals were from freshwater sources ($\leq 1,000$ mg/L total dissolved solids), with 99.4% being used in our mills for paperboard production and 0.6% in packaging operations. The breakdown by source for 2022 withdrawals was 87% surface water, 10% groundwater, and 3% potable water. Total 2022 water withdrawals were 9% higher than 2021 values, reflecting increased surface water withdrawals at three of the virgin mills and increased potable water use at the Kalamazoo mill for the new K2 paper machine.

Total Water Withdrawal (Megaliters)¹

Source	2019	2020	2021	2022
Surface water	132,000	125,000	120,000	131,200
Groundwater	16,000	15,000	15,000	14,900
Third-party water potable water	5,000	3,000	3,000	4,800
Total water withdrawals	153,000	143,000	138,000	150,900
US withdrawals	152,000	142,000	137,000	149,800
Outside-the-US withdrawals	<500	1,000	1,000	1,100
Mill water withdrawal	152,000	142,000	137,000	150,000
Packaging plant water withdrawal	1,000	1,000	1,000	900
Mill water withdrawal intensity (megaliters/metric ton saleable board)	0.043	0.040	0.039	0.041
Mill water withdrawal intensity (1,000 gal/US ton saleable board)	10.2	9.5	9.4	9.7

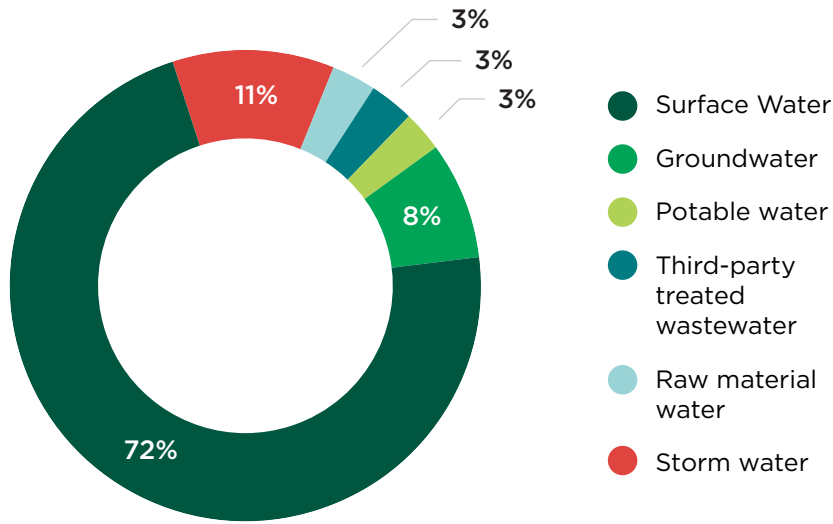
1. Withdrawal numbers are restated to reflect new water accounting methodology.



In addition to withdrawals, our facilities use reclaimed water and raw material water inputs in our manufacturing processes and recycle/reuse water within the mills to offset the need to withdraw new water from the environment. In 2022, raw material and reclaimed water sources accounted for 10,600 megaliters (or 7%) of the total water needed to manufacture our products.

We continue to work with our operating sites to improve our water metering, better understanding of each site's influent water 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. Our 2022 refinements to water accounting included tracking storm water runoff capture at those facilities where storm water is treated on site and discharged with treated mill process water. While not used in the paperboard manufacturing process, this water becomes part of discharged water measurements and should be included to better understand the site water balance and for estimating site water losses and consumption.

INFLUENT WATER BY SOURCE



Total Influent Water (Megaliters)				
Source	2019	2020	2021	2022
Other influent water	9,000	10,000	12,000	31,000
Third-party treated wastewater	5,000	6,000	7,000	6,100
Raw material water	4,000	4,000	5,000	4,500
Storm water (runoff)	-	-	-	20,400
Total water withdrawals	153,000	143,000	138,000	150,900
Total influent water	162,000	153,000	150,000	181,900
Mill water influent intensity ¹ (megaliters per metric ton saleable board)	0.045	0.043	0.043	0.043
Mill water influent intensity ¹ (1,000 gal per US ton saleable board)	10.8	10.2	10.2	10.4

1. Measured as mill process water influent intensity, which includes withdrawals, raw material water, and reclaimed water input sources.



Water stress

While water is relatively abundant in most of Graphic Packaging’s production locations, water stress may still impact some operations locally and within our 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 2022, Graphic Packaging updated the baseline stress screening analysis using the World Resources Institute (WRI) Aqueduct (version 3.0) screening tool. The tool identified 18 packaging locations in watersheds with either high or extremely high predicted baseline stress levels. These facilities account for approximately 0.22% of Graphic Packaging’s total water withdrawals and <1% of total consumptive water use. Compared to the 2021 assessment, there was no change in predicted watershed baseline stress conditions for the 18 Graphic 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 because most of the influent water supply is surface water from tributaries with ample water flow to meet local water needs. At the West Monroe facility, the site 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. Currently the aquifer levels are rebounding due to changing rainfall patterns and reduced demand on regional aquifer withdrawals. 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. Each individual watershed in which Graphic Packaging operates has its own local context for water availability and the use needs of its stakeholders. As we evolve 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 supplies needed to support operations at the packaging plants in predicted stressed watersheds are at risk.

Water Withdrawal From Areas With Predicted Water Stress¹ (Megaliters)

Source	2019	2020	2021	2022
Surface water	0	0	0	0
Groundwater	0	0	0	0
Third-party potable water	340	280	300	330
Total water withdrawal	340	280	300	330
US withdrawals	310	250	260	260
Outside-the-US withdrawals	30	30	40	70
Mill water withdrawal percentage	0%	0%	0%	0%
Packaging plant water withdrawal percentage	100%	100%	100%	100%
Stressed basin withdrawals as percentage of total water withdrawals	0.22%	0.20%	0.22%	0.22%

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

**GRI 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 who treat the water prior to discharge. At some mills, cooling water and other noncontact water are also safely discharged to surface water without treatment, and at our Texarkana mill we provide drinking water to the local municipality. Our packaging plants typically discharge their water to local publicly owned treatment works or other third parties for treatment prior to discharge. Currently, we have not traced the local municipal discharge destinations for facilities receiving packaging plant water and report these discharge destinations as third-party destinations.

Discharged water is a combination of both discharged process wastewater and noncontact cooling water and does not include water contained in products. At some mills, treated storm water may also be included in the total discharged water volumes. In 2022, 100% of mill water discharges (99.6% of total discharged water) were ultimately discharged to fresh, surface water systems either directly at our mills or by third-party treatment facilities.

Total 2022 water effluent discharges were approximately 12% higher and effluent intensity values are approximately 6% higher than 2021 values, largely due to increases in surface water withdrawals at three of the virgin mills.

Total Water Discharges (Megaliters)

Discharge destination	2019	2020	2021	2022
Surface water ¹	152,500	133,700	132,800	153,300
Groundwater	0	0	0	0
Third party ²	500	400	1,800	800
Third party potable supply ³	1,400	1,300	1,400	1,300
Total water discharges	154,400	135,400	136,000	155,400
US discharges	154,000	135,000	135,500	154,800
Outside the US discharges	400	400	500	600
Mill water discharge	153,900	135,000	135,400	154,700
Packaging plant water discharge	500	400	600	700
Discharges in water stress areas ⁴	80	90	130	160
Mill effluent intensity (megaliters/metric ton saleable board)	0.043	0.038	0.039	0.042
Mill effluent intensity (1,000 gal/US ton saleable board)	10.3	9.1	9.5	10.0

1. Includes mill discharges to local publicly owned treatment works (POTWs), as these facilities ultimately discharge to surface water following treatment.
2. Represents discharges from packaging plants to local POTW and withdrawn water sold to a third party by the Augusta mill.
3. Texarkana mill provides treated drinking water to the local municipality.
4. Learn more about our water management in water stressed areas in [Disclosure 303-3](#).

**GRI 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, and evaporation losses were calculated using a mass balance approach.

Graphic Packaging calculates both volume loss consumption (water in minus water out) and use/source change consumption (where use prevents water from being discharged to original source). Total consumption, the sum of these two components, represents the change in water available in the watershed.

From 2019 to 2022, source change consumption remained relatively flat. However, we see an increase in volume loss consumption, with the increase in 2022 driven by improved measurement methodology including storm water inputs in site water balance models versus actual changes in consumption. The mills team continues to work to improve its water measurement capabilities and refine site water balances to provide a more complete view of water inputs, outputs, and consumption to better inform 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	2022
Mill water consumption	24,800	30,900	27,300	41,300
Product loss	200	200	200	200
Calculated evaporative loss	5,000	13,000	8,900	23,700
Source change ¹	19,600	17,700	18,200	17,400
Packaging plant water consumption	700	700	800	900
Source change ¹	700	700	800	900
Total water consumption	25,500	31,600	28,100	42,200
Volume loss consumption	5,200	13,200	9,100	23,900
Source change ¹ consumption	20,300	18,400	19,000	18,300
Consumed water in water stressed² areas	340	280	300	330
Percentage consumed water in water stressed ² areas	1.3%	0.9%	1.1%	0.8%

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 nonpotable destination).

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



Waste and Recycling



GRI 306 WASTE

GRI 3-3 Management of Material Topic

Consumer brands are increasingly looking to reduce their use of virgin plastic packaging in favor of packaging solutions that are made from renewable materials, are recyclable, and, in some cases, are compostable. Our fiber-based packaging is fundamental to helping them meet their sustainability goals and reduce consumer packaging waste. In addition, our stakeholders expect us to minimize waste generation in our facilities and use natural resources responsibly — expectations consistent with circular economy principles, UN SDG 12, and the broader global sustainable growth agenda.

We align our approach to waste management with the circular economy principles promoted by the Ellen MacArthur Foundation. The approach is underpinned by a transition to using renewable materials and renewable energy with a focus on regenerating nature, while eliminating waste and decoupling economic activity from the consumption of finite natural resources. A circular approach is also good for business as it can help improve supply chain reliability and reduce operating and compliance costs for companies and their value chain partners.

Graphic Packaging follows the classic waste management hierarchy: reduce, reuse, recycle. Our teams start by exploring opportunities to generate less waste through product and process design, operations and maintenance, and material recovery.

Here are a few ways we design out waste:

- Virgin mills maximize tree material usage by recovering bark, branches, and black liquor biomass to burn for fuel, recovering turpentine and tall oil/soap byproducts for sale, optimizing paperboard production to maximize yields, and recovering the water entrained in the wood to use in our mills. Each of these actions reduces the quantity of residual waste material that must be managed in addition to delivering cost and revenue benefits.
- We are evaluating opportunities to expand our use of bubbling fluidized bed boiler technology, to further increase our use of recovered biomass waste as valuable renewable fuel.
- Virgin mill chemical pulping process units recover and regenerate the quicklime used in the wood chip pulping process. In 2022, Graphic Packaging mills recovered approximately 91% of the quicklime for reuse in pulping, minimizing the amount of new lime that needs to be purchased.
- Upgrading mills with curtain coaters reduces material use and defects in finished board — meaning less finished-product waste. Each new coater reduces applied coating material use by 20%, increases production efficiency by about 0.7%, and uses approximately 20% less natural gas than coating machine alternatives.
- Product designers optimize carton cutting layouts, matching die-cutting patterns to paperboard roll widths to minimize scrap waste generated during converting operations.
- Fiber-based consumer packaging is 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.
- We reduce customer waste by shipping products in reusable or recyclable packaging, such as corrugated boxes, wooden pallets, and wooden crates.



After the design process, teams seek opportunities to creatively recover materials. Here are a few ways we reuse and recycle materials:

- We use waste wood fiber materials from the timber industry as mill feedstocks (e.g., sawmill wastes when trees are cut into lumber). Also, much of the wood feedstocks for the virgin mills 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. Sophisticated pulping and fiber separation systems allow the mills to accept a wide variety of recycled, fiber-based materials, including foodservice packaging materials. We also work 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 saleable paperboard. The mills are continually looking for ways to improve first-pass product quality and minimize the need to reprocess off-spec product.
- Packaging 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 recycled paperboard or are recycled externally. Our goal is to keep valuable fiber resources in circulation as long as possible.
- Operations facilities collect other valuable waste materials for recycling (e.g., metals, wood pallets, core plugs, plastics, electronics) and structure infrastructure contracts to recover construction waste and debris for material recovery and recycling.
- At some packaging plants, 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, reusing the packaging multiple times.

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

We seek to drive more circular operations through innovative thinking and teamwork across our Company. The following subject matter experts work with the mills and packaging plants to action waste reduction initiatives:

- The Mills COE is a team of paper manufacturing technical experts who develop and implement technology solutions to improve mill operations.
- The continuous improvement team is a group of operations experts who train and work with mill continuous improvement resources to improve materials yields and reduce consumables use, driving both cost and waste reduction.
- Our product innovation team is a group of product design experts who practice DfE thinking to develop new packaging concepts that use fewer materials and generate minimal waste. DfE also considers material selection and packaging design to optimize end package recyclability.
- The supply chain team is made up of 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.
- Our packaging quality/continuous improvement resources team is a group of experts focused on improving materials yields, reducing consumables use, or generating fewer off-spec products in the packaging plants.

Partnering to increase paper and paperboard circularity

In its 2022 study, the [AF&PA study](#) reported that current US paper recovery rates for recycling were approaching 70% of total generated paper compared to EPA-reported recovery rates of 25% for glass and a mere 9% for plastics ([EPA, 2018](#)). The same trend is true in other regions. In [Japan](#), an 80% paper recovery rate was observed in 2022, and the [European Confederation of Paper Industries](#) reported that paper in Europe



was recycled at a rate of 71.4% in 2021. Paper-based packaging was recycled at an even higher rate in Europe with 82% recovered versus 38% for plastic packaging, and 76% for glass packaging (Eurostat EU-27, 2020). As governments and consumer brands around the world look to reduce the use of plastics (and other nonrenewable fossil fuel-intensive materials) in packaging, industry advocacy efforts become necessary to further increase the recovery of paper materials and paper-based packaging 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 recovery rates for paperboard and paper-based packaging materials. The [2021 AF&PA Access to Recycling study](#) showed current US paper industry recovery rates are at the highest 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 fiber-based packaging and further reduce packaging waste.

Unfortunately, there is a 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. Paper cups and other fiber-based foodservice packaging can be recycled, and they are made from virgin fiber, which is a desirable input material for recycled paper mills. Graphic Packaging and the paper industry are actively working with the Paper Cup Alliance, a subgroup of FPI, to increase community awareness and acceptance of paper cup recycling in the US. 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, educate residents on correct recycling practices, reduce contamination in the recycle stream, and increase resident participation (which means more material into the system). Since the initiative began in 2017, the percentage of the US population that has access to residential paper cup recycling has doubled. 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.

