



# Sustainability Report 2015



*"Sauder continues to honor these principles by producing environmentally responsible products in ways that conserve our world today and preserve it for future generations."*

*- Kevin Sauder*



# Introduction

Some companies claim to be “green” but don’t walk the talk. Other companies consistently demonstrate their environmental stewardship through their actions. In today’s business and retail world, it can be difficult to tell the difference. But not with Sauder.

Sauder’s commitment to environmental sustainability started over 80 years ago when Erie Sauder, a frugal entrepreneur and founder of Sauder Woodworking Co., insisted on reclaiming wood trim and scraps and finding ways to re-use that material. As early as the 1950s, Erie was diverting wood scraps from western lumber mills and bringing them to his Ohio factory to be re-processed into functional, affordable furniture. His pioneering development of Ready-to Assemble furniture not only opened new furniture channels, it also optimized furniture freight and eliminated enormous amounts of harmful diesel emissions.



Erie J. Sauder, company founder

Perhaps the most visible example of Sauder Woodworking’s environmental stewardship is its bio-fueled co-generation system. Wildly ahead of its time when it was first commissioned in 1993, Sauder’s co-gen plant produces electricity and steam from sawdust, wood trim, and other waste wood. This facility remains a cornerstone of Sauder’s environmental stewardship strategy. Sauder is leveraging its co-generation capabilities as well as its extensive re-use and recycling programs to make a difference in the environment.

Today, in its third generation of family leadership and entering into its 82nd year, Sauder continues to seek “better ways” in all that we do. Our mission statement, Creating Better Ways, to offer Better Value, for Better Living, calls us to challenge the status quo and to seek continuous improvement. Finding “better ways” to Reduce, Re-use, and Recycle natural resources is an important part of offering “better value” and ultimately “better living” for our employees, customers, and consumers.

I hope you enjoy our 2015 Sustainability Report, and I welcome any comments or suggestions for improvement that you may have.

Garrett D. Tinsman  
EVP, Operations  
Sustainability Leadership Team  
gtinsman@sauder.com



Sustainability Leadership Team

Team members: (left to right) Mark Weaver, Garrett Tinsman, Jeff Weber, Richard Nyce, Mike Zimmerman, Julie Houser, Mark Ryan

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# Sauder Environmental Sustainability Policy



Sauder Woodworking was founded in 1934 on the principles of stewardship and servanthood. Today, three generations later, Sauder continues to honor these principles by producing environmentally responsible products in ways that conserve our world today and preserve it for future generations.

Sauder uses highly sustainable natural resources in our products, and we protect the environment through efficient operational strategies. Ongoing performance is evaluated with unbiased metrics, and our continuous improvement initiatives focus in the key areas that impact the environment and influence our long-term corporate stewardship.

We are committed to conducting our operations in accordance with all applicable laws and regulations, and to engaging with industry and public stakeholders to develop responsible standards and voluntary initiatives that support this sustainability policy. Sauder is committed to sharing its sustainability performance and management practices to promote transparency and adoption of best practices for environmental stewardship.

We expect our suppliers to adhere to the applicable social and environmental laws of the countries, regions, and cities in which they operate. Furthermore, we encourage our suppliers to surpass baseline requirements and, where possible, to reduce the environmental impact of their operations.

Sauder's Sustainability Leadership Team will guide our environmental sustainability improvement efforts and provide regular progress reports to the Chief Executive Officer and Board of Directors. We encourage all Sauder employees to share the responsibility for advancing our environmental sustainability.

By conducting our business in this manner, we align our long-term success with the earth's ecological well-being and create enduring benefits for our shareholders, customers, suppliers, employees, and the communities in which we live and work.

