



Georgia-Pacific

PROGRESS WITH PURPOSE

Sustainability Highlights 2020

A large white egret is captured in mid-flight, its wings fully extended, flying from the right side of the frame towards the left. The background features a dense line of green trees under a clear sky. In the foreground, there is a body of water with some reeds and other birds visible in the distance.

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Sustainable outcomes that benefit society

A message from John Mulcahy, Vice President, Sustainability

The role of business in society is to help people improve their lives by providing products and services they value more highly than their alternatives, and to do so responsibly while consuming fewer resources. Georgia-Pacific (GP) has been helping people improve their lives for almost a century, providing solutions that create shelter, improve hygiene, offer convenience, extend shelf life, and protect goods in transit. We have been and continue to be an important part of the communities in which we operate, providing good jobs and contributing to prosperity through our economic activity and the engagement of our company and employees in civic and philanthropic activities.

People want to be associated with companies that are responsible. Our focus is to make progress daily, improving performance by living a principle of stewardship, embracing creative destruction, improving efficiencies, eliminating waste, finding new ways of meeting needs, and driving conservation activities that leave more resources available to satisfy other needs in society. We hope you'll join us on this journey.

Learn more about how GP manages ecosystems.
JOHN MULCAHY 

At Georgia-Pacific, we strive to be a preferred partner and drive continuous improvement to create sustainable outcomes that benefit society.

INTRODUCTION

OUR PRINCIPLES OF PROGRESS

These principles guide our behavior as we work to help people improve their lives. Dive deeper into each one to discover the specific ways in which that impact comes to life.

PRINCIPLES OF PROGRESS



CONSERVE

Natural Resources Conservation

From forest protection and biodiversity concerns to waste reduction and recycling, when it comes to **conservation** we strive to be better today, than yesterday. Better tomorrow, than today. Learn how we're working with our suppliers and Non Governmental Organizations (NGOs) through conservation to protect water, enhance wildlife, restore vulnerable habitats and ensure there are working forest for the future.



CHALLENGE

Non-Renewable Resource Use

Although our primary raw material, wood, is a renewable resource, our processes rely on non-renewable resources as well. Fossil fuels and chemicals are used in our manufacturing process, while plastics and gypsum rock are materials used to produce some of our products. Through transformative action, we **challenge** how we are using these resources while innovating to seek viable alternatives. See how we do it.



CONTROL

Emissions

The manufacturing of our products is resource intensive, requiring significant fiber, water, energy, chemicals, and labor. This conversion generates waste, including solid, liquid, and air emissions which, along with resource consumption, creates waste. Discover the ways in which we're constantly innovating to **control** these impacts and drive greater efficiency.



CONTRIBUTE

Sustainable Products

We create and **contribute** highly valued products to society while minimizing our impact. But how? Life-cycle thinking and creative destruction drive our processes. Throughout, we focus on choosing the best materials, minimizing the impact of our products in use, and building in end-of-life options including recycling and composting where valuable. As a result, we're able to offer everyone choices they can feel good about.



CONNECT

Social Impact

Our impact goes far beyond the benefits provided by our products and services. We **connect** with our employees, neighbors and customers by offering safe, well-paying jobs, and by supporting causes consistent with the objectives of our Foundation through financial support and volunteerism. Explore all the ways in which we empower the community.



CONSERVE

NATURAL RESOURCES CONSERVATION

Serving as responsible stewards

How Georgia-Pacific ensures there are working forests for the future

Forests provide value to society in many ways. They help protect air and water quality, supply important habitat for wildlife, and offer recreational opportunities. Forests also provide economic value, with Georgia-Pacific being one of the many companies that relies on them for the wood and wood fiber used to make the paper and building products people want and need. Though our business requires the use of this natural resource, we are committed to helping maintain healthy forests now and into the future by using resources more efficiently by sourcing responsibly, protecting endangered forests and special areas, and supporting wildlife conservation and biodiversity.

Source Responsibly

At Georgia-Pacific, we take steps to assure our customers and consumers that we are responsibly sourcing wood and fiber for our operations. It starts with our due diligence system, which includes:

- Building relationships with our suppliers, so we know where they source fiber.
- Incorporating responsible sourcing expectations into contracts used to purchase wood and fiber.
- Evaluating risk levels and public concerns about harvesting practices.

We also utilize and support sustainable forestry certifications such as:

Fiber Sourcing Certification

Our wood and fiber procurement practices are certified to the Sustainable Forestry Initiative® (SFI®) Fiber Sourcing Standard. This certification confirms that raw material in our supply chain comes from legal and responsible sources, guarantees trained loggers are used in all harvesting activities, and ensures that harvesting practices protect water quality and biodiversity.