A growing number of mills, including Graphic Packaging's new CRB paper machine in Kalamazoo, Michigan, can accept and process poly-coated paper cups when they are included in existing recycled paper bales such as sorted office paper, residential mixed paper, and carton bales. We 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. We further demonstrated our resolve to recycle paper cups and increase fiber circularity by announcing, in early 2023, our plans to build a new, state-of-the-art, \$1 billion CRB mill in Waco, Texas. 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, we participate in several initiatives focused on improving the circularity of packaging materials. [CEFLEX](#) (a flexible packaging value chain consortium) participation helps us in designing our paper and plastic flexible packaging for recycling and improved circularity. We also participate in [EXTR:ACT](#) (a platform to increase the recycling rates for beverage cartons and fiber-based multimaterial packaging). And we were, until 2022, a member of HolyGrail 2.0 (a cross-value chain initiative to pioneer digital technology for smart packaging recycling) to help improve composite packaging recyclability, which may need specialized sorting and recycling technologies.

We also have leading roles in several initiatives sponsored by the [4evergreen Industry Alliance](#), which includes over 100 members across the European fiber-based packaging value chain. 4evergreen's primary mission is to boost the contribution of fiber-based packaging in a circular economy and reach a 90% recovery rate for fiber-based packaging materials by 2030. In 2022, the [4evergreen circularity by design guidelines](#), [collection guidelines](#), and [evaluation protocol](#) were delivered, and innovations in sorting, recycling, and recyclability of barrier materials continue to be tested.



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 ESG Vision 2025 waste goal.

ESG VISION 2025 WASTE GOAL

- Drive out waste in all our operations.

We evaluate the effectiveness of our waste management approach and driving progress toward meeting our aspirational goal by monitoring progress advancing the following initiatives:

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

ESG Vision 2025 Waste Goal Progress

Goal	2022 result	Status
Drive out waste in our operations	-	Progressing
100% packaging plants engaged in a waste diversion program ¹	96%	On track
100% wastepaper recovery	98%	On track

1. Includes all Graphic Packaging locations as of December 31, 2022.

In 2022, 96% of our global packaging plants and all our mills and machinery plants were engaged in some form of a waste recovery program, successfully diverting 1,145,200 metric tons of material (or 68% of reported waste) to recycling/beneficial reuse and away from disposal via landfill, incineration, or another disposal method. The increase in packaging plant diversion program participation rates relative to 2021 (89%) reflects progress integrating 2021 acquired facilities into our ESG waste management program. Overall, our packaging plants diverted 92% of their reported waste volumes from disposal, while the mills diverted approximately 43% of their reported waste.

In addition to tracking active waste diversion programs, we are focused on recovering and recycling paper-based waste materials at mills and packaging facilities. In the US and Canada, we partner with a third-party company to collect recovered off-spec products and trimming/cutting wastepaper materials from our facilities and either deliver them to our CRB mills for recycling or sell them for external recovery. In other regions, recycling programs are managed by local contractors, and recovered paper is recycled externally. Our mills also recover and repulp off-spec board at each mill to reuse this material to make new paperboard and avoid generating the waste. In 2022, 98% of reported paper waste generated by Graphic Packaging packaging plants and mills 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 developed an initial baseline inventory of mill and packaging plant wastes by waste category, quantity, material type, and disposition method. Reported data in 2022 represents an improvement versus 2021 in measuring the Company's waste footprint with 98% of Graphic Packaging facilities reporting some waste data (versus 92% in 2021) and approximately 70% of facilities providing complete waste inventory information. However, there is additional work needed to increase reporting consistency and completeness across all global locations. As we get better at measuring our waste, the inventory data will provide a valuable source of information to identify new waste diversion opportunities and track progress driving waste out of operations.



2022 Waste Highlights

- Collecting waste data is key to reaching our long-term waste reduction goal. As of 2022, 98% of global operations are reporting some waste data.
- Over the year, 975,000 metric tons of paper waste were recovered by our facilities and recycled.
- Of Graphic Packaging’s reported waste, 68% was diverted from disposal, and 85% of that diverted waste was recovered paper waste.
- We recovered 69,000 metric tons of turpentine and tall oil wood byproducts to sell.
- The Prosperity extrusion plant installed an updated poly lactic acid (PLA) screw extruder that will reduce off-spec paperboard waste by approximately 30 metric tons per year.
- We recovered and regenerated for reuse 91% of the lime used for wood chip pulping in the virgin mills.
- The Kalamazoo mill is partnering with another company to explore beneficial reuse options for its wastewater sludge solids. If successful, the project could result in beneficial reuse of approximately 100,000 metric tons of waste.
- The Achen and Kalamazoo packaging plants raw material optimization projects will avoid generating ~2,000 metric tons of paper waste in 2022.
- The Perry and Cholet packaging plants implemented improvements that will collectively reduce paper waste by ~11 metric tons per year.
- The Monterrey packaging plant implemented changes to its maintenance programs, resulting in 2 metric tons less waste versus 2021.
- The Sneek packaging plant raw material optimization project resulted in 29% less paperboard waste generated in 2022 versus 2021.
- The East Angus mill installed a new air knife coating system, which has a larger capacity for coating removal, as well as a recovery system to increase efficiency of coating use. The lower coat weight uses less raw materials, is easier to dry (creating less off-spec product), and has a better overall control range for the grades that the mill runs.

- The EMEA team implemented a real-time total waste KPI monitoring system across the packaging plant network, with each machine connected to a central database. Overall efficiencies improved on average by 2% in 2022 versus 2021.

Governance

Waste management actions are guided by our [Code](#), commitment to the UNGC, and our HSE policy. The CSO works with the mills EVP and leaders from packaging 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 packaging plants are accountable for implementing waste diversion and reduction programs and reducing operations wastes. Read more about ESG governance in [Disclosures 2-9](#) and [2-13](#).

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.

GRI 306-1 WASTE GENERATION AND SIGNIFICANT RELATED IMPACTS

The following table summarizes the waste generated by the mills and packaging 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 our product innovation section and our approach to using recycled materials in [Disclosure 301](#).

**Waste Generation Overview**

Waste category	Description	Potential impact
Mills division		
Production waste	<p>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.</p> <p>Hazardous and nonhazardous chemical wastes (e.g., spent cleaning materials, equipment greases, used oil) and universal wastes are also included in production waste.</p>	Minimal impact. Nonsaleable 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, personal protection equipment (PPE) waste, packaging waste from purchased materials, electronics, etc.	Minimal impact. Where applicable, some materials recovered for recycling or composting. 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.
Packaging 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) 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, and electronics waste.	Minimal impact. Where applicable, some materials recovered for recycling or composting. 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 are 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.



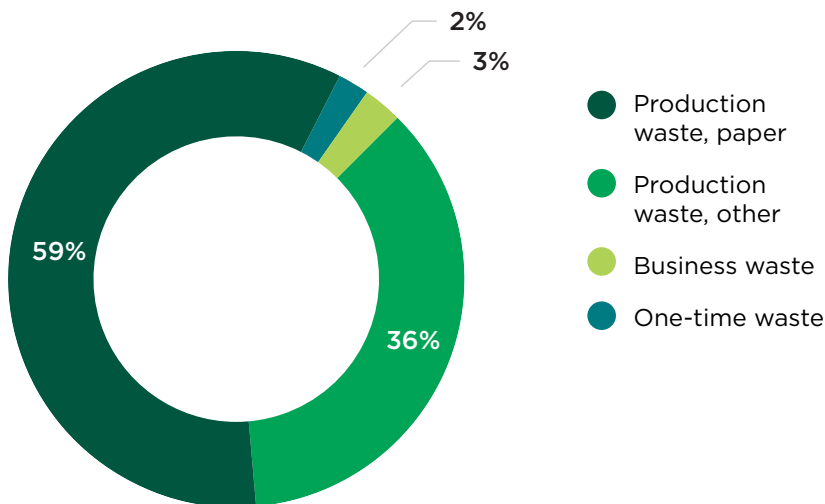
GRI 306-2 MANAGEMENT OF SIGNIFICANT WASTE-RELATED IMPACTS

See [GRI 3-3](#) and [Disclosure 306-1](#).

GRI 306-1 WASTE GENERATED

The mills and packaging operations reported 1.7 million metric tons of total generated waste in 2022, of which 68% was recycled or reused, 29% was landfilled, and the remainder was sent to third parties for disposal. Most of the waste (95%) was production waste of which approximately 62% was paper-based materials and less than 1% (10,600 metric tons) was classified as hazardous waste. Hazardous waste is characterized based on local regulations and was primarily production-related chemical wastes (e.g., used oils, solvents, inks, paints, laboratory chemicals), batteries, fluorescent bulbs, and other materials that were sent off site for treatment and disposal by authorized, third-party contractors.

2022 GENERATED WASTE BY WASTE CATEGORY



2022 Waste Quantities by Composition (Metric Tons)

	Total waste generated	Waste diverted from disposal	Waste directed to disposal
Production waste	1,604,100	1,143,100	461,000
Paperboard waste	996,300	974,500	21,800
Other production waste	607,900	168,600	439,300
Business waste/general trash	46,000	1,700	44,300
One-time event waste ¹	29,000	300	28,700
Total waste	1,679,200	1,145,200	534,100
US waste	1,349,800	855,200	494,600
Outside US waste	329,400	290,000	39,400
Mill waste	819,900	354,300	465,600
Packaging plant waste	859,300	790,900	68,400
Hazardous waste	10,600	800	9,800
Nonhazardous waste	1,668,600	1,144,400	524,200

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.



GRI 306-3 SIGNIFICANT SPILLS

There were no significant spills in 2022 resulting in serious injury or a significant impact on the environment.

Any Graphic Packaging facility managing hazardous materials in bulk is required to install, operate, and maintain equipment to prevent spills to soil, surface water, or groundwater. Each applicable facility has implemented an Emergency Response Plan that provides organized responses for plant emergencies and incidents. An emergency is defined as any situation that requires a response by employees from outside the immediately affected area to an occurrence that will result, or is likely to result, in an uncontrollable hazard. The plan includes actions to take in case of a spill or release.

The plan also 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.

GRI 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, 68% of reported generated waste was diverted from disposal, and 85% of diverted materials were paper-based materials. Most waste diversion activities occurred at the packaging plants, with global packaging plants successfully diverting 92% of reported generated waste. Most diverted materials were recycled with minor quantities recovered for composting or other beneficial reuse. The mills are currently diverting approximately 43% of reported generated waste, and this represents 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 2022 98% of total generated paper waste was recovered for recycling. Of the recovered quantities, 54% was consumed internally and 46% was sold for external recycling. Additional recovered materials for recycling or reuse include metals, plastics, wooden pallets, and other materials.

2022 Waste Diverted From Disposal by Recovery Operation (Metric Tons)

	Total waste	Hazardous waste	Nonhazardous waste
Recycled paper: internal	523,500	-	523,500
Recycled paper: external	451,000	-	451,000
Recycled other materials	155,800	800	155,000
Composting	14,900	-	14,900
Total diverted waste	1,145,200	800	1,144,400
US diverted waste	855,200	100	855,100
Outside US diverted waste	290,000	700	289,300
Mill diverted waste	354,300	-	354,300
Packaging plant diverted waste	790,900	800	790,100

**GRI 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 (e.g., landfill), chemical transformation, or thermal transformation (i.e., incineration). In 2022, 534,000 metric tons of waste (32% of generated waste) were sent for disposal with most of the disposed waste (93%) being sent to landfill for disposal. The remaining wastes were either incinerated (7%) or managed through other third-party disposal options (<1%).

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](#).

2022 Waste by Disposal Operation (Metric Tons)

Disposal method	Total waste	Hazardous waste	Nonhazardous waste
Incineration with energy recovery (biomass) ¹	23,100	-	23,100
Incineration with energy recovery (other)	4,100	800	3,300
Incineration no energy recovery	11,400	200	11,200
Landfill	466,200	8,700	457,500
Landfill — one time event waste	28,400	-	28,400
Other disposal options	800	100	700
Total disposed waste	534,000	9,800	524,200
US disposed waste	494,600	8,000	486,600
Outside US disposed waste	39,400	1,800	37,600
Mills disposed waste	465,600	7,700	457,900
Packaging plant disposed waste	68,400	2,100	66,300

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 byproduct for fuel use.



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 2022, reported manufacturing waste (production waste plus business waste) sent to landfills represented 494,600 metric tons, with the bulk of this material representing production wastes in the mills. Of this, 55% was managed in on-site landfills, and the remaining 45% 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.

2022 Landfill Waste Details (Metric Tons)			
	Total landfill	On-site landfill	Off-site landfill
Production waste ¹	422,200	259,600	162,600
Business waste (general trash)	44,000	6,800	37,200
One-time event waste	28,400	4,800	23,600
Total landfilled waste	494,600	271,200	223,400

1. Includes hazardous and nonhazardous production waste.





Social Topics

IN THIS SECTION

Engaged Employees

Labor Rights

Safety

Human Rights

Community Engagement





Engaged Employees



GRI 401, 404, 405 EMPLOYMENT, TRAINING AND EDUCATION, DIVERSITY AND EQUAL OPPORTUNITY

GRI 3-3 Management of Material Topics

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.

Our success depends on our ability to create an engaged workplace culture that attracts and retains diverse talent, and we are committed to fostering a rewarding and productive workplace. We invest in employee development and well-being, 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 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 an inclusive, 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

DEI is too important to be left to chance. 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 President and CEO, has built a diverse and inclusive ELT that mirrors our intent for the future make-up of our Company. We share diversity metrics on an ongoing basis to both highlight progress and drive 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.

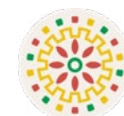
Our DEI Vice President and Senior Manager lead our efforts globally and, with our Inclusion Council (formed in 2021), set our strategic vision while ensuring tight alignment with the organization's overall business strategy. The Inclusion Council is composed of diverse leaders from our functions, businesses, BRG leaders, and geographies across Graphic Packaging's global footprint.



Women
@GPI+



AAPI+
Asian American
Pacific Islander



Alianza+
Latin and Hispanic
Employee Network



BEGN+
Black Employee
Global Network



Pride+



Company-sponsored and employee-led, our BRGs honor the unique cultural experiences of groups within our employee population. The BRGs have made a concerted effort to expand awareness across the Company by recruiting members outside of the United States. Each BRG sponsors events and initiatives to build awareness and value for our unique talents and cultural backgrounds, supports community engagement, and celebrates our diversity.