## Key Focus Areas:



Kevin J. Sauder  
President & CEO



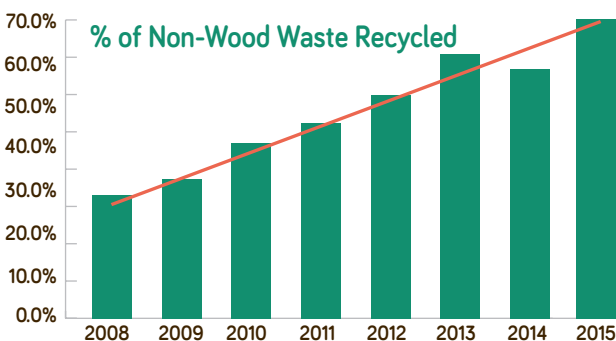
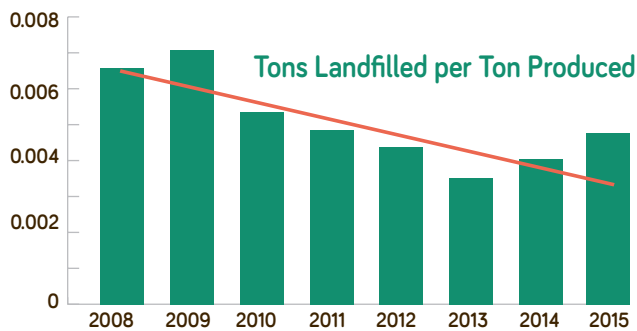
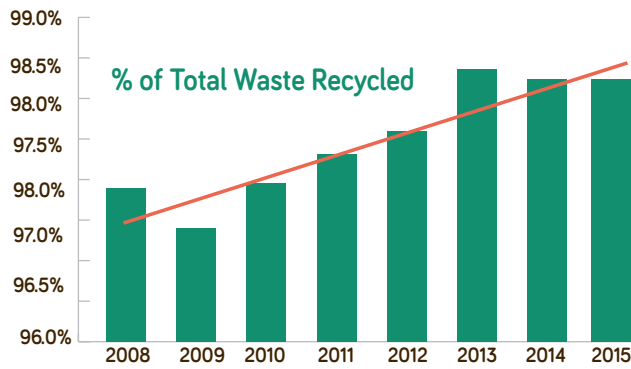
# Solid Waste and Recycling

Whether it is optimizing the yield from raw materials, finding new ways to re-use rip cuts and head cuts in manufacturing, or developing creative outlets to recycle waste, Sauder is setting the standard for reducing, re-using, and recycling solid waste within the ready-to-assemble furniture industry.

Sauder's co-generation plant, featured on page 5, is the furniture industry's largest biomass energy plant. In addition to diverting wood waste from landfills, the co-generation plant creates renewable, carbon-neutral energy. More recent efforts to reduce, re-use, and recycle solid waste have focused on non-wood waste streams. Although non-wood waste is a minority of Sauder's total waste, it represents Sauder's largest improvement opportunity. For example, a by-product of the co-generation combustion process is fly ash. This fly ash accounts for approximately half of Sauder's remaining landfill volume. Finding a recycling opportunity for this material has remained elusive but is vital to reaching our 2020 solid waste goals.

In addition to recycling 98.4% of total solid waste, Sauder achieved a new record by recycling over 70% of its non-wood waste. Although the recent trend in the "tons landfilled per ton produced" may seem troubling, it actually reflects a product mix shift away from high volume opening price point items and toward a more fashion-forward product offering. While production activity and sales volume have remained constant, the total weight of this product mix is less. This shift has impacted the metric. Sauder's commitment to minimizing all waste streams remains steadfast.

Creatively pursuing re-use and recycling has sparked some fulfilling opportunities for Sauder to be a good community citizen while also being a good environmental steward. Two of the many examples are highlighted in this report.



## The Furniture Bank:

During 2015, Sauder donated almost 5,000 obsolete laminated panels (weighing close to 400,000 pounds) to the Furniture Bank of Central Ohio. The Furniture Bank converted this raw material into attractive and functional furniture for low-income clients. By partnering with the Furniture Bank, Sauder was able to transform a potential waste stream into a positive community outcome.