Chain of Custody Certification

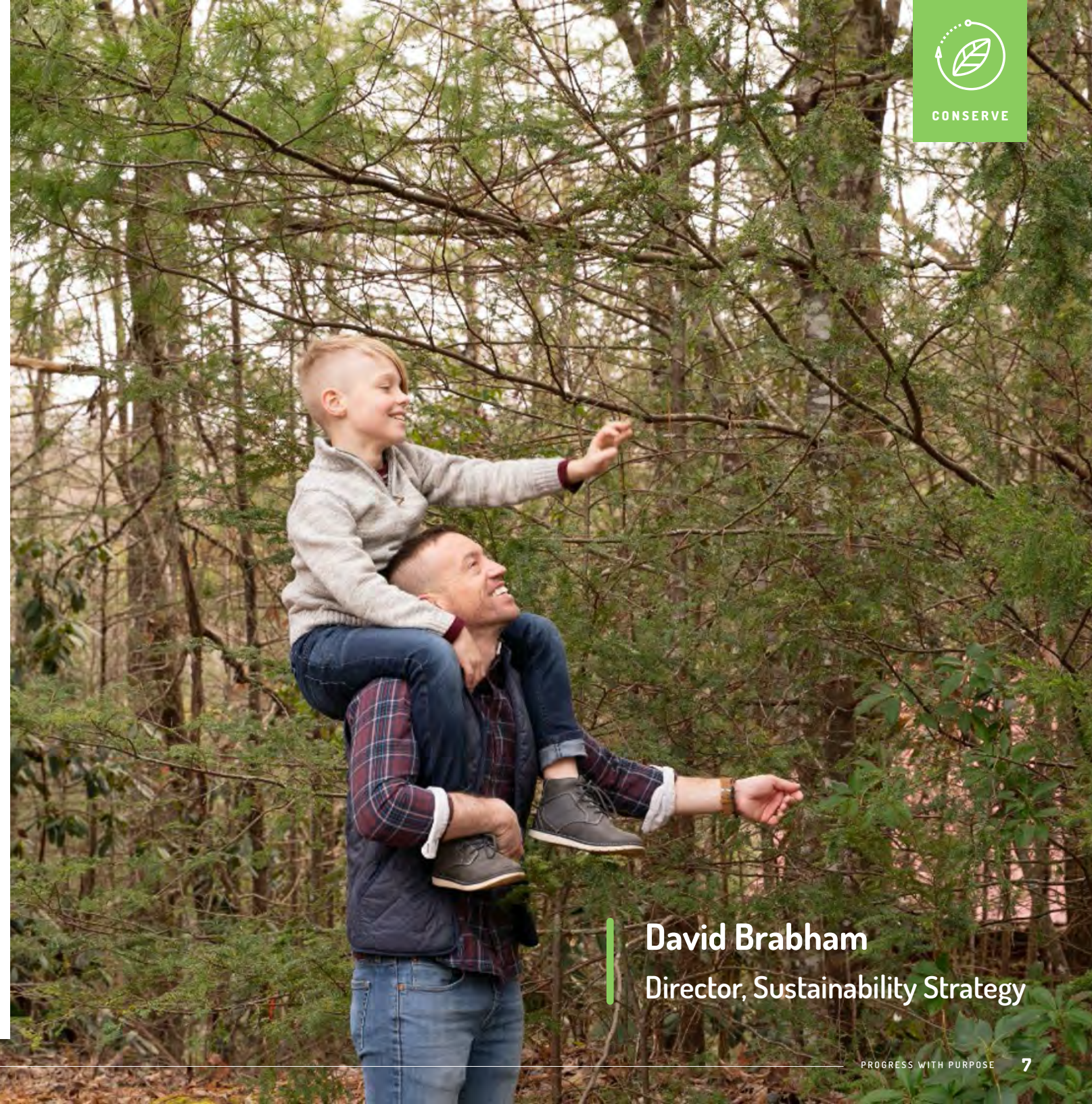
Georgia-Pacific holds chain of custody certifications from SFI®, Forest Stewardship Council® (FSC®), and Programme for the Endorsement of Forest Certification® (PEFC®) at many of our locations.

Controlled Wood Risk Assessment

Based on FSC® National Risk Assessments, GP sources fiber in a manner to avoid and/or mitigate risks such as harvesting in high conservation-value forests, plantations, or areas of non-forest use, illegal harvesting, violating traditional and civil rights, and using genetically modified trees.

Learn more about GP's sustainable forestry practices.

DAVID BRABHAM 



David Brabham
Director, Sustainability Strategy



CONSERVE

We believe in going beyond certification in our sourcing practices so that all people who rely on forests for income can participate in wood markets, but do so responsibly and in a manner that conserves of our world's resources.

Georgia-Pacific supports all of the recognized forest certification organizations, but not all programs are applicable or relevant for all landowners and every region of the world.

Protect endangered forests and special areas

In regions where we purchase wood and fiber in the United States, we actively map endangered forests and special areas using a scientific methodology that considers the values associated with such areas. Once mapped, Georgia-Pacific doesn't buy wood fiber from these areas, except in unique situations when active forest management is needed to improve habitat for endangered, rare, and/or vulnerable species. As part of this process, we have:

- Engaged in a continuous partnership with environmental organizations, including Dogwood Alliance, Natural Resources Defense Council, and Rainforest Action Network, to understand, identify, and review the scientific data used to map these areas.
- Implemented employee training, developed tracking systems for the delivery of wood fiber, defined contract requirements, and set supplier expectations to help ensure we don't receive wood from endangered forests.

Georgia-Pacific works with others in the forestry and environmental community to support wildlife and forest enhancement projects in communities near Georgia-Pacific operations.