Attracting and retaining talent are vital to growing and sustaining a thriving business. We are committed to leveling the playing field for diverse candidates and are enhancing our hiring processes. We have expanded our recruiting efforts beyond our core schools to include historically black colleges and universities as a part of our DEI strategy, enabling us to create a diverse talent pipeline for the future. We are working 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 continue investing in developing new and existing managers, expanding our offerings to help evolve the way leaders shape our organizational culture and positively impact our employee engagement. We strive to educate leaders in performance management, inclusive leadership, developing their teams and themselves, building trust, and leading by example. We have also made a considerable investment in building a learning and growth structure for our hourly technical employees, including by piloting a standardized training process in 2022, which we will continue to implement nationally and then globally. This model contains structured role responsibilities, standardized training materials, and a robust learning process that includes a consistent feedback model and measured learning outcomes.

We support all of our managers by practicing clear, consistent, and fair processes. We are focused on upskilling to promote inclusive leadership, increase awareness of unconscious bias, improve workplace culture and employee engagement, and bolster accountability in our performance management process. Read more about our training and performance management programs in [Disclosure 404](#).

We use mentoring 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 provided access to on-demand learning tools to support them along the way.



ESG Vision 2025 people commitments

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

ESG 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.”

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 and courageous conversations, and develop genuine relationships.

In 2020 and 2021, we used a survey to baseline employee engagement. This survey assessed the Graphic Packaging employee experience and provided the necessary insights we needed to drive initiatives to improve our workplace. As part of the survey, employee demographics including generation, gender, and ethnicity are collected with the intent of examining the specific drivers of engagement for different segments of our employee population. What we consider most important is that our employees engage through the survey and provide the valuable feedback we need to help shape our workplace 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 that 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. We paused conducting an enterprise-wide survey in 2022 to focus on implementing programs to action the feedback learned in the baseline surveys and will conduct the next engagement survey in 2023.

ESG Vision 2025 People Goals Progress		
Goal	2022 result	Status
Top quartile employee engagement ¹	-	Progressing
30 hours training per employee per year	12.3	Progressing

1. Survey not conducted in 2022. The next survey will be completed in 2023.

Survey results are assessed at both the enterprise level and team level and provide each manager with their team’s composite assessment. Managers share the feedback with their team and work together to create an action plan for improvement. Through the surveys, we heard from our employees that we have room to improve to achieve our ESG Vision 2025 people goals. The 2021 overall engagement score was tracking below both the assessment framework top quartile benchmark and the packaging industry norm. Areas where we learned we needed to focus improvements 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 took action in 2022 to create a more robust internal communication strategy that includes company-wide and business unit level quarterly town halls, coffee and culture conversations to connect our CEO with a wide representation of employees, and employee focus groups when leaders visit sites around the globe. Through these enhanced communication channels, leaders prioritize discussions on Vision 2025 to help our team members see a connection between their work and the Company's future.

We resumed hosting our annual employee recognition event where we recognize service anniversaries at an annual event that includes family members of those we are honoring. Additionally, we award President's Awards to employees and small teams who have gone above and beyond and have made an exponential impact on business results. These employees are provided a financial reward, a certificate, and personal recognition from the CEO. Atlanta area employees are also invited to celebrate together and cheer on our hometown Atlanta Braves during our annual employee appreciation event.

Also, in 2022, our foodservice business unit leveraged the survey data they received in 2021 to improve their team engagement. Hit hard by the pandemic and its effect on their core business of fast food and convenience businesses, our foodservice leaders embraced the survey, debriefed the results with their employees, collaborated on action plans that addressed the employee concerns and suggestions, and acted on them. Once complete, they communicated with employees again, letting them know what was addressed and what could not be addressed — including why. The foodservice team completed a "Pulse" survey in 2022 to assess progress. The survey showed an increase in overall engagement from 58% in 2021 to 69% in 2022, accomplished through their focused improvement efforts and ultimately legitimizing the voice of the employee and allowing it to influence our Company.

We plan to resurvey our entire workforce in 2023 to measure progress improving engagement and align our efforts on the priorities needed to deliver a successful future — for both our employees and our Company. After the 2023 survey concludes, dashboards and training will be provided for all managers with more

than four respondents. Managers will follow a common process to share and act on results. First, they will debrief the results and focus on the basic themes to building engagement. Together, they will agree on what's important to act upon as an area(s) of focus for the team or location. After viewing resources to maximize and focus engagement efforts, managers will develop action plans at a team level and review their progress monthly. Together, managers and their teams will listen to, address, and act on the issues that mean the most to employees.

Investing in our employees' development is another way we can foster a more engaged workplace. 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. GPI University uses a digital learning management system to manage employee training and enhance the learner experience. We offer compliance training initiatives, integrated LinkedIn Learning courses, hourly employee training programs, and leadership development content. Total training hours per employee were 12.3 hours in 2022. This represents an increase of double versus 2021, largely due to improved tracking and recording hourly employee orientation, safety training, and technical skills training.

We are in the process of migrating more of our trainings into the platform, enrolling all our global salaried employees in the platform, expanding use of the platform to a broader hourly employee audience, and building out curriculums for hourly employee job qualifications. As we continue to build our systems and ability to track learning, we will better understand the impact of our employee learning and development efforts across all areas of the Company. Read more about our training and employee development programs in Disclosures [404-1](#) and [404-2](#).



BRG Highlights

In January 2022, the BRGs created and facilitated DEI mentoring to support meaningful relationships within Graphic Packaging. The group matched 40 pairs of employees (mentors/mentees) for the pilot program that began in July 2022. At the end of the six-month program, 85% of the participants reported they were planning to maintain the mentor/mentee relationship.

In May 2022, the first edition of the BRG Newsletter debuted, highlighting activities and raising awareness for the groups. The newsletter also serves as a tool for those who would like to join the BRGs, whether as a member or an ally. The newsletter is distributed through email and printed copies, so it is readily available to all employees, even those without email accounts.

Throughout 2022, the BRGs sponsored the diversity speaker series, a lineup of individual speakers who presented information to help employees learn new skills, develop new ideas around the organization, and raise awareness surrounding diversity topics. The external and internal leaders that presented are subject matter experts in their respective fields and the talks are inspirational, informative, and thought-provoking. In 2022, we held seven events with speakers including Korean, Black, Hispanic, Indian, and military leaders who shared their experiences and insights with more than 3,500 employees joining the conversations.

All Graphic Packaging employees are invited, and audiences at individual events have reached numbers up to 400 employees. Speakers in 2022 included:

- **Deepa Purushothaman**, author of *The First, The Few, The Only: How Women of Color Can Redefine Power in Corporate America*
- **Andre Dickens**, Mayor of Atlanta Georgia
- **Tracey Rubin**, producer of the podcast Female Fallout
- **Shan Cooper**, CEO, Journey Forward Strategies
- **Erik Moses**, President, Nashville Superspeedway
- **Byung Jin “Bjay” Pak**, Esq.
- **Ronald Eustace**, Chief Executive Officer, Eustace & Partners
- **Auturo Barquin**, Business Development Latin America
- **USAF Chief Master Sergeant Chin Marie Cox**
- **Shanelle Boyd**, Life Coach and Founder, Woman to Women

Additional highlights from 2022 people initiatives include:

- We accelerated our focus on increasing women representation in leadership positions and continued our women in leadership development experience with 53 women involved in the leadership program since it began in 2021.
- BRGs were involved in community initiatives such as volunteering with Girl Scouts of America, Atlanta Food Bank, and participation with Beloved Community events.
- We signed onto the PAC Global: Inclusive Opportunities and Universal Packaging Charter, which calls on signers to “embed inclusivity and accessibility into all aspects of the package design process so that packaging is accessible to everyone.”
- We continued building out training content in GPI University with a focus on leadership, innovation, sales, technical skills, quality, and diversity and inclusion.
- Salaried employees currently enrolled in GPI University LinkedIn Learning participated in over 30,000 training courses or videos throughout 2022, with 84% of enrolled salaried employees taking advantage of LinkedIn self-directed learning.



- Almost 2,000 employees participated in our 2022 Foodservice Engagement Pulse Survey. The survey showed an 11-point increase in engagement versus 2021 results.
- Our 2022 Key Pipeline Talent cohort saw 19 high-potential employees preparing for roles of greater scale and responsibility.
- The Leadership Development Program (LDP) graduated 18 early career employees in 2022, with an additional 16 employees beginning their LDP journey.
- Our Sr. Leadership Experience taught 31 senior leaders best practices from industry and academic experts.
- Overall, 33.5% of mid-level leaders and 28.9% of front-line leaders participated in our in-person leadership development training series.
- We recognized 352 employees in our global Leadership and President's Award program for their contributions and impact on business results.
- Through our Graphic Packaging Honors event, we recognized 150 employees for their milestone service anniversaries and dedication and loyalty to the Company.

Governance

Our 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 Board Compensation and Management Development Committee on talent management and DEI progress.

Our governance system is underpinned by our Company values, [Code](#), and strong corporate policies that embrace the principles of the UNGC 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 to management or through the ALERTline.

Learn more about our values, corporate policies, and employee reporting process for communicating concerns in Disclosures [2-23](#), [2-26](#), and [205](#) and about our ESG governance process in Disclosures [2-9](#) and [2-13](#).

GRI 401-1 NEW EMPLOYEE HIRES AND EMPLOYEE TURNOVER

Graphic Packaging is 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 with them to share in our workplace with their teammates.

In 2022, Graphic Packaging experienced continued strains in the talent market across multiple fronts, including ongoing pandemic-related challenges, a very tight labor market, and evolving ideas on workplace flexibility. We are seeing an increase in external opportunities for employees to work in fully remote environments, which our plant/mill operations are not able to accommodate. In response, we made additional investments in our Talent Acquisition function and continued hybrid working schedules to remain reasonably competitive with like or similarly situated organizations. We also introduced flexible scheduling opportunities in our manufacturing operations wherever possible and invested in wage and benefit adjustments to meet local market conditions. Despite these efforts, our voluntary attrition increased by 2% compared to 2021. However, we were able to offset the attrition with a 5% increase in hiring rates in 2022, and we're confident that our attrition rate would have been higher without these actions.

**2022 Global Workforce¹ Changes by Age Group and Gender**

	New hires		Voluntary attrition ²	
	Number employees	Percentage new hires	Number employees	Percentage voluntary attrition
Total employees	5,346	32%	3,515	21%
Age group				
Under 30	1,905	36%	1,072	30%
30-50	2,659	50%	1,757	50%
Over 50	782	14%	686	20%
Gender				
Male	3,959	74%	2,567	73%
Female	1,349	25%	937	27%
Undeclared	38	1%	11	<1%
2022 US Workforce changes by ethnic diversity³				
Total US employees	4,679	32%	3,026	21%
Ethnically diverse	1,815	39%	1,006	33%
Nonethnically diverse	2,483	53%	1,830	61%
Undisclosed	381	8%	190	6%

1. Includes employees in the US, Canada, Mexico, Brazil, and Asia Pacific regions. EMEA employees not included due to system limitations.

2. Graphic Packaging also experienced involuntary attrition in 2022. Total attrition rate for included employees in 2022 was 32% (21% voluntary, 9% involuntary in the US, and 2% US retirements).

3. Total attrition rate for US employees in 2022 was 32% (21% voluntary, 9% involuntary, and 2% retirements).

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

Graphic Packaging offers a range of benefits to meet the needs of our employees. Benefits are aligned with local marketplace norms and may include:

- Paid vacation and holidays
- Leave programs including Family Medical Leave Act
- Healthcare plans
- Financial, physical, and emotional well-being programs
- Maternity leave
- Virtual healthcare and second opinion services
- Life insurance
- Short- and long-term disability coverage
- Business travel accident coverage
- Retirement programs
- Tuition reimbursement
- Breast-feeding facilities
- Employee Assistance Program (EAP)

To support well-being and work-life balance goals of our employees, we offer various flexible working options such as both full-time and part-time schedules, flexible work hours, and hybrid work arrangements including some work-from-home options. The EAP in the US also supports employee well-being by providing confidential, professional assistance to employees and their eligible family members for a variety of personal life issues. 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.

Graphic Packaging offers benefit programs globally that align with local laws and regulations as well as collective bargaining agreements where applicable. In addition, we focus on plans and programs that are customary in the countries where we operate. Benefits are offered to full-time employees and part-time employees working more than 30 hours per week. Our employees have the opportunity to enroll in employee only coverage or coverage that also covers their dependent(s). Read more about our health programs in [Disclosure 403-6](#).



GRI 404-1 AVERAGE HOURS OF TRAINING PER YEAR PER EMPLOYEE

Individual site locations and business functions offer many of our current training programs outside of GPI University, which makes it difficult to aggregate total employee training hours. In 2022, we implemented a more inclusive process to track in-person classroom training at our facilities and are moving toward documenting external trainings through a self-reporting feature in GPI University. This will provide employees with the capability to record training they may be doing outside of what is being offered through the learning platform.

Salaried employees currently enrolled in GPI University LinkedIn Learning (currently not available to employees from AR Packaging acquisition), participated in over 30,000 training courses or videos throughout 2022, with 84% of enrolled salaried employees taking advantage of LinkedIn self-directed learning. In 2022, we piloted the GPI University experience with a select group of hourly employees and have documented increased engagement in learning and continued growth with this group. Through these efforts, total training hours per employee were 12.3 hours in 2022. This represents an increase of double versus 2021, largely due to improved tracking and recording hourly employee orientation, safety training, and technical skills training. As we continue to build our systems and ability to track learning, we will better understand the impact of our employee learning and development efforts across all areas of the Company.

We issue training by role and not by gender. Gender statistics for learning are not tracked in 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.

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

Graphic Packaging employees and 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 University digital platform to help employees as they grow. The following list highlights some of our employee training and development programs:

- **New Employee Orientation** introduces new hires to our values, business, and the 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 with a focus on developing future plant leaders. 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 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 create an inclusive, engaged environment where employees will thrive.
- **Women in Leadership** program provides our women leaders with approaches for effectively handling common obstacles 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.
- **Key Pipeline Talent** is a developmental program for future senior leaders, combining a series of assessments, simulations, interviews, and education to prepare participants to lead on a greater scale.
- **Sr. Leadership Experience** takes our incumbent senior leadership and immerses them in the best practices and current learnings of corporate education.
- **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.
- **BRG Mentorship Program** provides additional opportunities to our underrepresented employees to receive the exposure and experiences needed to continue to develop their knowledge, skills, and abilities.

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, we offer programs to assist employees during various life events. Through Graphic Packaging Fit and our partnership with Fidelity Investments, we provide financial planning services to support employees with savings and retirement planning and overall financial well-being. 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.

