

2019

PaperWorks Sustainability Report



PaperWorks



About Us

PaperWorks is a leading, integrated North American full-service provider of 100% recycled paperboard and specialized folding cartons for packaging applications. Our company specializes in providing folding carton solutions for a wide variety of market sectors including food, beverage, personal care, pharmaceuticals, nutraceuticals and medical devices and we are also known for our state-of-the art, extended color gamut printing capability.

We have invested in state-of-the-art technology over the past three years to upgrade our paperboard mills and folding carton converting plants to be at the forefront of innovation and market differentiation. PaperWorks is committed to the highest sustainable forestry and procurement standards.



Purpose

With your trust, we deliver positive experiences and innovative solutions.



Vision

To be the brand for brands.



Values

Safety.
Transparency.
Community.



2 PAPER MILLS | **5** CONVERTING FACILITIES

ACROSS EASTERN U.S. AND CANADA



Fiscal Structure
Privately held company

1,400
EMPLOYEES

Products

6 grades of recycled paperboard (coated and uncoated)

Paperboard carton design and conversion

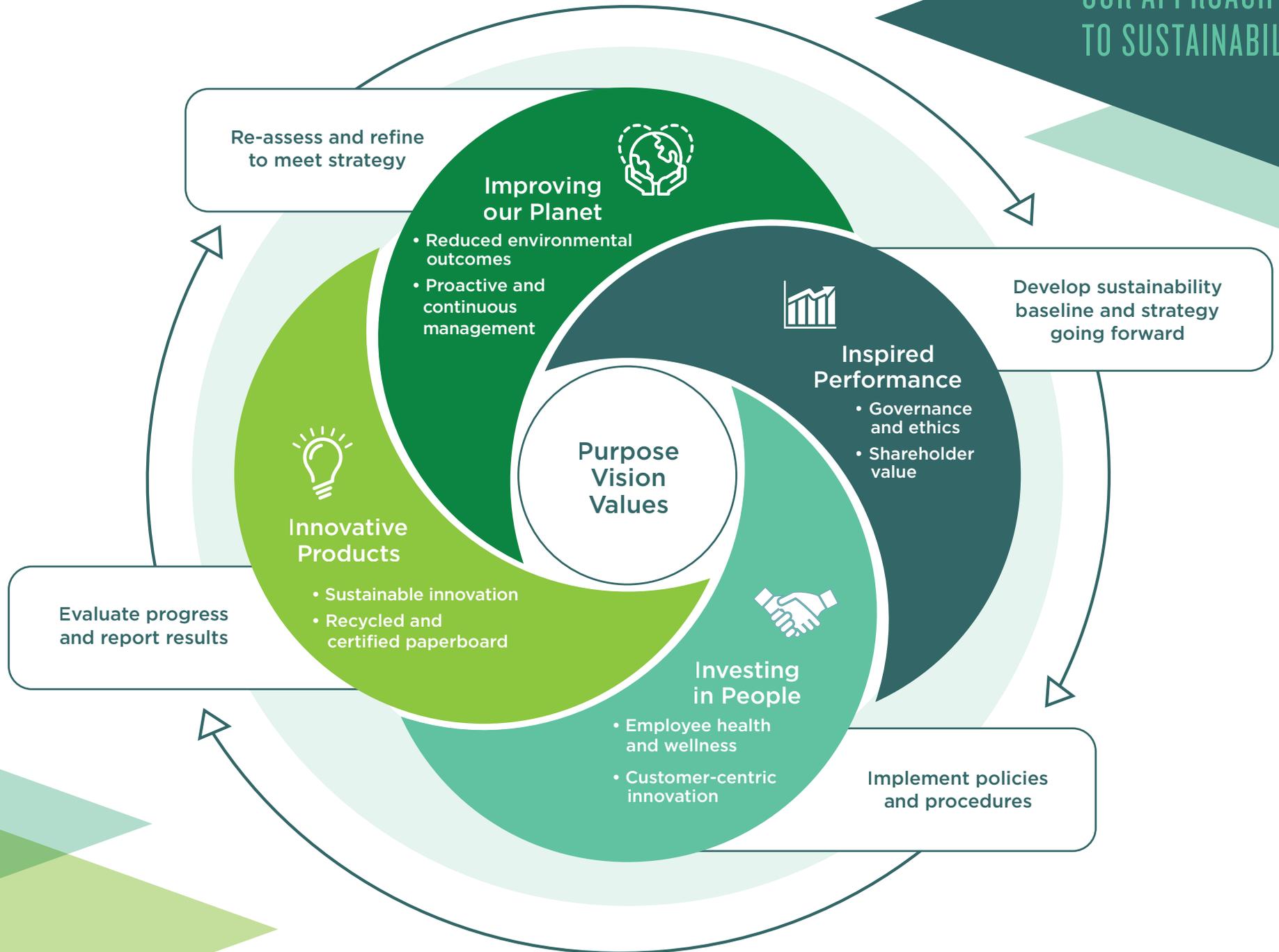
LITHO-LAMINATION

Available Certifications

Recycled Paperboard Alliance (RPA100)
Various Sustainable Forestry Certifications
Available Upon Request



OUR APPROACH TO SUSTAINABILITY



2019

Impact Summary

ENERGY	GHG EMISSIONS	WATER	Solid Waste to Landfill
GOAL: 20% reduction by 2028	GOAL: 15% reduction by 2028	GOAL: 5% decrease by 2028	GOAL: 50% reduction in absolute tonnage by 2028
PROGRESS: 3% decrease	PROGRESS: 2% decrease	PROGRESS: 22% increase ¹	PROGRESS: 9% decrease

Our “Sustainability Snapshot” covers performance between 2018-2019. Going forward, we will report annually against a 2018 baseline. To best assess our resource demand, we calculate our performance as an intensity score, qualifying total resource demand against total tons sold. This provides a more accurate assessment of resources used per ton sold rather than an absolute number that can fluctuate based on demand.

¹Please see page 7 for an explanation for the increased demand.

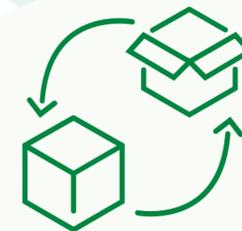


BALANCING CIRCULARITY WITH INNOVATION

Ensuring Circularity

As operators of recycled paperboard mills, we understand the value our domestic recycling systems can have in reducing environmental impact and creating economic opportunity. As an integrated carton provider, we recognize that recycling success is highly dependent upon product design. This full circle insight from product design to recovery provides our staff with valued insight into the 'design for recycling' process. The choice of inks, coatings, and laminations we use can have an impact on a package's ability to be recycled. Armed with this knowledge, our sales and design teams can work closely with our customers and vendors to ensure we can offer the best choices to help our customers meet their sustainable packaging goals.