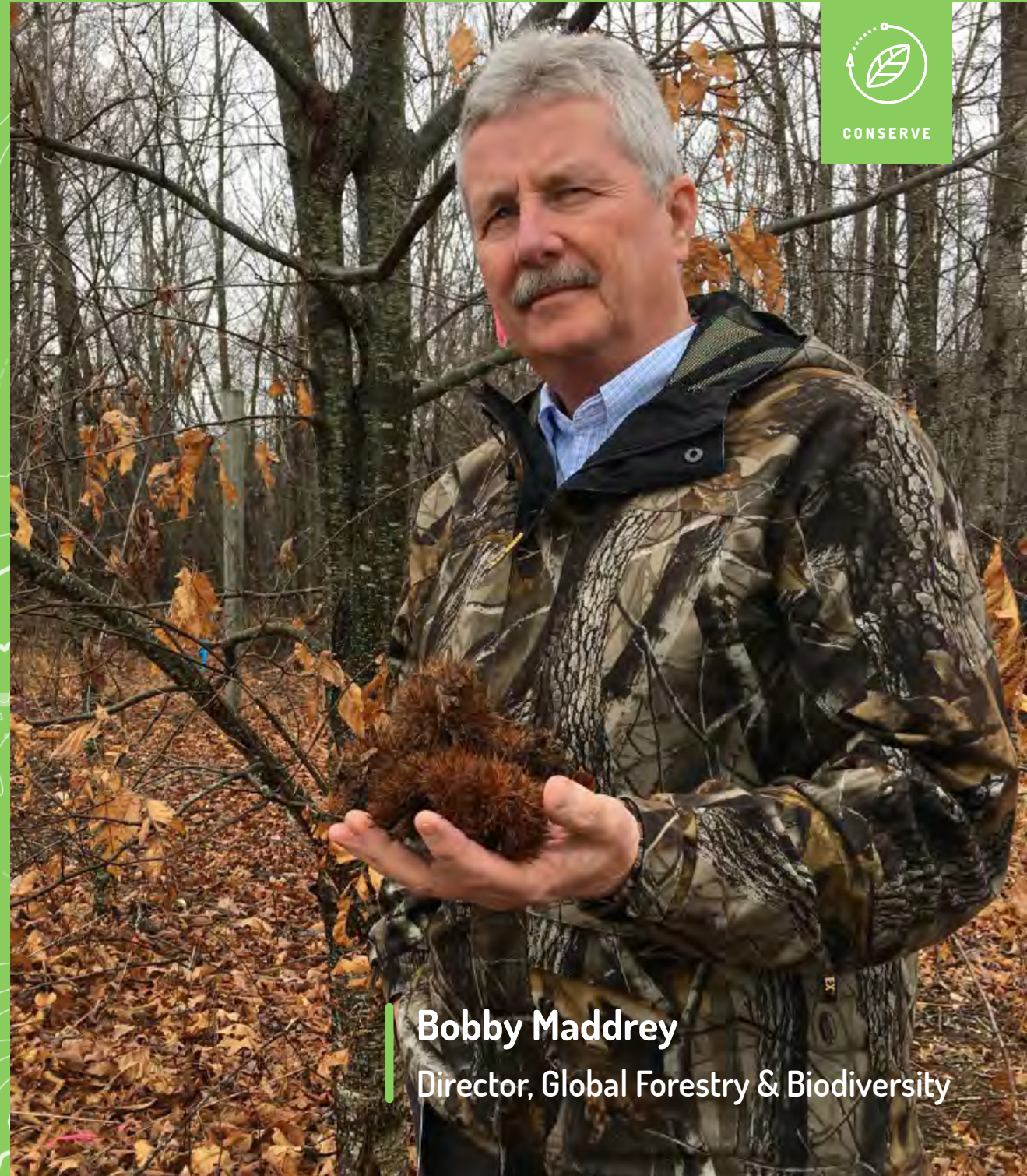
Support wildlife conservation and biodiversity

Healthy, diverse, and sustainable forests provide critical habitat for wildlife. Our efforts include:

- Protecting endangered species, restoring forest ecosystems, and promoting wildlife diversity.
- Planting well over 1 million trees through our direct investments in conservation projects, with an additional 400,000+ trees planted on the properties surrounding GP facilities.
- Committing to a 1:1 philosophy—for every 1 tree we use, at least 1 tree is regrown in the U.S.

Learn more about how GP promotes biodiversity.