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

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

Our former PMP consisted of setting goals by March 31, checking on progress in June/July, and for employees and managers to finally rate their delivery of the goal in November and December. The former process left a few things to be desired. First, if goals are formally set by March 31, a quarter of the year has passed before managers and employees aligned on objectives for the year. Secondly, goals can change during the year, and some things may become more important or less, depending on the business climate. Finally, checking on and rating progress once at the end of the year is not enough; it does not provide a sufficient amount of feedback to either reinforce or correct behavior and performance.



Our new XP approach to performance management addresses all of these shortcomings. At the heart of the XP approach are consistent one-on-one informal conversations, enabling employees to quickly adjust and improve incrementally throughout the year. First, goals are set in January and aligned with the release of the CEO’s company-wide annual objectives as well as the long-range plans developed by each business unit/function. Secondly, goals and “the work that matters most” are captured each month by the employee’s manager in the monthly reflection, and alignment on current objectives is gained during each month’s one-on-one conversation. Finally, the employee’s performance is captured each month in the monthly reflection and shared during the monthly one-on-one conversation. An employee self-reflection provides an opportunity to weigh in on their performance during the year, and employees are also able to share upward feedback with their managers, creating a two-way dialogue.

In 2022, 97% of US employees and 90% of global employees had their annual PMP completed by their managers by the end of the year (note: AR Packaging employees were not included in 2022 and will be added to the XP platform in 2023). PMP 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.

As part of our coaching and feedback processes, Graphic Packaging uses 360-degree assessments in our Executive Education programs, and by manager request, to help their direct reports grow and develop for their current and future roles. In all cases, 360-degree assessments are always used for development and never used for punitive purposes or as evidence for correcting performance.

GRI 405-1 DIVERSITY OF GOVERNANCE BODIES AND EMPLOYEES

Driving a culture of inclusion and diversity begins with our leadership. Our Board of Directors is composed of 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. In 2022, we increased Board diversity to 40%, taking both gender and ethnicity into consideration. To learn more about our Board, see [Disclosure 2-9](#) and our [2023 Proxy Statement](#).

Gender, Age Group, and Ethnic Diversity of Board of Directors as of December 31, 2022

Gender	
Female	30%
Male	70%
Age group	
Under 30	0%
30-50	0%
Over 50	100%
Ethnic diversity	
Ethnic diversity	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 December 31, 2022, our Americas workforce was made up of 22% women (23% globally) with 30% ethnically diverse



employees in the United States versus the pulp/paper industry benchmarks of 31% and 13% respectively (US Bureau of Labor Statistics, 2022). While we are making progress increasing ethnic diversity in our US workforce, we still have work to do to increase gender diversity.

In 2022, we accelerated our focus on increasing women representation in leadership positions and continued our women in leadership development

experience. We increased our global representation of women on our executive team to 33% and increased our representation of women in VP roles to 29% and for our global leadership team roles to 27%, an increase of 5% from 2021. Our leadership team continues to facilitate an environment where inclusion is modeled and cascaded through our organization.

Americas Employees by Age Group and Gender as of December 31, 2022 ^{1, 2}

	Total	Hourly	Salaried	People leaders	Vice president	Executive leadership team ³
Age group						
Under 30	13%	14%	9%	3%	0%	0%
30-50	47%	48%	45%	47%	37%	8%
Over 50	40%	38%	46%	50%	63%	92%
Gender						
Male	78%	82%	68%	75%	73%	67%
Female	22%	18%	32%	25%	27%	33%
Undeclared	<1%	<1%	<1%	0%	0%	0%
US employees by ethnic diversity as of December 31, 2022						
Ethnically diverse	30%	35%	16%	12%	14%	33%
Non-ethnically diverse	65%	59%	82%	86%	82%	67%
Undisclosed	5%	6%	2%	2%	4%	0%

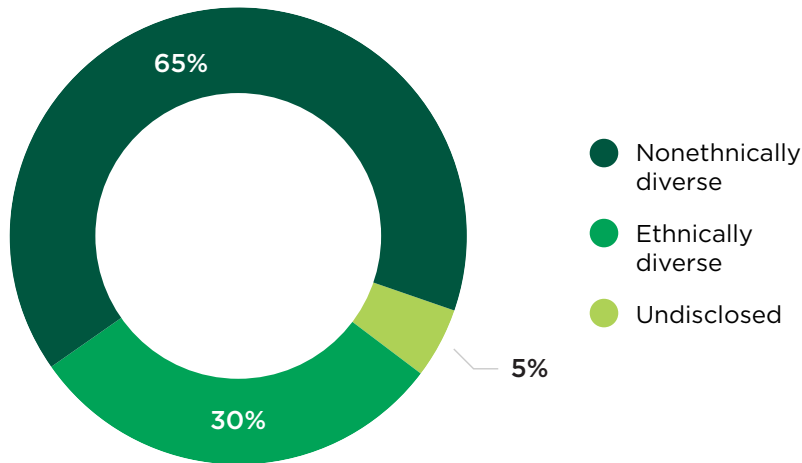
1. Includes employees in the US, Canada, Mexico, and Brazil.

2. No employees <15 years of age.

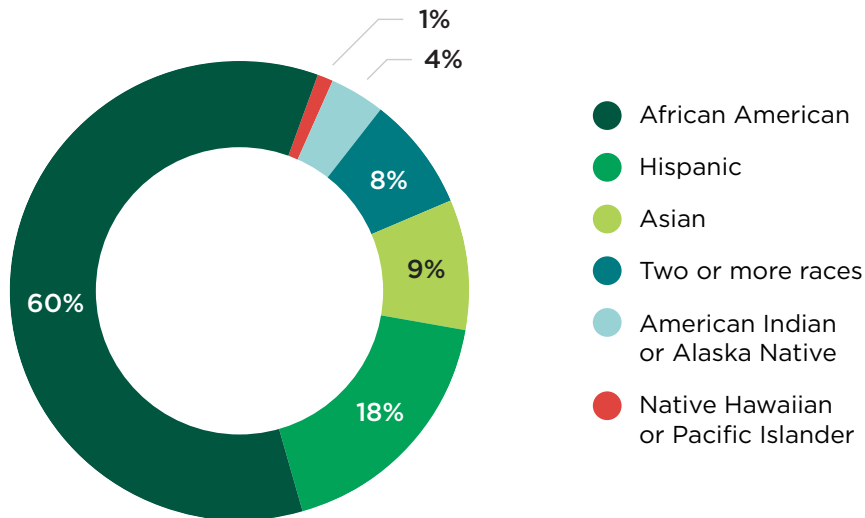
3. Data presented for entire executive team.



US EMPLOYEE ETHNICITY REPRESENTATION



OF THOSE ETHNICALLY DIVERSE



As additional information, we also provide our most recently filed US Federal Employer Information equal employment opportunity (EEO)-1 Report 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 2-7](#).

GRI 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, we do 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, Graphic Packaging periodically contracts with a third party to conduct a pay equity analysis of our salaried and non-union employees that allows us to identify and correct for any potential unequal treatment. The most recent study was conducted in 2021 and included 231 groups and subgroups of US employees who were compared to each other and evaluated based upon protected EEO categories, job titles, and EEO job categories. We were 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 [2-19](#) and [2-20](#) for additional information on our remuneration processes.



Labor Rights



GRI 402, 407 LABOR/MANAGEMENT RELATIONS, FREEDOM OF ASSOCIATION AND COLLECTIVE BARGAINING

GRI 3-3 Management of Material Topics

Graphic Packaging recognizes and respects applicable labor and employment laws — including those addressing freedom of association, privacy, and EEO — 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.

A cross-functional labor council (consisting of the EVPHR; the VP, Labor Relations; the VP, Chief Employment Counsel; the Director of Benefits; senior leaders from each business unit; and their respective HR business partners) reviews 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 benefits offerings and external labor trends and events that could impact our labor relations strategy. We strive to maintain strong, positive relationships with the unions or work councils that represent our employees and to bargain fairly with those representatives to maintain optimal operations globally. A majority of our 24,000+ employees globally are represented by labor unions, collective bargaining agreements, or work councils.

In the US, approximately 42% of employees belong to a labor union. Globally, that number rises to approximately 62% of all employees belonging to a labor union, with 28% of employees covered by a work council (includes some union employees) and approximately 60% 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 packaging plants.

Graphic Packaging strives 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.

We work to build relationships with union leadership at a local, regional, and national level, and we 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 Graphic Packaging and work with us 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 HR 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 [2-26](#) and [205](#).

As of December 31, 2022, 1,194 of our employees were working under expired contracts, which are currently being negotiated, and 2,055 were covered under collective bargaining agreements that will expire within one year.

Graphic Packaging experienced one labor strike in 2022. The Association of Western Pulp and Paper Workers Union and its members in our North Portland, Oregon, facility engaged in a brief strike over a dispute regarding contract negotiations. That single event occurred during the third quarter in 2022 and was resolved within 10 days. Only one other stoppage or strike has taken place in the past five years, and that stoppage was also resolved with minimal disruption to work activities. Management believes that its relations with employees and labor organizations are positive.

GRI 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. Contractual notice of operational closure 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 or changes, Graphic Packaging consistently complies with its legal bargaining obligations regarding such changes as they impact employees' terms and conditions of employment.

GRI 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

GRI 3-3 Management of Material Topics

We strive 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 and contractors working under our control should trust that their physical safety and health are our priority, and that they will be treated with respect and leave each workday as they arrived.

Our layered approach to global HSE efforts begins with our HSE Policy, principles and Minimum Safety 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 Policy](#) recognizes our company’s commitment to protecting the health and safety of our employees and the public and the quality of our environment and includes expectations for:

- Complying with applicable HSE regulations, customer expectations, and Graphic Packaging’s HSE requirements.
- Providing leadership to ensure effective standards exist to protect our employees, contractors, communities, and the environment.
- Creating a zero-incident culture that holds people accountable.
- Integrating our HSE systems into business processes and continually improving HSE performance.

- Providing necessary training and resources.
- Communicating HSE commitments, expectations, and performance.
- Promoting environmental awareness and reducing impacts to the environment.
- Designing products and manufacturing operations to advance circularity.
- Collaborating with our partners to improve HSE performance and product stewardship.

Our HSE principles align with our business core values of teamwork, respect, accountability, relationships, and integrity, and specifically express that:

- Preventing injuries and incidents is good business.
- HSE is everyone’s responsibility.
- Working safely and in an environmentally responsible manner is a condition of employment.
- All injuries and incidents 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 comply with our company policies and requirements and 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.

HSE Management System

Major elements of our HSE program include:

- Leadership and management commitment
- Employee involvement
- Risk identification
- Risk management
- Measuring and monitoring progress
- Continuous improvement



Minimum Safety Expectations

We have implemented minimum safety expectations (MSEs) across our operations. MSEs 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. Cultural elements address how we work safely by defining the leadership, oversight, and training needed to nurture a strong HSE culture. Key elements include routine safety meetings, safety engagements, equipment inspections and safety reviews, and incident reporting and investigations.

Programmatic elements are designed to reduce risk in our operations through implementing HSE programs consistently across our business. These programs define procedures for how to conduct common work tasks (e.g., confined space entry, fall protection, electrical safety, line breaks, hot work, hazard communication) safely across our global operations. By standardizing how we work, we create opportunities to better leverage learnings and best practices to improve our HSE programs. This CI 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.

Our safety 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 a colleague and are not permitted in our facilities. Employees who break a safety absolute are subjected to disciplinary action, following a thorough investigation, up to and including separation from the Company.

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

Safety Absolutes
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
Neglecting to follow established fall protection procedures
Reaching into moving equipment in violating of established safe operating procedures
Operating a powered industrial vehicle in a reckless or threatening manner
Placing yourself or another employee in serious danger



In 2022 we introduced two foundational HSE Management System Elements to our global HSE approach — HSE Annual CI Plans and HREC — formalizing and standardizing these efforts globally.

Our HSE CI efforts are designed to drive improved safety performance and culture through HSE global and local systems and requirements. The CI plans are developed locally at sites by the plant leadership team then reviewed and approved by the operations direction and HSE director, and plan implementation is tracked for completion. The CI plans include items designed to mature the cultural and programmatic HSE efforts at each facility along with required actions that all sites are required to complete globally. Plans are developed using a plan, do, check, act (PDCA) model and are geared to improve HSE program maturity at the location. Completion of HSE CI plans is a company-wide leading indicator with expectations that locations complete at least 90% of planned items. This leading indicator is tracked, and results are reported to the CEO and the CEO’s leadership team.

Another cornerstone of a management system is a process to recognize and assess risk at the operation. The HREC process is designed to drive risk reduction into the operations. The one-day workshops teach the operations (leaders, line leaders, and front-line workers) how to implement the HREC process with a widespread roll-out planned for 2023.

Read more about our HSE management system in [Disclosure 403-1](#).

ESG Vision 2025 safety goals

We action our commitment to ensuring that safety remains a top priority through our ESG Vision 2025 safety goal:

ESG VISION 2025 SAFETY GOALS

- Continue progress toward our aspirational target of zero safety incidents

We measure progress achieving this aspiration through the following targets:

- Zero LIFE injuries
- Reduce LTIR to 0.2

LIFE injuries (also known as serious injuries and fatalities — SIFs) are defined as serious, life-altering injuries that could result in a fatality, loss of limb or function, hospitalization, brain injury, bone injury, burns, or significant wounds requiring treatment. These injuries cause significant disruption to the injured person’s health and well-being and can impact team morale at our sites. We support the AF&PA and broader paper industry’s safety initiative to drive down rates for LIFE injuries and are committed to advancing the organization’s safety goal to prevent SIFs.

The company has developed and is using HSE leading indicators rather than lagging indicators to proactively identify risk, trends, and influencing behaviors and advance HSE program maturity to reduce incidents in the workplace with a focus on eliminating LIFE incidents. Through this and other external organizations, we 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 ELT and ESG steering teams). The VPHSE provides corporate oversight and guidance to our global sites and facilitates sharing learnings and best practices. Each operating location is responsible to implement our HSE continuous improvement program, meet customer and Company requirements including local HSE compliance program, tailored to the regulatory requirements and operating requirements of the site, and the site manager is accountable for HSE programs, including 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 [2-9](#) and [2-13](#).

Continuous Improvement

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.

Additionally, we have developed and are progressing against our 2025 HSE Strategy.

2025 HSE Strategy				
Mission	To create a safe, healthy, and environmentally responsible culture			
Vision	Employees and contractors working in a safe and environmentally responsible manner 100% of the time to achieve an injury-free workplace.			
Strategic Priorities	Shape Culture	Risk Management	Build Knowledge and Capabilities	Environment and Product Stewardship



Routine third-party HSE compliance assessments are completed by qualified HSE consulting companies globally, with each of our global operating sites assessed once every seven years. In 2022 we completed 42 third-party HSE compliance audits globally. Some of our facilities elect or are required by customers to also have their HSE systems certified to ISO 45001 and/or ISO 14001. As of December 31, 2022, 17 locations (15%) were certified to the ISO 45001 safety management system standard and six locations (5%) were certified to the ISO 14001 environmental management system standard. Our Prosperity, South Carolina, packaging facility has also achieved OSHA Voluntary Protection Program status.