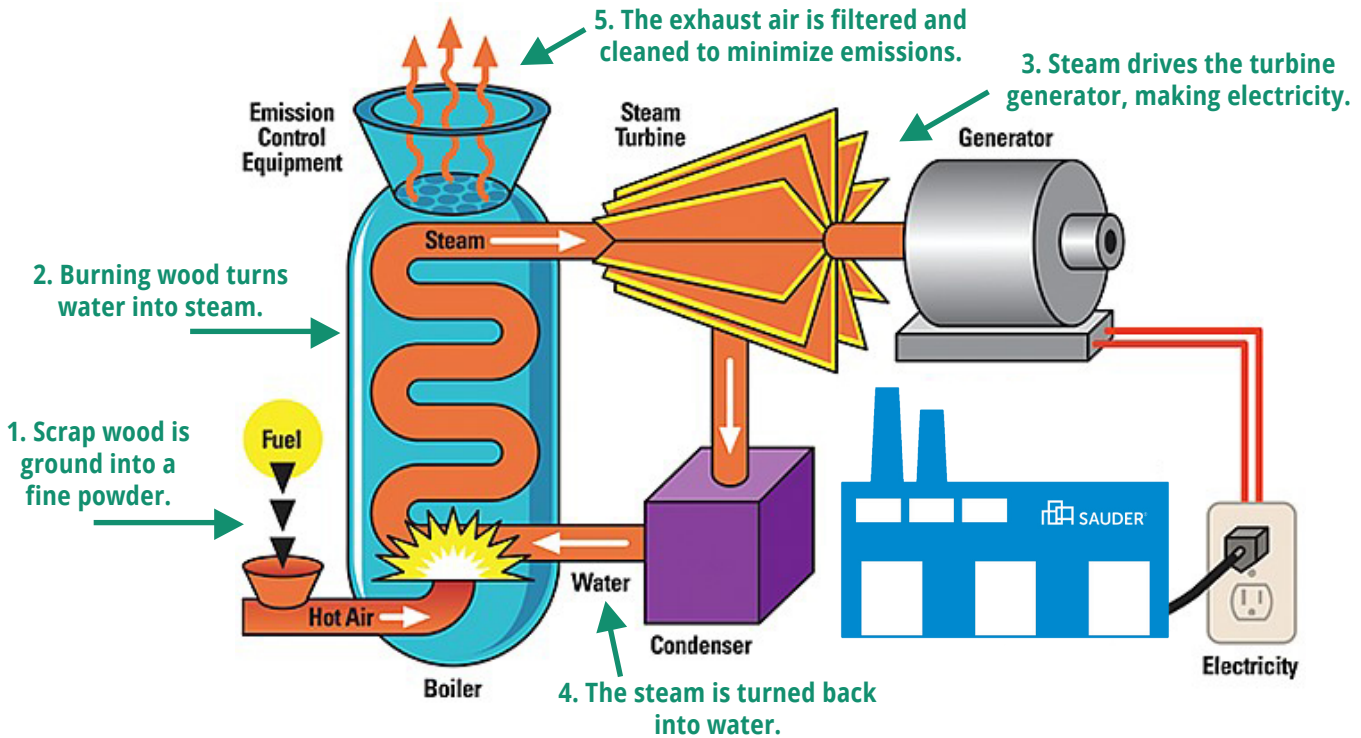
## Habitat for Humanity ReStore:

During the normal course of business, Sauder accumulates samples, prototypes, and quality inspection pieces that cannot be sold into normal retail channels. Instead of scrapping this material, Sauder has partnered with the Habitat for Humanity ReStores in Maumee and Defiance, Ohio to utilize this furniture. During 2015, Sauder sent over 20 truckloads of furniture to Habitat. The Habitat ReStore sells this furniture at deeply discounted prices and uses the proceeds to finance additional Habitat for Humanity home build projects. It feels good to do good for the environment, while doing good for our neighbors as well.



# Sauder Co-Generation Plant

Originally installed in 1993, Sauder's co-generation plant has been continuously operated, maintained, and upgraded ever since. Today, the co-gen plant supplies over 1/3 of Sauder's power requirements through renewable, carbon-neutral biomass. The following diagram graphically explains how the co-gen plant works.



It is important to note the inputs and outputs of Sauder's co-generation system. There are only three inputs to the system – air, water, and wood fuel. The co-generation process consumes over 110 million pounds of wood fuel per year. That's 110 million pounds of material that did not go to area landfills. Notably, woody biomass is a renewable fuel. In fact, according to the Food and Agriculture Organization (FAO) there are more acres of forest land today than there were 100 years ago.

The outputs of the co-generation process are electricity, steam, and exhaust air from combustion. The high pressure steam from the boilers turn turbine generators that generate approximately 38 million kilowatt hours of power per year. This electricity is either used internally or supplied onto the electrical grid to supply other users. And every kilowatt hour generated using renewable biomass is one less kilowatt hour that must be generated from fossil fuels. A portion of the steam is also diverted to other local companies for process heat requirements. These complementary uses further reduce the need for traditional fossil-fuel consumption.

The final output is exhaust air from burning the wood fuel. Sauder has invested in control equipment to ensure that the benefits of biomass generation are not lost by damaging emissions. High tech burners generate nearly complete combustion. Remaining emissions from the combustion process go through a cyclone to remove particulate, a large electrostatic precipitator to further clean the air, and finally a catalytic converter to remove nitrogen-oxygen compounds. The combination of a clean burn and state-of-the-art controls minimizes any environmental impact.



Sawdust is ground and stored in three main silos.



Wood is burned in the boiler to generate steam.



Steam drives a turbine generator to create electricity.



The cooling tower turns steam back into water.

# Energy/Carbon Footprint

Sauder is investing regularly to reduce its CO<sub>2</sub>e\* intensity. In fact, since 2012, Sauder has invested close to \$5 million in technologies to reduce energy consumption and improve energy efficiency. Countering these positive actions is a combination of environmental and market-based forces that meaningfully impact Sauder's energy consumption and carbon footprint.