BOBBY MADDREY 



Bobby Maddrey
Director, Global Forestry & Biodiversity



CHALLENGE

NON-RENEWABLE RESOURCE USE

Challenging the status quo

How Georgia-Pacific innovates solutions for responsible resource usage

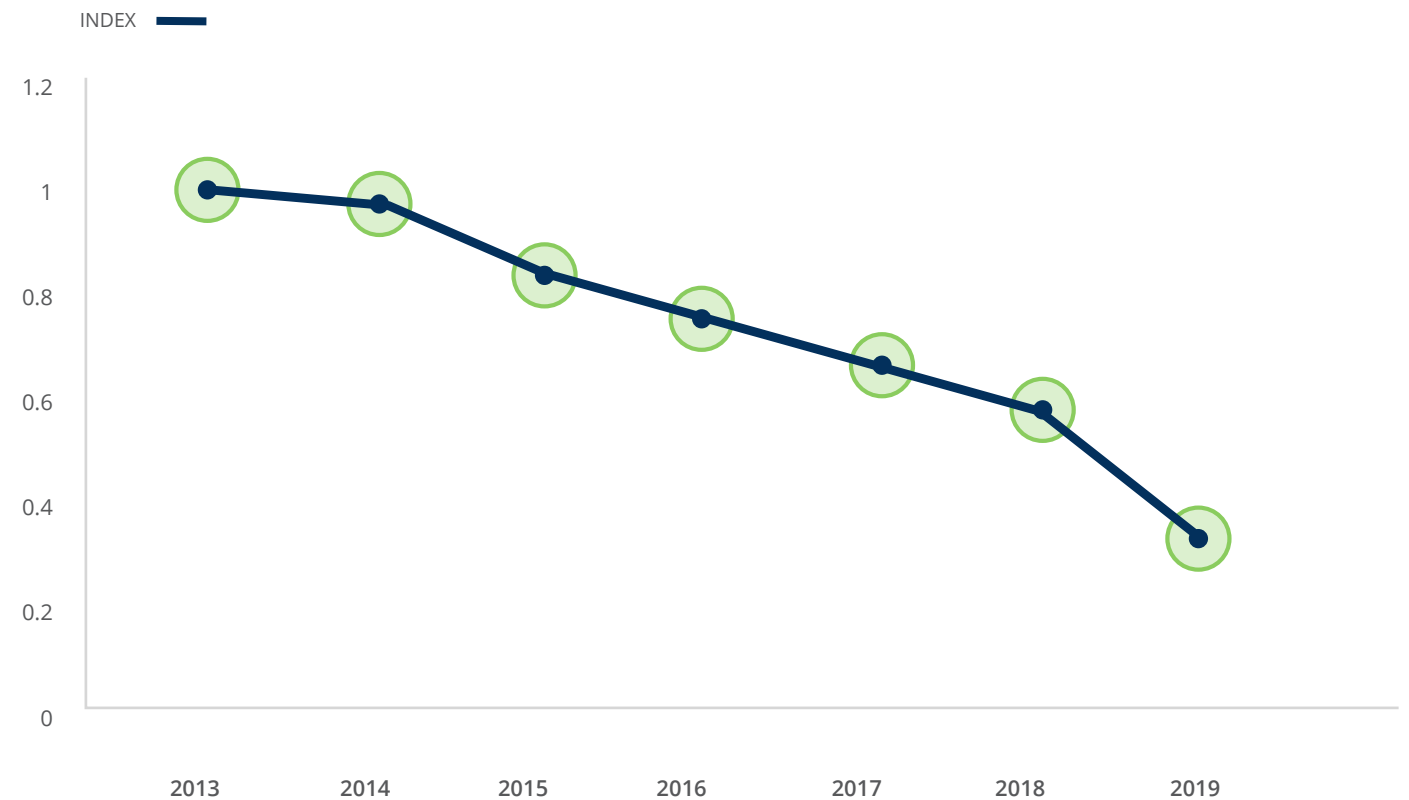
Georgia-Pacific gives great attention to how non-renewables are consumed and works diligently to push the boundaries of what's possible in terms of creative consumption. From energy use to bleaching technologies, we strive to responsibly produce the products our partners, consumers, and communities rely on.

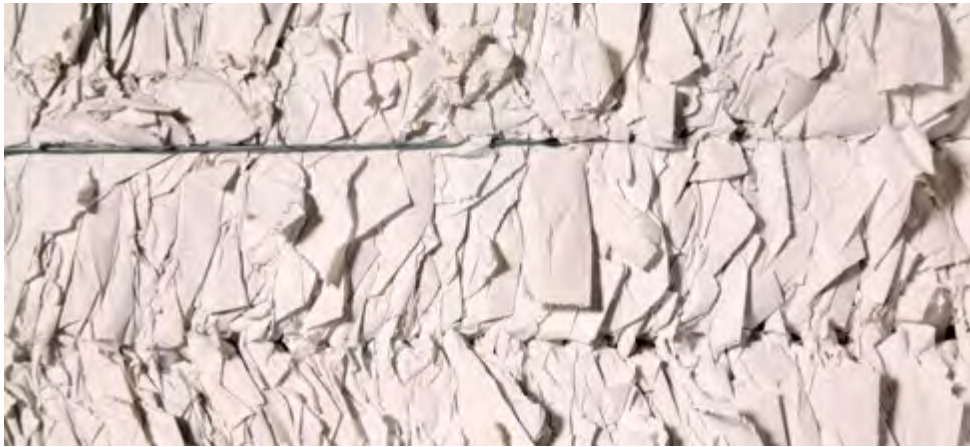
Since 2013, we have made capital investments that resulted in the closure of seven solid fossil fuel (coal and petroleum coke) power boilers and replaced this energy demand with either natural gas or biomass.

Our usage of fossil fuels continues to decline

We're committed to using energy economically and decreasing the intensity of purchased energy (non-biomass) and associated greenhouse gas emissions in our operations. This has reduced the amount of BTUs derived from solid fossil fuel by 63%.

MMBTUs derived from solid fossil fuels





We've implemented innovative bleaching technologies

Georgia-Pacific has eliminated the use of elemental chlorine in all of our facilities; therefore, all of our bleached pulp and paper products, including those that we manufacture, may be classified as Elemental Chlorine Free (ECF). Elemental Chlorine Free is a technique that uses chlorine dioxide for the bleaching of wood pulp. It does not use elemental chlorine gas during the bleaching process and prevents the formation of dioxins and dioxin-like compounds. ECF technology complies with U.S. EPA wastewater effluent limitations and has low environmental and health and safety impacts, as compared to the use of elemental chlorine bleaching. ECF also has higher wood yields than other alternatives, resulting in greater land efficiency.

Some of our mills have individual process lines that do not use any chlorinated compounds, and the specific products manufactured on those lines may be classified as being Processed Chlorine Free (PCF). PCF products contain recycled content produced without elemental chlorine or chlorine derivative; although, one or more fiber components may have originally been bleached with chlorine or chlorine derivatives. Any virgin pulp is totally chlorine free or produced without using any chlorine compounds for wood pulp bleaching.

Learn more about how GP reduces our environmental impact.

TODD WINGFIELD 

GP's largest energy source is biomass

We're proud to say that Georgia-Pacific's largest energy source is biomass—wood fiber, bark, and other organic materials. We have used these materials for many years to help power our wood and paper manufacturing facilities. It's just one of the innovative ways in which we serve as good stewards of our resources.

GP Fuel mix



CHALLENGE



CONTROL

EMISSIONS

The reduction of emissions

How Georgia-Pacific keeps its output in check

Much like our approach to non-renewable resources, we apply transformative, technological solutions to our business and our clients' businesses to help control emissions of all kinds. Through creative problem solving, we can reduce our environmental impact, so that the impact that's truly felt is one of value. We do this in several key areas: air, waste, greenhouse gas, and water.