In addition to technical compliance auditing efforts, operational teams from one plant conduct an onsite peer-to-peer assessment of another plant’s implementation of our MSEs, adherence to our HSE policy and company requirements, progress closing corrective actions, progress completing their HSE annual continuous improvement plans, and machine guarding.

In 2022, our sites completed 51 peer-to-peer assessments, covering 43% of our operating locations. These peer-to-peer assessments drive HSE program maturity by identifying programmatic CI opportunities and build HSE knowledge across our global operations. The key to the success of the peer-to-peer assessment program is that it is owned and executed by our operations teams and supported by our HSE community.

We developed and piloted HREC workshops during 2022. HREC workshops train our site management teams and HSE leaders on how to identify, evaluate, and mitigate or control hazards in the workplace. In 2023, we will roll out the workshops globally and begin the development of site-wide risk assessments in our manufacturing locations.

Additionally, throughout 2022 we implemented HSE CI plans at our manufacturing locations globally. A total of 85 manufacturing facilities developed and executed their annual HSE CI plan, completing 92.1% of planned action items. The Americraft and AR Packaging locations acquired in 2021 were busy executing against robust HSE integration plans (including HSE CI plan elements) in 2022 and will move to developing and implementing their HSE CI Plans in 2023.

We closely monitor our progress toward reaching our ESG 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 2022, we were proud to have 34 facilities with zero recordable injuries.

Over the past few years, we have acquired several companies with multiple locations, which has presented opportunities for safety culture alignment and improvements as we integrated the new sites into our safety programs. Through aggressive integration plans that included education, risk reduction, and HSE programs and initiatives, we improved our LTIR by 14% and our LIFE Injury rate by 33% versus our 2018 baseline, all while adding approximately 15.2 million hours worked through these integrations. We remain focused on eliminating LIFE injuries and to significantly reducing our LTIR by 2025 on our journey to achieving a zero incident workplace. Read more about our safety performance in [Disclosure 403-9](#).

ESG Vision 2025 Safety Goals Progress

Goal	2022 result	Status
Continue progress toward our aspirational target of zero safety incidents		Progressing
Reduce employee LTIR to 0.2 ¹	0.31	Progressing
Zero employee LIFE injuries ²	4	Progressing

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, aligned with the AF&PA significant injury and fatality methodology



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. Graphic Packaging finished 2022 in the top quartile of AF&PA companies for LTIR. In addition, our 2022 worldwide LTIR was 0.31, 66% below the 2021 Paperboard and Packaging Lost Time Case Rate of 0.90 as reported by the Bureau of Labor Statistics (2021 represents the most recent published data).

2022 health and safety highlights

- Achieved 0 total recordable incident rate (TRIR) across 34 facilities in 2022.
- Completed 51 peer-to-peer assessments — touching 51 facilities across our global network.
- Exceeded our annual Hazard Mitigation goal of 20 by 35%, reaching a collective rate of 30.89.
- Continued deploying Safety Leadership Trainings globally.
- Created and piloted HREC workshops across our global network.
- Created and implemented a facility continuous improvement program with 85 locations creating and implementing their HSE CI plans.

Our European locations have implemented a Hazard Mitigation Recognition Program, awarding monthly, quarterly, and annual recognitions for proactively identifying and correcting potential safety hazards. The HSE team plans to expand Europe's Hazard Mitigation Recognition Program in 2023 to cover all our global operations.

GRI 403-1 OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT SYSTEM

Each operating location is responsible for implementing our HSE continuous improvement program including MSEs; meeting customer and company requirements; and ensuring material compliance with local, regional, and national regulatory requirement. Sites are accountable for correcting third-party HSE audit findings in a timely manner. All site employees, contractors working at a site under Graphic Packaging's control, and site visitors must comply with our HSE requirements, policy, and standards.

Our HSE approach is guided by three key governance documents:

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

In addition to these documents, our Employee Handbook includes corporate level policies developed to ensure employees are fit for duty and that our workplace provides a safe work environment. 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 unique, local operating or regulatory 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 [2-23](#) and [405](#).

Our cultural MSEs represent aspects of a HSE Management System approach with a focus on leadership and their ownership of HSE culture, risk mitigation, and compliance. Plant managers hold strategic HSE meetings and lead Safety Leadership training with their teams, and our supervisors have regular safety contacts with shop floor employees. Our behavior-based Safety Contact program focuses on one-on-one interaction between leader and the employee, discussing both positive observations as



well as opportunities for improvement. All people leaders at our global manufacturing locations participate in the Safety Contact Program.

Our Hazard Mitigation Program is designed to identify hazards in the workplace and eliminate or mitigate them using the hierarchy of control. Employees at any level can submit hazard mitigations, which are tracked in our HSE data management system and reported monthly to senior leadership. In 2022 we had a 98% closure rate for hazards identified in our Hazard Mitigation Program.

In 2022, we began implementing additional foundational elements to our overall HSE program including HSE continuous improvement plans at our locations and HREC workshops to identify, evaluate, and mitigate or control hazards in the workplace.

GRI 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 assessments to identify HSE risks, and we review routine and nonroutine operations hazards to improve site operating procedures and processes.

Our HREC program is designed to provide facility-wide risk assessments across the organization. HREC workshops train site and HSE leaders on the importance of recognizing and assessing risk across their facilities. The hands-on operational floor training is tailored for all levels of the organization, from directors and plant managers to shop floor employees. Participants are trained on identifying hazards in the workplace, evaluating and quantifying risks using severity and probability concepts, and prioritizing risks for mitigation action. Using the hierarchy of controls, participants learn to implement a hands-on approach to eliminate or mitigate risk to an acceptable level. By proactively identifying and mitigating safety risks, we can reduce the number of future injuries and incidents.

Complementary to the HREC program, our Hazard Mitigation program drives floorbased actions to identify and mitigate hazards on our shop floors. Each location has an annual target mitigation rate, defined as the percentage of mitigations per 100 employees per year. Our 2022 global hazard mitigation goal was for our sites to collectively achieve a rate greater than or equal to 20. We calculate the hazard mitigate rates using the same formula as an OSHA incident rate (i.e., number of mitigations reported, multiplied by 200,000, divided by total hours worked). In 2022, our sites achieved a collective hazard mitigation rate of 30.89, exceeding our stated goal by 35%.

We embrace and encourage open, two-way communication across our health and safety initiatives globally. We encourage all employees to report hazard mitigations, incidents, and improvement opportunities and to 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.

When an incident does occur, we conduct a thorough investigation to identify the root cause(s) and develop corrective actions to prevent recurrence. 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 HSE as needed in the spirit of CI and driving a safety-minded culture. These investigations and outcomes allow us to continually improve our programs and adjust our HSE efforts to reduce risk and prevent injuries in all injury categories and to specifically target injuries in our top incident categories.



GRI 403-3 OCCUPATIONAL HEALTH SERVICES

Graphic Packaging provides employees with appropriate PPE, including safety glasses, hearing protection, hard hats, gloves, and steel toe shoes. Contractors are responsible for providing their own PPE in compliance with local laws and regulations.

We contract with third parties to provide occupational medicine at some of our manufacturing sites based on location, size, legal requirements, 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 or our operations also engage third-party industrial hygiene, risk, fitness for duty, and ergonomic consultants to evaluate whether work conditions are safe and to 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.

GRI 403-4 WORKER PARTICIPATION, CONSULTATION, AND COMMUNICATION ON OCCUPATIONAL HEALTH AND SAFETY

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. Safety performance discussions are shared by the CEO quarterly with all Graphic Packaging employees during global town hall meetings, by business segment presidents during their town hall meetings, and by site leaders during routine site meetings. MSEs require each site to have a safety team 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. In 2022, 98% of manufacturing locations report having active safety teams that cover all site employees (95% of global employees).

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. 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.

GRI 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 and maintain 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 includes knowledge checks assessments or in-field performance assessments.

Our Global Safety Leadership Training 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 up to two and a half days.



The program is designed for and completed by our operations leaders, managers, and frontline leaders worldwide, and periodic refreshers are also performed. This training is also required for any new operations leaders, including those joining through acquisitions, to ensure consistency across our operations.

GRI 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](#).

Our employee wellness program includes providing treadmill workstations, wellness rooms, and a fitness room at our headquarters office, and through our Graphic Packaging FIT wellness program. Graphic Packaging FIT offers funds to healthcare spending accounts for the completion of wellness activities like annual physicals, fitness challenges, mental health activities, and financial well-being activities.

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.

Pandemic Planning and Response

Throughout 2022, we continued to manage COVID-19 cases in accordance with the CDC guidelines or international guidelines respectively. Additionally, we continued to encourage employees to get vaccinated and provided time off to do so. As a result, Graphic Packaging experienced no significant outbreaks across any of its facilities worldwide.

GRI 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 integral to 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.
- HSE expectations set with our contractors through our GSCOC and through the contracting process in the Americas and European region, see [Disclosure 204](#) for more information.
- Selected solutions for remediation programs 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.

GRI 403-8 WORKERS COVERED BY AN OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT SYSTEM

Of workers whose work or workplace is controlled by Graphic Packaging, 100% are required to comply with Company health and safety requirements and our HSE Policy.

**GRI 403-9 WORK-RELATED INJURIES**

We aspire to achieve zero work safety incidents. Each month, our HSE team reports current metrics, progress on advancing safety initiatives, and key learnings from incidents investigated in the prior month. We track both lagging and leading key indicators, including first aid injuries, near misses, safety contacts, hazard mitigations, and recordable lost time, 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 use the US 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 2022, Graphic Packaging employees and contractors under our supervision worked over 54.5 million hours, with a TRIR of 1.02, LTIR of 0.31, and LIFE injury rate 0.01, representing a 14% decrease in the TRIR and a 24% decrease in the LTIR relative to 2021. Additionally, we experienced an 80% decrease in our LIFE injury rate from 2021 to 2022. We were, however, deeply saddened that an employee incurred fatal injuries in 2022 as a result of a workplace incident. We take the safety and health of all our employees seriously and remain focused on eliminating LIFE injuries and significantly reducing our LTIR by 2025 on our journey to achieving a zero-incident workplace. Year-end 2022 data are reported as of January 19, 2023.

Employee and Contractor¹ Work-Related Injury Metrics

	2019	2020	2021	2022
Total recordable incident rate² (TRIR)	1.10	1.10	1.18	1.02
Lost time incident rate² (LTIR)	0.35	0.31	0.41	0.31
Days away, restricted, or transferred (DART) case rate	0.62	0.68	0.71	0.56
LIFE injuries³	8	9	10	4
LIFE injury³ rate	0.04	0.05	0.05	0.01
Fatalities	0	0	0	1
Fatality rate	0	0	0	0.004

1. Includes Graphic Packaging employees and contractors working under Graphic Packaging supervision.
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.



We conduct thorough incident investigations to identify root causes, contributing causes, and preventative/corrective measures to help prevent similar incidents from occurring in the future. 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 across all injury categories and to specifically target injuries in our top incident categories. One risk trend identified through 2022 investigations was employee/machine interaction. To prevent future injuries due to this risk, we layered in a machine interaction/breaking the plane initiative that uses the same techniques and principles of HREC to focus specifically on mitigating hazards that could result in employees interacting with machinery. This initiative will be carried into 2023 as a continued focus.

We benchmark our safety performance using manufacturing industry safety metrics reported by the US Bureau of Labor Statistics and by the AF&PA. Our 2022 worldwide TRIR and LTIR were well below the 2021 Paperboard and Packaging industry rates of 2.50 and 0.9 respectively, as reported by the Bureau of Labor Statistics (2021 represents the most recent published data).

Graphic Packaging also aligns with the AF&PA significant injury metric (SIF of 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. Graphic Packaging finished 2022 in the top quartile of AF&PA companies for LTIR.

GRI 403-10 WORK-RELATED ILL HEALTH

Reporting for work-related ill health metrics is included in [Disclosure 403-9](#). We do not separate ill health cases from injuries in our metrics.



Human Rights



**GRI 406, 408, 409, 412 HUMAN RIGHTS –
NONDISCRIMINATION, CHILD LABOR, FORCED OR
COMPULSORY LABOR, HUMAN RIGHTS ASSESSMENT**

GRI 3-3 Management of Material Topics

Graphic Packaging is committed to ensuring that people are treated fairly and with dignity and respect throughout our Company, our supply chain, and in the communities where we operate. We are committed to protecting human rights; equality among people; employee well-being and security; personal freedom from persecution; privacy; and economic, social, and cultural freedom. This commitment fosters an environment that protects the emotional and psychological aspects of employee safety and well-being. An environment lacking psychological safety creates distractions that can lead to missteps and inattention to detail. We aim to ensure that all employees can feel emotionally safe at work and show up as their authentic and best selves.

Our [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 UN Conventions on the Rights of the Child, and the UN 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.



Human Rights Practices	
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, as well as anyone who applies for employment with us. Our GSCOC sets similar expectations for suppliers we do business with.
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 and anti-discrimination 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 and are firmly committed to paying employees in a fair and equitable manner.
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 2-30, 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 our standards. 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 2-23](#), [2-26](#), and [205](#). Read more about employment-related topics in [Disclosures 401](#), [402](#), and [407](#).



As part of our 2025 ESG vision, Graphic Packaging is committed to conducting human and labor rights due diligence assessments throughout its packaging plant operations and set the goal that:

ESG VISION 2025 SOCIAL RESPONSIBILITY GOAL

- 100% global packaging plants will be in compliance with a social responsibility compliance audit.

We use the Supplier Ethical Data Exchange (Sedex) platform, an online collaborative platform that allows us to screen for risks, complete annual self-assessments, document third-party social responsibility audits at our facilities, and share our social responsibility program and compliance results with our customers. Sedex has developed a rigorous four-pillar framework that assesses a site based on the organization’s standards for labor, HSE, and business ethics. Our packaging plants use the Sedex platform to conduct periodic, online self-assessments and, every three years, to complete a social responsibility Sedex Member Ethical Trade Audit (SMETA) to check that they are compliant with applicable local, state, or national/regional requirements, as well as Graphic Packaging policies. All audits are conducted by a Sedex approved, independent third-party auditor.

We initially set an ambitious plan to have every packaging plant under our ownership for more than a year complete the 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 within the first two years after purchase. Currently, we only conduct SMETAs at packaging locations; our mills, machinery plants, corporate offices, and R&D facilities are not in-scope for this goal.