As interest in the circular economy grows, we understand an increasing number of our customers are setting goals to increase the amount of recycled content within their products. Frequently our post-consumer recycled content claims exceed industry norms and we are happy to supply additional documentation to support customer interest.



Ensuring Circularity

Our Wabash Mill is one of the few Mills in North America that can provide a 100% recycled board which has the clarity and whiteness of an SBS board—PaperWorks’ MasterWorks Ultra100 Board. The innovative Ultra100 board benefits our customers by helping them reduce their Greenhouse Gas (GHG) emissions and by providing a paperboard with the image of a virgin grade board but with fewer resources. Using recycled content, we reduce energy and material demand to create a paperboard with a much lower carbon footprint. While we consider this an environmental success, it should be noted that the process of manufacturing a board that can compete with virgin grades requires a more robust pulping and cleaning system.

Recycled paper is created from using a wide range of recycled paper products. We may have a mix of newspapers, corrugate, window envelopes or poly-coated paperboard. The two later products for example, include small amounts of plastic which must be separated from the paper pulp and removed. Any small amounts of plastics or other potential contaminants within the paperboard can create an ‘off specification’ look and add additional texture to the board—making it more difficult to create clean graphics or solid adhesive

coatings. The process of ‘pulping’ and cleaning to remove these non-paper products requires an increase in demand for fresh water.

**REDUCE WATER
DEMAND BY 5%**

Typically, our Mills recycle 90% of their water, but on days that we produce the ultra- white board we can only use about 60% of that recycled water and must draw additional water from our onsite freshwater wells. This explains why we have seen an increase in our water demand.

Now that we have achieved this exciting sustainability innovation we will continue to work with emerging science and manufacturing processes to identify ways we can reduce water demand to create a product that offers a win-win across all sustainability performance metrics. We continue our efforts to decrease cumulative water demand by 5% from our 2018 baseline.