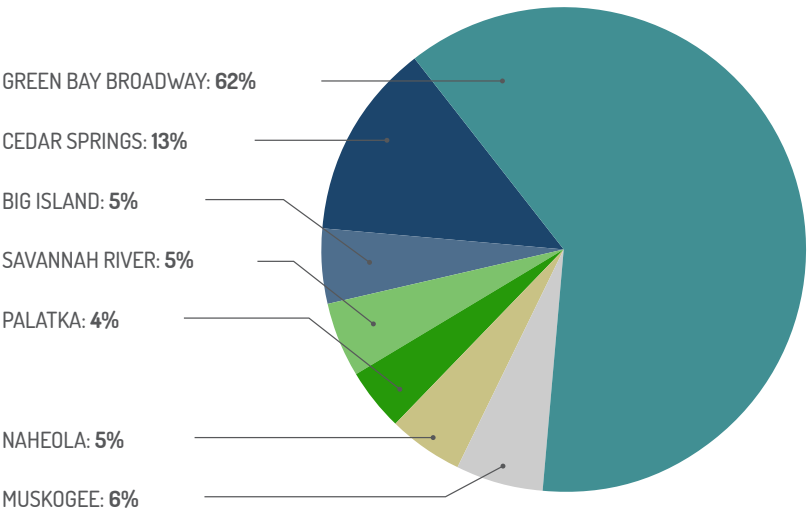
Alison Conroy
Director, Environmental Sustainability

Air

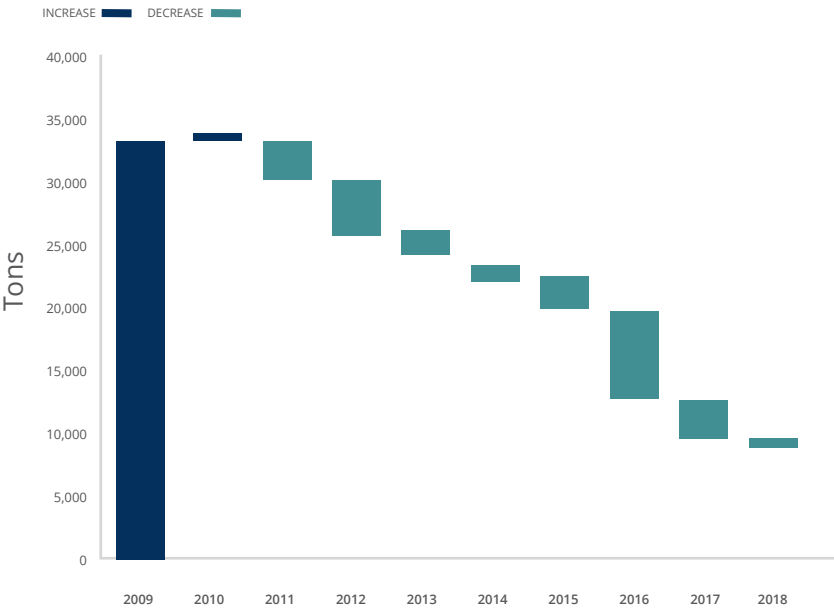
At Georgia-Pacific’s Broadway Mill in Green Bay, Wisconsin, we invested in improvements that generated immediate impact to the reduction of SO₂ emissions, which contributes to smog. By converting that facility’s coal-fired boilers to natural gas, the mill dramatically reduced its sulfur-dioxide emissions by 94%, yet boosted its energy efficiency. In fact, GP’s facilities have realized a 59% reduction in SO₂ emissions—that’s nearly 30,000 tons—during the last five years, with even more reductions on the way. Great results like these can be found throughout Georgia-Pacific.