At year-end 2022, 87% of packaging plants were compliant with completing their third-party SMETA on schedule. The 2022 compliance rate is an improvement over 2021 (71%), demonstrating excellent progress integrating the Americraft and AR Packaging acquisitions into our program and completing audits at these newly

acquired facilities. We targeted completing audits at the highest risk locations first and will continue to report progress with the goal to achieve 100% compliance by 2025.

ESG Vision 2025 Social Responsibility Goal Progress

Goal	2022 result	Status
100% global packaging plants will be in compliance with a social responsibility compliance audit	87%	On-track

Highlights and audit findings from 2022:

Trade Union and Management Systems

- Audit findings at two EU sites highlighted our respect for employees’ interests as evidenced by good audit observations. At our Austrian site, the audit observed a positive attitude toward unions, and at one UK site, employees felt a strong level of dialogue between employees and management.

Wages and Benefits

- Audits found Graphic Packaging values our employees and provides a range of benefits, including free onsite medical care, holiday and other bonuses, food subsidies, and free transport.

Minimum Age of Employment in 2020 and 2021

- Graphic Packaging is committed to operating responsibly, which is evidenced in the Children and Young Workers category. Audit results commended four US locations for well-documented procedures for checking ages of all workers.



GRI 406-1 INCIDENTS OF DISCRIMINATION AND CORRECTIVE ACTIONS TAKEN

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. See Disclosures [2-23](#), [2-26](#), and [205](#) for information on our policies and process for investigating ALERTline calls, including calls reporting potential discrimination or harassment concerns. Due to confidentiality reasons, we do not publicly report incident details on these calls. All calls reported in 2022 were investigated, where possible, and where applicable, appropriate corrective action was taken. Corrective actions for substantiated discrimination or harassment incidents range from policy reviews and training to termination.

GRI 408-1 OPERATIONS AND SUPPLIERS AT SIGNIFICANT RISK FOR INCIDENTS OF CHILD LABOR

We comply with local, state, national, and regional laws prohibiting child labor. We do not hire individuals under the age of 15 for any role or individuals under the age of 18 for positions that would expose them to hazardous work or materials. We require legal proof of age at time of hire, and we maintain copies of these documents in our local HR management systems. Original documents are returned to employees. We have 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. 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 and Europe suppliers. Read more about our supplier expectations in [Disclosure 204](#).

GRI 409-1 OPERATIONS AND SUPPLIERS AT SIGNIFICANT RISK FOR INCIDENTS OF FORCED OR COMPULSORY LABOR

We comply 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.

In reviewing audit reports from the past three years, we see that 35% of audited sites were cited for excess overtime or similar findings. All sites are US operating locations and labor practices at the sites are compliant with applicable US labor laws. Throughout the COVID pandemic, several of our operating sites have been challenged with maintaining minimum essential staffing levels, and it has been necessary to ask employees to voluntarily work overtime. Graphic Packaging encourages employees to limit the amount of overtime they work to ensure the health and safety of all its employees. Some employees freely choose to work additional overtime due to their personal situations, which the Company permits as long as it is safe and legally compliant. We continue to monitor work practices and are working to staff facilities to minimize the need for excess overtime.

While we do not monitor our suppliers' human rights practices, we set expectations for them, through our GSCOC, to similarly respect human rights, and we explicitly prohibit the use of 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 and Europe suppliers. Read more about our supplier expectations in [Disclosure 204](#).



GRI 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 using the Sedex risk assessment tool, Radar. The tool combines country- and sector-level risk data based on independent and reputable sources to assess risks in the four Sedex pillars across 14 risk topics, including human and labor rights (e.g., forced labor, human trafficking, child labor, freedom of association, right to collective bargaining, equal remuneration, and discrimination). Country risk indicators are drawn from publicly available sources and are chosen according to their coverage, reliability, comparability, and relevance. In screening the 27 countries where we have significant business operations, we identified three packaging sites and one office located in three countries ranked as potentially high risk.

The packaging sites were acquired in 2021 and underwent further assessment in 2022, including two sites completing third-party SMETAs, to screen for potential human rights impacts. The sites have been trained on our [Code](#) and corporate policies as part of integration efforts, and to our knowledge no significant human rights risks are present at the packaging locations or at the Graphic Packaging office location. Further training is planned in 2023.

Any employee with questions about our human rights policy, reviews, or any additional concerns can contact their local HR representatives, the legal department, or our confidential ALERTline as outlined in [Disclosure 2-26](#).

GRI 412-2 EMPLOYEE TRAINING ON HUMAN RIGHTS POLICIES OR PROCEDURES

See Disclosures [2-23](#) and [205](#) for a discussion of our policies, training practices (which include human rights policies and procedures), and training metrics.

GRI 412-3 SIGNIFICANT INVESTMENT AGREEMENTS AND CONTRACTS THAT INCLUDE HUMAN RIGHTS CLAUSES OR THAT UNDERWENT HUMAN RIGHTS SCREENINGS

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

GRI 3-3 Management of Material Topics

Graphic Packaging operates in a world that increasingly expects more from a company than providing jobs and maintaining safe operations. 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 and corporate giving program is led by our VP, Global Communications and sponsored by our EVPHR. The EVPHR works with the ELT and CSO in setting the strategy and guiding our approach for our community engagement program. Donations are reviewed annually by the corporate communications, HR, 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. We also offer paid time off for employees to volunteer at Company-sponsored community events.

Our community engagement strategy revolves around three pillars that guide our philanthropic commitments and volunteerism efforts and result in a greater overall Company impact:

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, Atlanta Food Bank, 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 fiber-based packaging 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 and engage with schools across the globe to introduce the science behind recycling paper to create new packaging. Each year, Graphic Packaging hosts TICCIT (trees into cartons, cartons into trees; pronounced “ticket”), a community outreach and educational program created 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, University of Maine, and Western Michigan University to develop curricula in science, technology, engineering, and math (STEM) and paper-related sciences. We mentor youth through organizations such as Boy Scouts of America and Tech Bridge 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.



We encourage community members to share ideas or concerns with their local Graphic Packaging operations site leadership team or to contact us through our corporate website. Requests for support are reviewed for alignment with our corporate giving pillars as part of consideration for funding, though our sites also have flexibility to address specific local needs.

Independent, third-party auditors oversee our donation process to ensure compliance and recommend improvements. We periodically review our donation practices and may choose to audit organizations receiving funding at any time for any reason.

In 2022, Graphic Packaging and our employees together donated over \$3 million to community organizations, educational activities, charitable foundations, and other NGOs. In the US, where we partner with United Way, our employees generously contributed over \$450,000 to the annual fund drive, and we matched 25% of all employee donations.

2022 Highlights

Graphic Packaging employees volunteered in our communities throughout 2022. Here are a few highlights:

- We continued our support of the Woodruff Arts Center in Atlanta with the second of five annual \$200,000 sponsorships. This contribution supports the Center's mission to provide access to artistic excellence and arts education programming in the Atlanta community.
- Through Scholarship America, Paper Stock Industries, and Auburn University, we provided \$41,000 in scholarships to our employees' college-aged students pursuing programs in paper sciences, engineering, supply chain, and other curricula supporting careers in our industry.
- Cristo Rey Atlanta Jesuit High School opened in 2014 as a place where children from low-income families could build a foundation for the rest of their lives. Students take on a college-prep curriculum four days a week and spend the fifth day in a corporate work-study program that funds 70% of their schooling.

As a founding partner of the program, we host students every year at our headquarters as work-study interns. Due to the upcoming building renovations, this school year we decided to act as "angel" sponsors, gifting our sponsorship to a local nonprofit, Trees Atlanta.

- A group of about 30 of our Graphic Packaging New Albany employees coordinated and contributed to a school supply drive for local students in their Indiana community. Ten team members spent over 30 hours assembling backpacks with school supplies and delivering them to two local elementary schools. It was so well received that the facility plans to make this an annual event.
- Our BEGN and Women@GPI BRGs cohosted an event at Graphic Packaging headquarters in September for 15 girls who are interested in STEM. Hosted in conjunction with Women in Technology and Salesforce, this two-part immersive experience taught students how Salesforce helps them to skill up, discover career options, and get hands-on experience. In the first part, they prepared for a STEM career and learned about jobs at Salesforce. Later they built a project management app to construct a galactic battle station.
- Graphic Packaging partnered with Ghent University in Belgium on its new Master of Science in Sustainable Food Packaging launched in September 2022. The program, aimed at growing the next generation of graduates and professionals, is intended to stimulate a switch toward 100% reusable, recyclable, compostable, or biodegradable packaging. As a gold program sponsor, we are sharing our industry expertise with students through guest lectures, sponsoring master theses, and facility visits.
- Many sites held job and career fairs to encourage students to explore careers in paper and packaging. Locations holding events in 2022 included our Bardon, UK; Berlin and Frankfurt, Germany; Graz, Austria; Lund, Sweden; North Portland, Kalamazoo, and West Monroe, US facilities.
- In Nigeria, in 2022, Graphic Packaging supported the primary education system through the building and donation of new blocks of classroom, a well, and different utilities in the Methodist basic school Ayetoro in Ibadan Oyo state. This is the fifth school renovated by the Company in Ibadan since 2017 and reflects



our commitment and collaboration with local communities in relation to UN SDG 4 helping developing countries to access quality education and investing in the future generations — in fact, the very kids of our local workforce.

- Corporate IT has changed the way we dispose of IT equipment. Instead of paying someone to dispose of the equipment, we are donating the equipment to a group called InspiredU. They take in the equipment, rebuild it, and donate it to underprivileged schools and children. In 2022, Graphic Packaging donated 125 laptops and 355 desktop computers to InspiredU to be reused, extending the equipment's useful life.
- Our global operating sites provided support for local food pantries, schools, local scholarship and skills training programs, youth sports teams, front-line responders, humane societies, toy drives during the holidays, clothing drives for organizations like Dress for Success, and support for many other community groups.
- The corporate IT team of 25 spent three hours unpacking, sorting, and repacking more than 17,500 pounds of nonperishable food for the Atlanta Community Food Bank to hand out to senior citizens in the community. Throughout the year, teams of Graphic Packaging employees volunteered more than 100 hours at the Atlanta-based Community Assistance Center to help stock pantry shelves and assist customers.
- Many US sites and our Atlanta, Georgia, headquarters supported the annual Salvation Army Christmas stocking and Angel Tree programs, with our Atlanta office alone providing gifts for 100 angels in 2022.
- In 2022, we committed to partner with organizations that provide support to Ukrainian refugees and have helped a number of women and their families who have fled the conflict with housing arrangements and work permits.
- Our Bawen site in Indonesia sponsored events to support local traditions and culture and provided rice donations to people in need who have been impacted from rising prices.



- TICCIT returned to live, in-person events in 2022 with over 800 students engaged in events throughout our global footprint to learn more about recyclable packaging and renewable forests. Example locations sponsoring activities included our locations in Shelbyville, Oroville, Pacific, Crosby, Centralia, Perry, Sturgis, Atlanta, and Igualada, Spain.



GRI 413-1 OPERATIONS WITH LOCAL COMMUNITY ENGAGEMENT, IMPACT ASSESSMENTS, AND DEVELOPMENT PROGRAMS

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 intentionally seek to listen to diverse groups of community representatives to hear 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 clearer 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, coated, recycled paperboard 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:

- We partner with Michigan Works to actively recruit more residents for critical jobs. We participate in the annual job fair conducted at Kalamazoo Expo Center, sponsor other local job fairs, and work with MI Works on recruitment events and opportunities.
- The Kalamazoo mill initiated a program called “Walk-in Wednesday” for community members to visit the mill, learn more about mill operations, and apply for jobs at the mill. During its inaugural event, over 70 community members visited the mill and applied for work. The mill also revisited its screening criteria for evaluating potential new employees to create a more inclusive process and access a broader talent pipeline. The site hired approximately 70 new employees in 2022 through this program with a retention rate of about 60%.

- We partnered with Western Michigan University to enhance its paper technology curriculum through student tours, sponsorships, staff time, and donated equipment.

In Kalamazoo, we have been working for more than a decade to address concerns regarding potential orders surrounding our mill and our neighbor, the Kalamazoo Wastewater Reclamation Plant (KWRP). We joined an Odor Task Force with KWRP to accelerate joint solutions, and we formed a Community Advisory Committee to increase communication with local residents.

By the end of 2023, we will have invested more than \$8 million in health and safety improvements in the mill. We have implemented state-of-the-art H2S and odor mitigation techniques including optimizing chemical processes in our wastewater. In 2023, we initiated a plan to install both a permanent oxygenation system and scrubbing system to further reduce H2S emissions. We also installed 16 EnviroSuite monitors around the mill to measure H2S levels in real time. We provide this data, as well as information on our community and odor mitigation efforts, via Kalamazoorecycles.com. Read more in [Disclosure 303-1](#).

We also tested our community engagement actions as we executed the new CRB mill site selection program. Our site selection team developed key community attributes to narrow the list of potential sites to a select few communities. We encouraged community leaders from these sites to visit our facilities and assess our community engagement and corporate responsibility activities. A visit to the Kalamazoo Mill was important, and we highlighted our new mill and the community engagement efforts that are becoming a pillar of partnering with the Kalamazoo community. Feedback was positive from the various community leaders and instrumental in their decision to encourage Graphic Packaging to select their community. We selected Waco, Texas, for our new CRB mill, and we look forward to open lines of communication and a beneficial relationship with the community.

GRI 413-2 OPERATIONS WITH SIGNIFICANT ACTUAL AND POTENTIAL NEGATIVE IMPACTS ON LOCAL COMMUNITIES

See [Disclosure 413-1](#).