## Major Energy Efficiency Investments

### Eco-Gate Dust Collection Technology:

Dust collection is Sauder's single, largest user of energy, and Sauder has invested in state-of-the-art Eco-Gate systems to minimize dust collection energy consumption. The new Eco-Gate system includes variable speed drives, re-sized piping, automated gates, and electronic controls to reduce power consumption.

### Lighting Upgrades:

Sauder has replaced over 6,000 older light fixtures with energy-efficient fluorescent fixtures. In some areas, motion sensors and controls further minimize energy use by turning off lights when an area is unoccupied.

### Compressed Air Optimization:

Sauder installed piping to link air compressors across four major production buildings into one, closed-loop system. By linking the buildings, Sauder can share and optimize compressed air capacity and reduce energy consumption.

### Co-Generation Plant Improvements:

Sauder has worked with a thermodynamics expert to identify efficiency losses and implement improvement opportunities in its co-generation plant.

## Market & Environmental Headwinds

### Cold Winter Weather:

The average Heating Degree Days, a measure of heating requirements based on temperatures, for 2013-2015 was 14.3% higher than for 2010-2012. Elevated Heat Degree Days contributes to higher natural gas usage for heating.

### Product Market Changes:

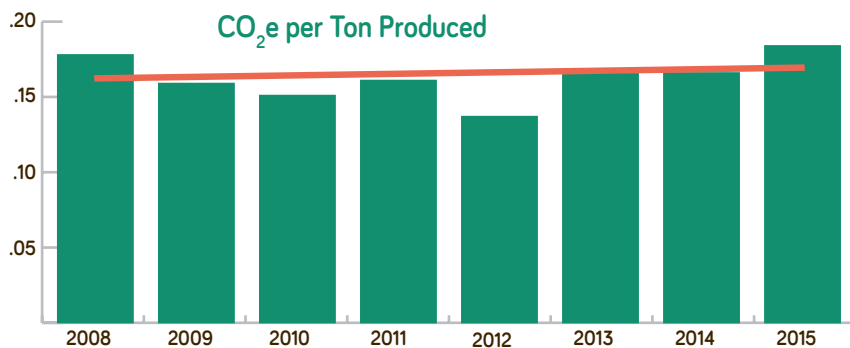
E-commerce (on-line furniture retailing) is growing dramatically, and effectively supporting the e-commerce channel requires more products and more product differentiation. Both of these trends impact Sauder's carbon footprint. More products lead to lower lot sizes and more changeover time. More product differentiation requires a broader range of production technologies. Increased changeover time and broader use of production capabilities lead to increased energy consumption without an equivalent increase in output.

### Staff Shortages:

The improving economy has driven unemployment rates in Northwest Ohio below 4%. Staff shortages and elevated turnover have led to increased overtime, reduced efficiency, and higher energy usage.

### New Business Development:

A major growth opportunity led Sauder to install new equipment and utilize an additional 300,000 square feet of space. Until this capacity and space is fully utilized, new business development will adversely impact energy usage.

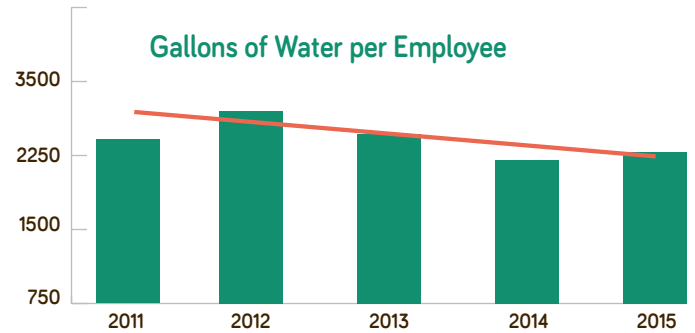
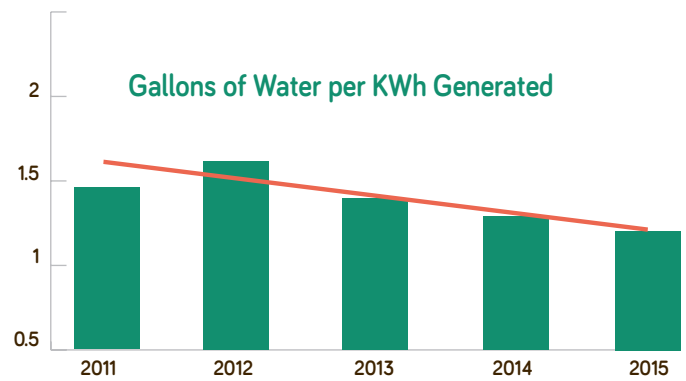


Although the metric of "CO<sub>2</sub>e per Ton Produced" does not reflect improvement, Sauder is proud of the investment and impact that we have made toward reducing our carbon footprint. The carbon-neutral nature of the co-gen plant reduces Sauder's carbon footprint by 31%. Without the co-gen and these other investments, Sauder's carbon footprint would have been substantially higher. Our desire to act in a responsible and environmentally sustainable manner will continue to motivate Sauder to invest in energy efficiency.