Learn more about how we can be sustainable in everyday actions.
ALISON CONROY

Mill-Specific Contributions to Reductions | 2009—2018



SO₂ Emissions from Pulp and Paper Mills



Waste

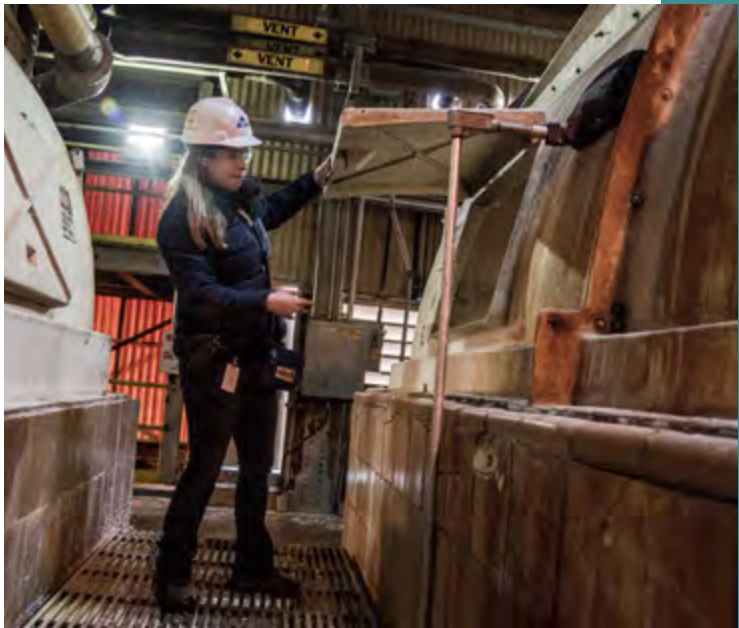
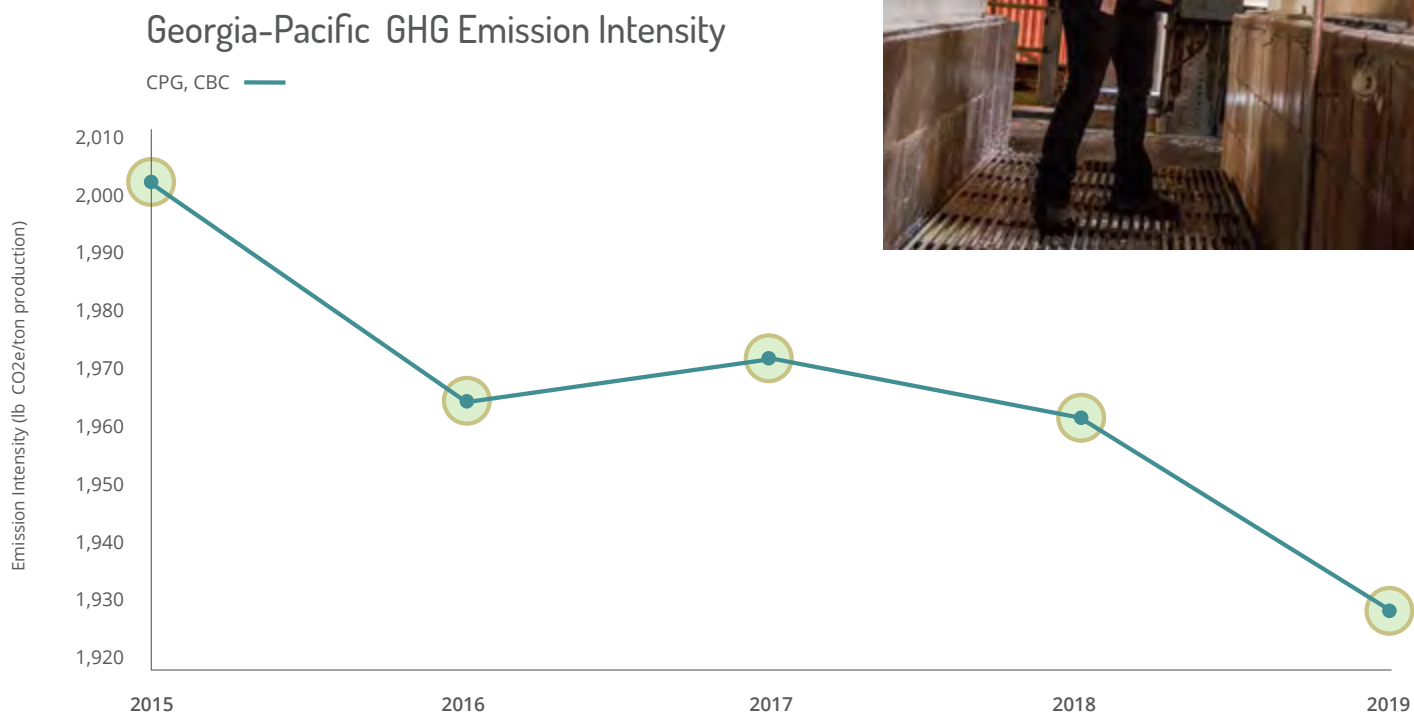
Georgia-Pacific’s Naheola mill, located in Alabama, has diverted nearly 88% of its waste from the landfill. That’s 82,552 cubic yards of process waste in 2019 alone.

1 GP MILL DIVERTED ENOUGH WASTE TO FILL
25 OLYMPIC SWIMMING POOLS

Greenhouse Gas

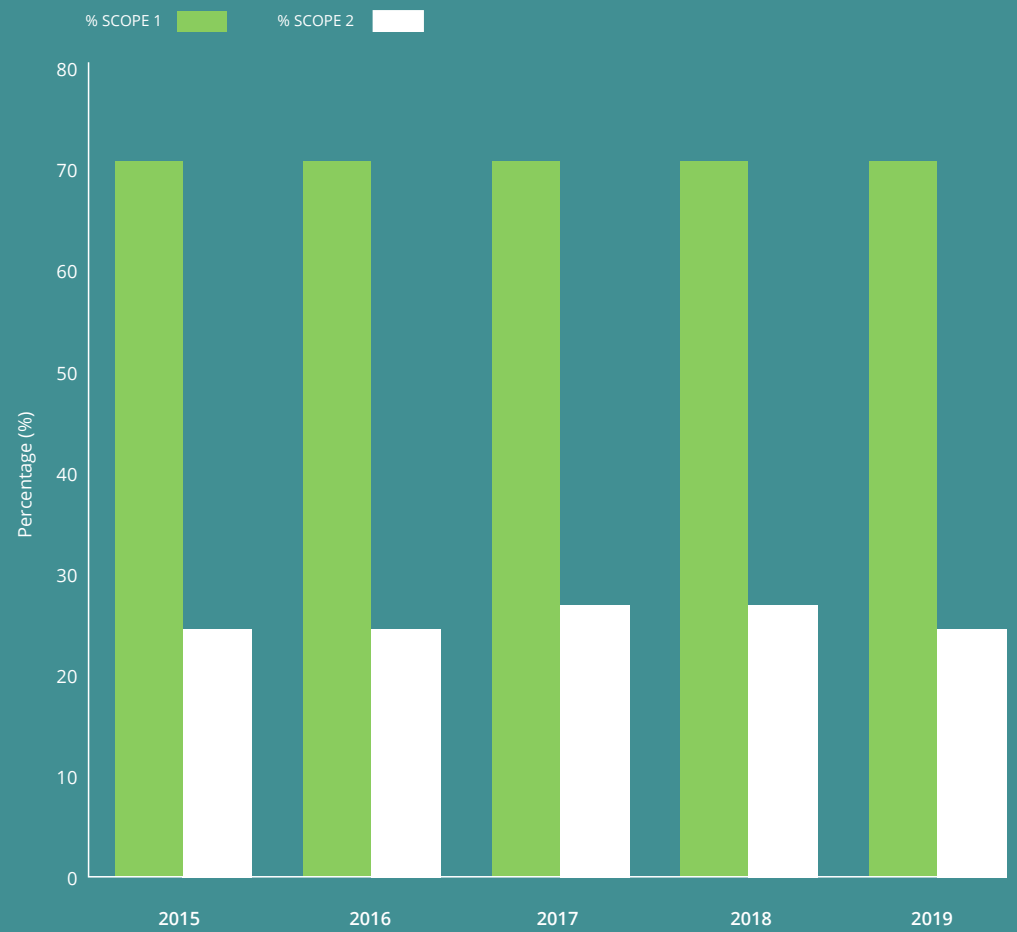
Georgia-Pacific has made significant investments which have helped to reduce the greenhouse gas intensity of our operations. We work with our customers who have established carbon-reduction goals for their supply chain and have participated in the CDP survey since 2014.