Appendix

IN THIS SECTION

[ESG Data Summary](#)

[SASB Index](#)

[TCFD Index](#)

[UNGC Communication
on Progress](#)

[UN SDG Index](#)

[Acronyms](#)





Graphic Packaging 2022 ESG Data Summary

Performance Indicator	Baseline ¹	FY2019	FY2020	FY2021	FY2022	ESG Vision 2025 Goal Status
Business Overview (USD in millions)						
Economic Value Generated						
Net Sales	\$6,160	\$6,160	\$6,560	\$7,156	\$9,440	On track
Adjusted EBITDA ²	\$1,030	\$1,030	\$1,070	\$1,056	\$1,600	
Adjusted Earnings per Share ²	\$0.87	\$0.87	\$1.12	\$1.14	\$2.33	On track
Economic Value Distributed						
Operating Costs ³		\$5,617	\$6,026	\$6,739	\$8,421	
Research and Development		\$9	\$10	\$10	\$14	
Payments to Providers of Capital ⁴		\$373	\$548	\$223	\$668	
Payments to Governments ⁵		\$64	\$70	\$58	\$88	
Capital Expenditures		\$353	\$646	\$802	\$549	
Economic Value Retained						
Change in Retained Earnings ⁶		\$56	\$-48	\$66	\$403	
Product Innovation						
Annual Revenue from New Product Innovations (USD in millions)		\$115	~\$120	~\$180	~\$160	
Cumulative Revenue from New Product Innovations (USD in millions)	\$0	-	~\$120	~\$300	~\$460	On track
Percentage Revenue from Recyclable Products ⁷	-	97%	97%	95%	95%	Progressing
Percentage Reduction LDPE Use	0%	4%	16%	19%	15%	Progressing

**Graphic Packaging 2022 ESG Data Summary (continued)**

Governance						
Percentage Completion Code of Conduct Training ⁸		89%	94%	97%	99%	
Percentage Completion Anti-harassment Training ⁸		96%	94%	97%	99%	
Percentage Packaging Plants Completed Social Responsibility Audit ⁹	-	89%	91%	71%	87%	On track
Say-on-Pay Voting Percentage		99%	98%	96%	92%	
CEO Total Compensation Ratio		151:1	147:1	136:1	251:1	
Political Contributions, Lobbying, and Trade Association Fees (USD in millions)		\$3.0	\$3.0	\$2.7	\$3.5	
Social						
Employees						
Employees at Year End		~19,000	~19,000	24,182	24,263	
Women in Total Global Workforce		21%	21%	23%	23%	
Women in Global Leadership Team		21%	25%	22%	27%	
Women in Executive Team		40%	27%	20%	33%	
Women on the Board of Directors		22%	22%	30%	30%	
Ethnic Diversity in Total US Workforce		23%	25%	29%	30%	
Ethnic Diversity in US Leadership Team		8%	9%	11%	19%	
Ethnic Diversity in Executive Team		20%	27%	40%	33%	
Ethnic Diversity on the Board of Directors		0%	0%	0%	10%	



Graphic Packaging 2022 ESG Data Summary (continued)

Employee Hiring Rate ¹⁰		-	-	27%	32%	
Employee Voluntary Attrition ¹⁰		12%	13%	19%	21%	
Employee Involuntary Attrition ¹⁰		7%	8%	6%	9%	
Employees Covered by Collective Bargaining Agreements		41%	41%	52%	62%	
Employee Engagement Survey Participation ¹¹	-	-	64%	70%	-	Progressing
Training Hours per Employee	-	-	-	6	12.3	Progressing
Revenue per Employee (USD)		\$324,000	\$346,000	\$296,000	\$390,000	
Adjusted EBIDTA ² per Employee (USD)		\$57,000	\$56,000	\$44,000	\$66,000	
Stakeholder Engagement						
Charitable Giving (USD in thousands)		\$771	\$864	\$1,024	\$3,034	
Charitable Giving as Percentage Revenue		0.01%	0.01%	0.01%	0.03%	
Health, Safety & Environment						
Total Reportable Incident Rate (TRIR) ¹²		1.10	1.10	1.18	1.02	
Lost Time Incident Rate (LTIR) ¹²	0.36	0.35	0.31	0.41	0.31	Progressing
Days Away, Restricted, or Transferred (DART)		0.62	0.68	0.71	0.56	
LIFE Injuries	6	8	9	10	4	Progressing
LIFE Injury Rate ^{12,13}		0.04	0.05	0.05	0.01	
Fatalities		0	0	0	1	
Fatality Rate ¹²		0	0	0	0.004	

**Graphic Packaging 2022 ESG Data Summary (continued)**

Total Number Significant Spills		0	0	0	0	
Percentage Locations Certified to ISO 45001		5%	5%	7%	5%	
Percentage Locations Certified to ISO 14001		11%	11%	20%	15%	
Environment						
Materials (in metric tons)						
Fresh Wood Fiber Consumed		9,874,000	9,149,000	9,155,000	9,385,000	
Percentage Chain of Custody Certified		24%	25%	24%	22%	
Recycled Fiber Consumed		991,000	1,030,000	1,226,000	1,260,000	
Total Paperboard Production	3,483,000	3,566,000	3,575,000	3,489,000	3,698,000	
Total Paper Mill Byproducts Produced ¹⁴		-	-	59,000	69,000	
Percentage Recycled Paperboard Produced		25%	25%	26%	31%	
Percentage Internal Paperboard Consumption		68%	70%	72%	73%	
Total Converted Paperboard ¹⁴		-	-	3,211,000	3,567,000	
Percentage Recycled Paperboard Converted ¹⁴		-	-	33%	34%	
CDP Forests Rating		B-	B	B	B	
Energy Use (in MWh)¹⁵						
Total Purchased Electricity		1,559,000	1,468,500	1,721,700	1,951,200	
Purchased Electricity - Percentage Renewable		0%	0%	2%	2%	
Total Self-generated Electricity ¹⁴		-	-	1,912,500	1,858,100	

**Graphic Packaging 2022 ESG Data Summary (continued)**

Self-generated Electricity - Percentage Renewable ¹⁴		-	-	71%	69%	
Self-generated Electricity Sold - Nonrenewable	-24,800	-17,200	-6,200	-7,600	-14,400	
Renewable Electricity as Percentage Total Electricity ¹⁴		-	-	38%	35%	
Total Fuel Use	24,492,700	24,683,800	25,027,000	25,698,900	26,372,400	
Percentage Renewable Fuel Use	73%	71%	69%	69%	69%	
Total Energy Use	26,076,700	26,242,800	26,495,500	27,431,300	28,335,500	
Percentage Renewable Energy	68%	67%	65%	65%	64%	
Nonrenewable Energy Intensity (MWh/\$1,000 net revenue)	1.40	1.40	1.41	1.34	1.07	Achieved
Mill Division Energy Use	25,228,300	25,331,100	25,586,900	26,185,700	27,044,600	
Mills Percentage Renewable Energy	71%	70%	67%	68%	67%	
Mills Total Energy Intensity (MWh/metric ton saleable board)	7.24	7.10	7.16	7.51	7.31	
Mills Nonrenewable Energy Intensity (MWh/metric ton saleable board)	2.13	2.17	2.33	2.40	2.39	
Packaging Energy Use	848,400	911,700	908,600	1,245,500	1,290,900	
Packaging Percentage Renewable Energy ¹⁴	1.0%	0%	0%	3%	4%	
Packaging Total Energy Intensity (MWh/metric ton converted board) ¹⁴		-	-	0.34	0.36	
Percent Locations Certified to ISO 50001		0%	0%	6%	5%	



Graphic Packaging 2022 ESG Data Summary (continued)

GHG Emissions (in metric tons CO ₂ e) ¹⁵						
Scope 1	1,257,500	1,318,700	1,441,500	1,604,100	1,626,900	
Scope 2 - Market Based	793,000	824,200	680,400	714,500	828,400	
Total Scope 1 and 2 - Market Based	2,050,500	2,142,900	2,121,900	2,318,600	2,455,300	
Mills Scope 1 and 2 - Market Based		1,777,300	1,787,000	1,890,400	2,019,200	
Packaging Scope 1 and 2 - Market Based		365,600	334,900	428,200	436,100	
US Scope 1 and 2 - Market Based		2,061,200	2,037,700	2,171,300	2,309,500	
Outside US Scope 1 and 2 - Market Based		81,700	84,200	147,300	145,800	
Direct Biogenic		5,652,200	5,543,600	5,739,800	5,935,800	
Total Scope 1 and 2 GHG Emissions Intensity (metric tons CO₂e/\$1,000 net sales)	0.35	0.35	0.32	0.32	0.26	Achieved
Total Scope 1 and 2 GHG Emissions Intensity (metric tons CO ₂ e/\$1,000 Adjusted EBIDTA)	1.99	2.08	1.98	2.20	1.53	
Mills Scope 1 and 2 GHG Emissions (metric tons CO ₂ e/metric ton saleable board)	0.49	0.50	0.50	0.54	0.55	
Packaging Scope 1 and 2 GHG Emissions (metric tons CO ₂ e/metric ton converted board) ¹⁴	-	-	-	0.12	0.12	
Scope 3 (million metric tons CO ₂ e) ¹⁶		3.50	3.58	6.65	6.96	
Emissions Covered Under Regulatory Program		>99%	>99%	>99%	>99%	
Emissions Covered Under Regulatory Reporting Program	-	85%	85%	82%	83%	



Graphic Packaging 2022 ESG Data Summary (continued)

Emissions Covered Under Regulatory Emissions-Limiting Program		2%	2%	2%	1.3%	
CDP Climate Change Rating		B	A-	A-	A-	
Air Emissions (in metric tons)						
Hydrochlorofluorocarbon-22 Emissions ¹⁴		-	-	0.28	0.66	
Total NO _x Emissions ¹⁷		5,400	5,200	5,100	5,500	
Total SO _x Emissions ¹⁷		1,400	1,800	1,300	1,300	
Total VOC Emissions ^{14, 17}		-	-	4,600	4,100	
Total PM10 Emissions ^{14, 17}		-	-	1,600	1,600	
Water Stewardship (in megaliters)						
Total Water Withdrawals		153,000	143,000	138,000	150,900	
Total Influent Water		162,000	153,000	150,000	181,900	
Total Discharged Water	143,700	154,400	135,400	136,000	155,400	
Total Water Consumption		25,500	31,600	28,100	42,200	
Mills Water Influent Intensity (megaliters/metric ton saleable board) ¹⁸		0.045	0.043	0.043	0.043	
Mills Water Discharge Intensity (megaliters/metric ton saleable board)	0.041	0.043	0.038	0.039	0.042	No progress
Number of Locations in Stressed Watersheds per Aqueduct Screen		14	14	19	18	
Stressed Watershed Withdrawal/Total Withdrawals		0.22%	0.20%	0.22%	0.22%	
Discharged BOD (metric tons) ¹⁹		-	-	3,770	3,320	

**Graphic Packaging 2022 ESG Data Summary (continued)**

Discharged Total Suspended Solids (TSS; metric tons) ¹⁹	-	-	6,200	4,080	
Discharged AOX (metric tons) ¹⁹	-	-	130	160	
Discharged Total Ammonia Nitrogen (metric tons) ¹⁹	-	-	260	190	
CDP Water Stewardship Rating	B-	B	B	A-	
Waste and Recycling					
Total Generated Waste (metric tons) ¹⁴			1,259,500	1,679,200	
Total Nonhazardous Waste Disposed (metric tons) ¹⁴	-	-	642,000	524,200	
Total Hazardous Waste Disposed (metric tons) ¹⁴	-	-	1,800	9,800	
Landfill ¹⁴	-	-	464,400	494,600	
Waste to Energy ¹⁴	-	-	27,200	27,200	
Other Disposal ¹⁴	-	-	152,200	12,200	
Percentage Generated Waste Diverted for Recycling ¹⁴	-	-	47%	68%	
Recycled Fiber (metric tons) ¹⁴	-	-	573,400	974,500	
Percentage Waste Paper Recovery for Recycling ¹⁴	-	-	91%	98%	On track
Other Recycled Materials ¹⁴	-	-	42,000	155,800	
Packaging Plants with Waste Diversion Program	100%	100%	89%	96%	On track
Supply Chain					
Facilities Compliant with Fiber Certification Standard ⁹	100%	100%	93%	96%	On track

**Graphic Packaging 2022 ESG Data Summary (continued)**

Percentage Audits Completed for Targeted Wood Suppliers		-	63%	112%	136%	
Percentage New Wood Suppliers Screened for Risk ¹⁴		-	-	100%	100%	
Percentage Global Employees Completing Modern Slavery Awareness Training		99%	-	90%	96%	
Spend with Graphic Packaging Defined Diverse Supplier Group (USD in millions) ²⁰		\$161	\$177	\$182	\$210	
Year-over-year Change in Spend		13%	10%	3%	15%	
Spend with All Diverse and Small Supplier Groups (USD in millions) ^{14,21}		-	-	\$260	\$291	
Percentage of North America Addressable Spend ¹⁴		-	-	7.8%	7.5%	
Total Number Small or Diverse Suppliers ^{14, 21}		-	-	661	593	
EcoVadis Rating		Bronze	Bronze	Gold	Gold	



Graphic Packaging 2022 ESG Data Summary (continued) Footnotes

1. Baseline year for financial goals is 2019, for the LDPE and recyclable product revenue goals it's 2018, and for all other goals it's 2016.
2. Adjusted EBITDA and adjusted EPS represent non-Generally Accepted Accounting Principles measures.
3. Defined as cost of goods 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, Capital expenditures, payments to investors, and payments to governments.
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, 2021, and 2022 for further information.
7. Includes products categorized as widely recyclable, regionally recyclable, and conditionally recyclable.
8. Data do not include salaried employees from AR Packaging acquisition.
9. Starting in 2021, goal reporting methodology and will measure progress considering all facilities at year end, regardless of acquisition date.
10. 2019-2021 data are for legacy US Graphic Packaging only. 2022 data include Americas and APAC regions. EMEA is excluded.
11. Survey not conducted in 2022. Next survey planned for 2023.
12. Rate is defined as number of events per 100 workers per year. Includes Graphic Packaging employees and contractors working under our control.
13. 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).
14. New reporting metric for 2021.
15. 2021 Energy and GHG data are restated for 2021. Scope 1 emissions include HCFC-22 refrigerant emissions, which are covered under the Montreal Protocol.
16. Updated and expanded Scope 3 reporting methodology in 2021.
17. Reported for mills division only.
18. Influent water in intensity calculation includes withdrawals, raw material water, and reclaimed water input sources. Storm water not used in the mill process is excluded.
19. New reporting metric for 2021. Includes virgin mills only.
20. Defined by Graphic Packaging as woman-, minority-, or disabled-/disabled-veteran-owned supplier. Includes both certified and self-declared diverse suppliers.
21. Graphic Packaging defined diverse supplier group plus spend with small businesses, 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, 2022, unless otherwise noted.