\* CO<sub>2</sub>e is a unit of measurement used to compare the relative climate impact of different greenhouse gasses. The CO<sub>2</sub>e quantity of any greenhouse gas is the amount of carbon dioxide that would produce the equivalent global warming potential.

## Water Conservation

Approximately 90% of the water consumed by Sauder evaporates as part of the cooling process at the co-generation facility. The other primary use of water is for sanitary purposes. Thanks to employee awareness efforts and investments in reverse osmosis water treatment and boiler tube upgrades, both of these uses are trending down and nearing our 2020 goals. Ongoing improvement in water consumption will remain a focus of Sauder's sustainability efforts.



## Sustainable Products

Sauder furniture has been responsibly manufactured in the United States for 82 years. Our formula for sustainable furniture is very simple: Start with the right product designs (fashionable, functional, manufacturable, and efficiently transportable), utilize the right raw materials (maximizing sustainable resources and recycled content), and utilize the right processes (minimizing waste in all its forms).

Toward that end, 100% of the wood fiber that goes into Sauder's domestically produced products has been classified as "controlled wood" by the Forest Stewardship Council (FSC). Controlled wood avoids forestry practices that carry high environmental and social risk. Sauder also ensures that all of its North American composite panels are certified under the Eco-Certified Composite (ECC) program. The ECC program goes beyond the confines of FSC certification and takes a holistic approach to ensuring environmentally responsible wood products. In addition to responsible forest management, the ECC certification includes factors such as Carb2 formaldehyde compliance, how far forest products are transported before being processed, the percentage of the wood that is actually utilized by panel manufacturers, the carbon footprint of the panel manufacturing processes, and the percentage of recycled or reclaimed materials used in panel production. Sauder is committed to utilizing 100% ECC panels to promote broad-based environmental stewardship.



Recycled content is also an important consideration in sourcing raw materials. Sauder utilizes a high percentage of materials and packaging that is produced from post-consumer and post-industrial recycled materials. And Sauder's ready-to-assemble furniture format minimizes the freight volume and the associated carbon emissions from truck and rail freight. The result is a product that combines outstanding style, cost effective value, and outstanding environmental stewardship.

## Product Stewardship



Right Products



Right Materials



Right Processes

# 2020 Environmental Sustainability Vision

Sauder has established a core set of quantifiable goals in areas that we view as critical to environmental sustainability. These goals establish the vision of what can be achieved if we create the right focus, support that focus with appropriate resources, and engage the entire Sauder team. They are inspiring goals that can rally people to achieve great things. And they are goals that, if achieved, will make our employees, company, community, and customers proud. The following table presents our progress toward our 2020 goals.

Area / Metric:	Baseline Measure	2015 Actual	Improvement vs. Baseline	2020 Goal	Improvement Goal
<b>Energy / Carbon Footprint</b>					
Metric Tons CO <sub>2</sub> e per Metric Ton Produced	0.178 Tons	0.184	(3.4%)	.120 Tons	32.6%
<b>Solid Waste / Recycling</b>					
Tons Landfilled per Ton produced	0.00656 Tons	0.00473 Tons	27.9%	0.00131 Tons	80%
% of Solid Waste that is Recycled	97.4%	98.4%	1.0%	99.5%	2.2%
% of non-Wood Waste that is Recycled	31.6%	70.9%	124.4%	80%	153.2%
<b>Water</b>					
Gallons Used per Kw Generated	1.45 Gal.	1.23 Gal.	15.2%	1.23 Gal.	15%
Avg. Gallons Used per Employee	2,664 Gal.	2,277 Gal	14.5%	2,264 Gal.	15%

## Conclusion



Stewardship, including environmental stewardship, is part of Sauder Woodworking's corporate DNA. It is not something that we do to grab headlines or greenwash our customers. We prioritize and invest in environmental stewardship because we believe in preserving and protecting all of the resources that have been entrusted to us. Sauder's mission of *Creating better ways, to offer better value, for better living* motivates and guides Sauder to be a leader in producing environmentally responsible products in ways that conserve our world today and preserve it for future generations.