In 2019, approximately 55% of our energy needs were derived from renewable biomass sources, representing over 9% of the electricity generated from woody biomass in the entire United States.



CONTROL

GP GHG Emission Profile



Water

While a significant amount of water flows through our mill systems, only about 12% of it is consumed during the pulp and papermaking process. Most is recycled, treated thoroughly to remove contaminants, and usually returned to the body of water it came from. Georgia-Pacific treats its wastewater discharges in compliance with U.S. Environmental Protection Agency standards and state standards.



CONTRIBUTE

SUSTAINABLE PRODUCTS



What we make,
makes a difference

How Georgia-Pacific products contribute to
the greater good

By creating highly valued products while minimizing our global
impact, we offer our consumers and partners choices they can
feel good about.



CONTRIBUTE

Delivering Societal Benefits

We take our role as an industry leader very seriously and know that we aren't just making things. We're helping to shape the world around us through a variety of societal benefits:



Shelter

Forest products are essential to the creation of homes, apartments, workplaces, and places of worship.



Hygiene

Our Consumer Products business provides essential hygiene products, including bath tissue, paper towels, and paper cups, while our Cellulose business provides ingredients used for feminine hygiene, baby care, and adult incontinence products.



Convenience

Paper packaging helps with the quick transfer of goods, allowing consumers and the foodservice industry to access what they need, when they need it.



Product Protection

Whether it's facilitating the transport of goods from manufacturers to store shelves or enabling the growth of e-commerce, paper-based packaging helps drive our economy.

Offering Sustainability with Our Brands

In 2018, our Consumer Products business launched Aria®, a sustainably positioned premium bath tissue brand, to capture the environmentally conscious market and younger shoppers. The tissue's environmental attributes deliver quality and comfort, and due to the overwhelming response to this product, we have expanded this positioning into our Quilted Northern brand.

The manufacturing process utilizes a proprietary technology, through which we're able to efficiently use water and energy by recycling the water and mechanically removing a portion of it before drying. For the energy that is consumed, we use 100% renewable power through the use of biomass fuel and renewable energy credits. According to a recent Life Cycle Assessment (LCA) conducted by Georgia-Pacific in 2017, our proprietary tissue technology is less energy-intensive on a per usage occasion basis when compared to through-air dried technology.

- **21% LESS PRIMARY ENERGY DEMAND**
- **12% LOWER GLOBAL WARMING POTENTIAL**
- **14% LESS OZONE DEPLETION**

Forestland in the United States has increased by 6% since 1920, a period in which the U.S. population has tripled, an indication that we're using these natural resources sustainably.

Participating in the Circular Economy

The circular economy aims to redefine growth, focusing on positive, society-wide benefits. It entails gradually decoupling economic activity from the consumption of finite resources, and designing waste out of the system. GP wants to keep products in their highest state in use as much as possible.

Circular Economy Success: Corrugated Containers

The corrugated container market is a great example of circularity success. The paper used to make these boxes originally came from trees and boxes contain a high percentage of recycled content. At the same time, it has the highest recovery rate for the recycling of any commodity. According to the American Forest & Paper Association, the tons of corrugated containers recovered for recycling amounted to more than 92% of the total production of the industry over the past three years.

Recycling the Right Way

Our businesses continue to make investments that increase our ability to economically use recovered paper:

- We've increased our capability to process mixed paper in our Consumer Products business by more than 50%.
- At our Toledo, OR mill, the Packaging & Cellulose business is launching our Juno® technology, which will enable us to recover paper, plastic, and other valuable materials from commercial waste streams.
- GP Recycling, a Georgia-Pacific company, is one of the world's largest buyers and sellers of recycled fiber and supplies GP facilities as well as sells to other recycled fiber users.

Providing Environmental Impact Data at the Product Level

Environmental Product Declaration (EPD) is a standardized way of quantifying the environmental impacts of a product or system in accordance with ISO 14025. It is a summary document of the results of a Life Cycle Assessment study conducted according to the guidelines specified in the Product Category Rule (PCR) for a specific product category. At Georgia-Pacific, we have created over 30 EPDs for our Gypsum Wallboard/Glass Mat Gypsum Panels. These EPDs allow building projects to help earn LEED® points by using GP's products in construction.



CONTRIBUTE



GP HAS OVER 30 EPDs
COVERING OUR PAPER-FACING AND
GLASS-MAT GYPSUM BOARDS





CONNECT

SOCIAL IMPACT



Our commitment to the community

How Georgia-Pacific is helping to improve people's lives

We champion our employees, neighbors and customers through empowering, community-based programs that help improve the lives of those located wherever Georgia-Pacific serves.