TOPIC/CODE	ACCOUNTING METRIC	RESPONSE
GHG Emissions		
RT-CP-110a.1	Gross global Scope 1 emissions, percentage covered under emissions-limiting regulations	GRI 302, 305 Climate change ESG Data Summary
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 2023 CDP Climate Change Response
Air Quality		
RT-CP-120a.1	Air emissions of the following pollutants: NO _x (excluding N ₂ O) SO _x VOCs PM	GRI 305-7 Other air emissions
Energy Management		
RT-CP-130a.1	Total energy consumed Percentage grid electricity Percentage renewable Total self-generated energy	102,008,000 GJ total energy consumed, 98% of purchased electricity is sourced from the grid, 64% of total energy consumed was from renewable fuel or purchased energy sources, 6,689,000 GJ self-generated electric power; note not all self-generated electricity is consumed by Graphic Packaging GRI 302, 305 Climate change
Water Management		
RT-CP-140a.1	Total water withdrawn 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 2023 CDP Water Security Response

**Sustainability Accounting Standards Board (SASB) Index (continued)**

RT-CP-140a.3	Number of incidents of noncompliance associated with water quality permits, standards, and regulations	Two confirmed water quality incidents in 2022 There were two incidents of noncompliance from 2019 operations that resulted in a formal enforcement action in 2022. GRI 2-27 Compliance with laws and regulations
Waste Management		
RT-CP-150a.1	Amount of hazardous waste generated; percentage recycled	Waste is characterized according to local regulatory requirements. GRI 306 Waste and recycling
Product Safety		
RT-CP-250a.1	Number of recalls issued; total units recalled	Two recalls in 2022. Total recalled units not available. GRI 416 Product stewardship Our packaging products are traceable, ensuring quick and accurate investigations when necessary.
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. 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
Product Life Cycle Management		
RT-CP-410a.1	Percentage of raw materials from: Recycled content Renewable resources Renewable and recycled content	GRI 301, 304 Sustainable forestry
RT-CP-410a.2	Revenue from products that are reusable, recyclable, or compostable	95% of total enterprise revenue from products defined as widely recycled, regionally recycled, and conditionally recycled.
RT-CP-410a.3	Discussion of strategies to reduce the environmental impact of packaging throughout its life cycle	GRI 301, 304 Sustainable forestry GRI 306 Waste and recycling GRI 204, 308, 414 Supply chain sustainability Product innovation



Sustainability Accounting Standards Board (SASB) Index (continued)

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	1,907 metric tons; 0% certified
RT-CP-000.A	Amount of production, by substrate	GRI 301, 304 Sustainable forestry
RT-CP-000.B	Percentage of production as: Paper/Wood Glass Metal Plastic	Calculated using a percentage revenue basis. Percentage of production (1) Paper/Wood 94.5% (2) Glass 0.0% (3) Metal 2.0% (4) Plastic 3.5%
RT-CP-000.C	Number of employees	Greater than 24,000 employees GRI 2-7 Employees



Task Force on Climate-related Financial Disclosures (TCFD) Index

Given the immense effect climate change poses for business, now and in the future, the Financial Stability 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 2023 CDP climate change response and this 2022 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.	2023 Proxy Statement, p. 7-8 2023 CDP Climate Change Response: C1 GRI 2-7 Governance structure GRI 302, 305 Climate change
	B) Describe the management's role in assessing and management of risks and opportunities.	2023 CDP Climate Change Response: C1 GRI 2-9, 2-13, 201-1 Governance structure, delegating authority, economic performance 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.	2023 CDP Climate Change Response: C2 GRI 2-12 Role of the highest governance body in overseeing the management of impacts GRI 3-1 Process to determine material topics
	B) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.	2023 CDP Climate Change Response: C2, C3, C12 GRI 2-12 Role of the highest governance body in overseeing the management of impacts GRI 3-1 Process to determine material topics
	C) Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	2023 CDP Climate Change Response: C2, C3 GRI 2-12 Role of the highest governance body in overseeing the management of impacts GRI 3-1 Process to determine material topics The Company has committed to establish and develop SBTs by the end of 2023. Proposed targets were submitted to the SBTi during 1Q23 and are scheduled for review by the SBTi.

**Task Force on Climate-related Financial Disclosures (TCFD) Index (continued)**

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.	2023 Proxy Statement, p. 7-8 2023 CDP Climate Change Response: C2, C12 GRI 2-12 Role of the highest governance body in overseeing the management of impacts GRI 3-1 Process to determine material topics
	B) Describe the organization's processes for managing climate-related risks.	2023 Proxy Statement, p. 7-8 2023 CDP Climate Change Response: C1, C2, C12 GRI 2-12 Role of the highest governance body in overseeing the management of impacts GRI 3-1 Process to determine material topics
	C) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.	2023 CDP Climate Change Response: C1, C2 GRI 2-12 Role of the highest governance body in overseeing the management of impacts GRI 3-1 Process to determine material topics
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.	2023 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 GHG emissions, and the related risks.	2023 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.	2023 CDP Climate Change Response: C4 GRI 302, 305 Climate change



UNGC Communication on Progress

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 UN goals. As such, we committed to annual reporting on our progress toward implementing the UNGC's 10 Principles. This 2022 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.

Graphic Packaging applies the standards of the UNGC to our [Code](#), our business ethics policies, our HR policies, our HSE 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 beginning of this report.

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 204, 308, 414 Supply chain sustainability GRI 205, 206 Business ethical conduct GRI 2-23 Policy commitments GRI 2-24 Embedding policy commitments GRI 2-30 Collective bargaining agreements GRI 402, 407 Labor rights GRI 403 Safety GRI 404, 405 Engaged employees GRI 406, 408, 409, 412 Human rights
Principle 4	The elimination of all forms of forced and compulsory labor.	
Principle 5	The effective abolition of child labor.	
Principle 6	The elimination of discrimination in respect of employment and occupation.	



UNGC Communication on Progress (continued)

Environment		
Principle 7	Businesses should support a precautionary approach to environmental challenges.	GRI 2-23 Policy commitments GRI 301, 304 Sustainable forestry GRI 302, 305 Climate change GRI 303 Water stewardship GRI 306 Waste SASB Index 2023 CDP Climate Change Response 2023 CDP Forests Response
Principle 8	Undertake initiatives to promote greater environmental responsibility.	
Principle 9	Encourage the development and diffusion of environmentally friendly technologies.	
Anti-corruption		
Principle 10	Businesses should work against corruption in all its forms, including extortion and bribery.	GRI 2-23, 2-24 Policy commitments and embedding policy commitments GRI 205, 206 Business ethical conduct



UN SDG Index

Graphic Packaging is inspired by the global vision that the UN SDGs represent 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 UNGC, we mapped our ESG Vision 2025 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 interests 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 that are 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 any forms of forced labor.

Learn more:

- Climate change
- Community engagement
- Engaged employees
- Health and safety
- Human rights
- Supply chain sustainability
- Waste and recycling
- Water stewardship











UN SDG Index (continued)

Ensure sustainable consumption and production patterns	
 <p>Targets 12.2, 12.3, 12.4, 12.5, 12.6</p>	<p>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 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.</p> <p><u>Learn more:</u> Climate change Product innovation Supply chain sustainability Sustainable forestry Waste and recycling Water stewardship</p>
Take urgent action to combat climate change and its impacts	
 <p>Targets 13.1, 13.2</p>	<p>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, nonfossil-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.</p> <p><u>Learn more:</u> Climate change Product innovation Supply chain sustainability Sustainable forestry Waste and recycling</p>
Protect, restore, and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and biodiversity loss	
 <p>Targets 15.2, 15.5</p>	<p>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.</p> <p><u>Learn more:</u> Supply chain sustainability Sustainable forestry</p>



UN SDG Index (continued)

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:

 <p>Targets 2.1</p>	<p>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.</p> <p>Learn more: Community engagement</p>	 <p>Targets 6.3, 6.4, 6.5</p>	<p>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.</p> <p>In addition, the Company provides safe drinking water and sanitation/handwashing services at all facilities globally.</p> <p>Learn more: Community engagement Supply chain sustainability Water stewardship</p>
 <p>Targets 3.4, 3.5, 3.7, 3.8</p>	<p>Graphic Packaging provides health and wellness benefits to employees to ensure healthy lives for employees and their families.</p> <p>Learn more: Engaged employees</p>	 <p>Targets 7.3</p>	<p>Graphic Packaging sources approximately 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.</p> <p>Learn more: Climate change</p>
 <p>Targets 4.3, 4.4, 4.5</p>	<p>Graphic Packaging provides training and development opportunities for our employees. We also support education programs through our corporate philanthropic initiatives.</p> <p>Learn more: Community engagement Engaged employees</p>	 <p>Targets 10.2, 10.3</p>	<p>Graphic Packaging does not tolerate discrimination or harassment in our Company or supply chain and is proud to be an equal opportunity employer.</p> <p>Learn more: Engaged employees Human rights Supply chain sustainability</p>
 <p>Targets 5.1, 5.5</p>	<p>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 woman-owned and other diverse businesses.</p> <p>Learn more: Engaged employees Human rights Supply chain sustainability</p>	 <p>Targets 16.2, 16.5, 16.7</p>	<p>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.</p> <p>Learn more: Business ethical conduct Engaged employees Human rights Policy commitments and embedding policy commitments Supply chain sustainability</p>



Acronyms

AF&PA: American Forest & Paper Association

AFF: American Forest Foundation

AFTS: American Tree Farm System

AOX: Adsorbable organic halogen compounds

BMP: Best management practice

BOD: Biological oxygen demand

BRC: British Retail Consortium

BRG: Business resource groups

CDP: Carbon Disclosure Project

CEFLEX: A circular economy for flexible packaging

CEO: Chief executive officer

CH₄: Methane

CHP: Combined heat and power

CIO: Chief information officer

CISO: Chief information and security officer

CITES: Convention of International Trade in Endangered Species or Wild Fauna and Flora

CMA: Compost Manufacturing Alliance

CMDC: Compensation and Management Development Committee

CO₂: Carbon dioxide

CO₂e: CO₂ equivalent

COC: Chain of custody

Code: Code of conduct

COE: Center of excellence

CPG: Consumer packaged goods

CRB: Coated recycled paperboard

CSO: Chief sustainability officer

CUK: Coated unbleached kraft paperboard

DAF: Dissolved air flotation

DDS: Due diligence system

DEFRA: United Kingdom Department for Environment, Food, and Rural Affairs

DfE: Design for the environment

DO: Dissolved oxygen

E&C: Ethics and compliance

EBITDA: Earnings before interest, taxes, depreciation, and amortization

ECMA: European Carton Makers Association

EEO: Equal employment opportunity

EGLE: Michigan Department of Environmental, Great Lakes, and Energy

eGRID: Emissions and Generation Resource Integrated Database

ELT: Executive leadership team

EMEA: Europe, Middle East, Africa

ERM: Enterprise risk management

ESG: Environmental, social, and governance

EU: European Union

EVP: Executive vice president

EVPGC: Executive vice president, general counsel

EVPHR: Executive vice president, human resources

FEC: Federal Election Commission

FECV: Forests with exceptional conservation value

FPI: Foodservice Packaging Institute

FSC: Forest Stewardship Council

FSSC: Food Safety Systems Certification

FTC: Federal Trade Commission

GA EPD: Georgia Environmental Protection Division

GDPR: General data protection regulation

GFSI: Global Food Safety Initiative

GHG: Greenhouse gas

GIS: Geographic information system

GMO: Genetically modified organism

GMP: Good manufacturing practices

GPI University: Graphic Packaging University



Acronyms (continued)

GPI-PAC: Graphic Packaging Political Action Committee

GPK: Graphic Packaging International, LLC's New York Stock Exchange ticker symbol

GRI: Global Reporting Initiative

GSCOC: Global supplier code of conduct

GWP: Global warming potential

HCFC: Hydrochlorofluorocarbon

HCV: High conservation values

HFC: Hydrofluorocarbons

HR: Human resources

HSE: Health, safety, and environmental

HVAC: Heating, ventilation, and air conditioning

IEA: International Energy Agency

ILO: International Labour Organization

IPA: Isopropyl alcohol

IPCC AR5: Intergovernmental Panel on Climate Change, Fifth Assessment Report

ISAE: International Standard for Assurance Engagements

ISO: International Organization for Standardization

IT: Information technology

IUCN: International Union for Conservation of Nature

K2: Kalamazoo Line 2

LCA: Life cycle assessment

LDA: Lobbying Disclosure Act

LDPE: Low-density polyethylene

LED: Light-emitting diode

LGBTQ+: Lesbian, gay, bisexual, transgender, queer, plus others

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

LTIR: Lost time injury rate

MAP: Modified atmosphere barrier

MiDiCo: Michigan Diversity Council

ML: Mega Liter

MSE: Minimum safety expectation

MWh: Megawatt hour

N₂O: Nitrous oxide

NA: North America

NASF: National Association of State Foresters

NCASI: National Council for Air and Stream Improvement, Inc.

NGGC: Nominating and Corporate Governance Committee

NF₃: Nitrogen trifluoride

NGO: Nongovernmental organization

NIST: National Institute of Standards and Technologies

NMSDC: National Minority Supplier Development Council

NOV: Notice of violation

NO_x: Nitrogen oxides

NPDES: National pollutant discharge elimination system

OECD: Organization for Economic Cooperation and Development

OFAC: Office of Foreign Assets Control

OSHA: Occupational Safety and Health Administration

P2P: Procure to pay or Peer to peer

PAC: Political Action Committee

PAD-US: Protected Areas Database of the United States

PCR: Post-consumer recycled

PE: Polyethylene

PEFC: Program for the Endorsement of Forest Certification

PET: Polyethylene terephthalate

PFC: Perfluorocarbons

PIR: Post-industrial recycled

PLA: Polylactic acid

PM1: Paper machine 1

PM10: Particulate matter

PMP: Performance management process



Acronyms (continued)

POTW: Publicly owned treatment works

PPE: Personal protective equipment

PSU: Performance stock units

QA: Quality assurance

QC: Quality control

QMS: Quality management system

QSR: Quick service restaurant

R&D: Research and development

RCRA: Resource Conservation and Recovery Act

RMP: Residential mixed paper

RPA: Recycled Paperboard Alliance

RPTA: Recycled Paperboard Technical Association

RSU: Restricted stock units

SASB: Sustainability Accounting Standards Board

SBS: Solid bleached sulfate paperboard

SBT: Science-based target

SBTi: Science-based Targets initiative

SEC: Securities and Exchange Commission

SF₆: Sulfur hexafluoride

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

SO_x: Sulfur oxides

STEM: Science, technology, engineering, and math

SVPSC: Senior vice president, supply chain

TCFD: Task Force on Climate-related Financial Disclosures

TICCIT: Trees into cartons, cartons into trees

TMDL: Total maximum daily load

TRIR: Total recordable incident rate

TSS: Total Suspend Solids

UK: United Kingdom of Great Britain and Northern Ireland

UN SDGs: United Nations Sustainable Development Goals

UNGC: United Nations Global Compact

US: United States

US EPA: United States Environmental Protection Agency

USD: United States dollar

USDA: United States Department of Agriculture

UV: Ultraviolet

VOC: Volatile organic compound

VPGA: Vice president, government affairs

VPHSE: Vice president, health safety environment

VPP: Vice president, procurement

VPSC: Vice president, supply chain

WBENC: Women's Business Enterprise National Council

WMU: Western Michigan University

WRI: World Resources Institute

XP: Xccelerated performance

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