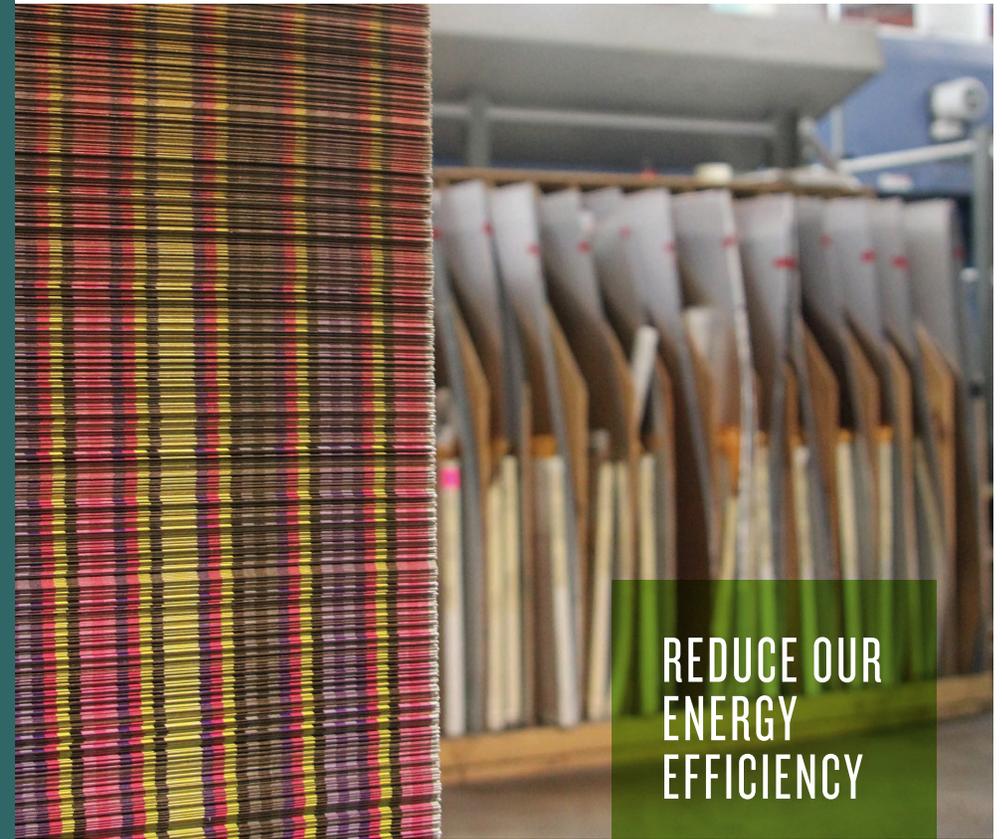


Manufacturing Responsibly



At PaperWorks, we take our responsibility to provide safe products, seriously. We are pleased to announce that we have made significant progress in reducing hazardous inks and solvents across our printing processes. Through concerted material substitution, two of our sites previously deemed large quantity hazardous waste operators, have now received exempt status. We are continuing to explore more benign alternatives to the inks, coatings and cleaning products we bring into our facilities. These efforts have resulted in a 5% reduction in our VOC emissions since 2017.

**CELEBRATING
BETTER BUILDINGS,
BETTER PLANTS
PARTNERSHIP**



**REDUCE OUR
ENERGY
EFFICIENCY**

**20%
BY 2028**

Manufacturing accounts for more than a quarter of U.S. energy use and slightly less than a quarter of our national GHG emissions.

The good news is we know that improved energy efficiency can reduce costs and strengthen the economic vitality of our industry all while protecting our environment. Working towards the goal of reduced energy and reduced greenhouse gas emissions, PaperWorks is pleased to be in partnership with the Better Buildings, Better Plants program offered by the Department of Energy. As part of our commitment to the program, PaperWorks has pledged to improve our energy efficiency by 20% by the year 2028.



Serving As a Partner of Excellence

PaperWorks was created eleven years ago and has quickly grown to become one of the industry's largest independent recycled paperboard providers. Amidst our rapid growth and change, we have remained focused on our desire to operate ethically with integrity, responsibility, and vision.

In 2018 we released an updated Code of Conduct reflecting the company's Purpose, Vision and Values. We've been following up the release of this code with staff meetings and 'Great Place To Work®' tours to ensure our employees have an opportunity to share their insights and add value to our culture of excellence.

SAFETY.
TRANSPARENCY.
COMMUNITY.