Financial Support

We've been able to help a number of causes that make a true impact on our communities, many of which are located near Georgia-Pacific facilities.

Bucket Brigade

Once every 24 seconds, a fire department responds to an alarm somewhere in the United States. Surprisingly, two-thirds of them are volunteer based and most are underfunded. That means many of the firefighters who risk their lives every day to protect people, property, and pets are doing their jobs with outdated or otherwise inadequate equipment. In 2006, Georgia-Pacific launched its Bucket Brigade program to help support local fire departments and the brave men and women who strive to keep our communities safe.

Convoy of Hope

Georgia-Pacific partners with Convoy of Hope, an international humanitarian organization, to supply products such as bath tissue, paper towels, and tableware in places affected by natural disasters.

**40 TRUCKLOADS
OF PRODUCTS
DONATED IN 2017**



**\$4.9M IN
DONATED GOODS
SINCE 2008**

**HELPS VICTIMS
OF HURRICANES,
EARTHQUAKES,
WILDFIRES**

Project Green Hands

In 2013, GP Cellulose partnered with UNICEF, who is working with the Chinese government to ensure access to safe water and basic hygiene for children. In 2019, this program expanded into India through Project Blue Hands. These programs help promote hygiene by:

- Building, upgrading, and maintaining water, sanitation, and hygiene facilities.
- Instituting behavior changes and awareness campaigns.
- Supporting health programs in schools.

A green rectangular graphic with white line-art icons of a hard hat, safety glasses, a fire coat, and boots. Below the icons, the text reads: ">\$2.7M CONTRIBUTED", "USED TO PURCHASE COATS, BOOTS, SAFETY GEAR, EQUIPMENT", and "AWARDED TO FIRE DEPARTMENTS WITHIN 30 MILES OF GP FACILITY".

**>\$2.7M
CONTRIBUTED**

USED TO PURCHASE COATS, BOOTS,
SAFETY GEAR, EQUIPMENT

AWARDED TO FIRE DEPARTMENTS
WITHIN 30 MILES OF GP FACILITY



CONNECT





CONNECT



Volunteerism

Our employees are committed to supporting their communities, as evidenced by the investment of their time.

GP Buddy Program

The GP Buddy Program is an employee volunteer tutoring program designed to enhance academic and literacy skills of students at M. Agnes Jones Elementary in Atlanta, GA. GP employees partner together to tutor and mentor a student, twice a month.

Habitat for Humanity®

GP teams up with Atlanta Habitat for Humanity to construct homes and provide resources for qualified, hardworking families. Employee volunteers dedicate their time to several build days and the house dedication once the project is complete.



>\$2.6 MILLION
SINCE 1996

IN-KIND DONATIONS OF BUILDING MATERIALS

EMPLOYEES
HELPED
RAISE

>\$6M
SINCE 2006



Susan G Komen®

Georgia-Pacific is committed to raising awareness and participating in fundraising opportunities to support Susan G. Komen and breast cancer research. GP sponsors Komen Race for the Cure events in communities near GP facilities. Our employees have helped raise more than \$6 million since 2006.



>1,400
EMPLOYEE-DONATED
HOURS IN 2019

ServiceForce

Georgia-Pacific's employee volunteer program is a network of GP employees and retirees who make a difference by volunteering for company-sponsored service projects and events in their communities.

“

Georgia-Pacific comes together as one company: a wide-ranging and evolving community of people working together. Diversity in experience, thought, and perspective makes GP a more innovative place. Ensuring everyone brings their uniqueness to the company is critical to our success. Many different people, but we are one GP.

Julie Brehm, VP of Human Resources

”



“

Georgia-Pacific products are part of everyday life. And while they fill a diverse range of home, commercial, and industrial needs, they have one thing in common: they're all made to high standards of quality and safety. **Our 30,000 employees around the world are always looking for better ways of doing things.**

Dawn Wurst, SVP, Health & Safety

”

AWARDS AND RECOGNITION

We appreciate the recognition we've received from local and federal government agencies, non-governmental organizations and customers, and are especially proud of the Georgia-Pacific employees who helped make these awards possible.



2019 EPA Energy Star Project of the Year

With the installation of the new biomass-fired boiler, our Naheola mill in Pennington, AL significantly reduced its environmental emissions.



2019 SmartWay® Excellence Award

Georgia-Pacific and KBX Logistics LLC—also a Koch company—were awarded the 2019 SmartWay® Excellence Award from the EPA, based on our successes in energy efficiency and supply chain environmental performance.



EPA Energy Star Challenge for Industry

Three GP mills have achieved the EPA Energy Star Challenge for Industry by reducing energy intensity by at least 10%.

CERTIFICATIONS

Many Georgia-Pacific products and facilities are recognized and/or certified these third-party groups:



FSC® Chain of Custody



SFI® Certified Sourcing



SFI® Chain of Custody



PEFC™ Chain of Custody



LEED



ECOLOGO®



Green Seal



BPI Compostable



USDA BioPreferred® Program



Wildlife Habitat Council



UL Responsible Sourcing



GreenGuard®



Home Innovation NGBS



Safe Quality Food Institute



BRC Packaging

CLOSING THOUGHTS



Responsibility is our highest priority

A message from Christian Fischer, CEO

Every day, we work to create more value, using fewer resources than the day before. We do it by managing our resources in a way that benefits our customers, employees, partners, community members, and society with a philosophy of mutual benefit. With more than 180 locations, we're one of America's largest manufacturers. To stay in business for the long term, we must constantly improve and innovate—both in the products we make and how we make them. We look forward to what the future holds.

