



## 2015 Taubman Sustainability Report

# Overview

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# About Taubman

## Who We Are

We own, manage and/or lease regional, super-regional and outlet shopping centers across the United States. Since our founding in 1950, we've earned a reputation for creating extraordinary retail environments for shoppers, retailers, communities and investors.

We're headquartered in Bloomfield Hills, Michigan, and our portfolio of properties, located in major markets from coast to coast, is the most productive in the publicly held U.S. regional mall industry. Average sales per square foot in our centers were \$800 in 2015. Shares of Taubman Centers, Inc. (NYSE: TCO), a Real Estate Investment Trust, have been trading on the New York Stock Exchange since 1992.

## Our Governance

We recognize that strong governance improves corporate decision making and strengthens our company. The Board of Directors of Taubman Centers, Inc. has adopted certain corporate governance principles establishing a common set of expectations to assist the Board and its committees in performing their duties in compliance with applicable requirements. Visit <http://investors.taubman.com> for more information.

## Our Values and Code of Conduct

In everything we do we are guided by the following values:

- **We Take the High Road**
- **We Play For the Team**
- **We Respect Everyone**
- **We Push the Envelope**
- **We Pursue Excellence**
- **We Honor Tomorrow Today**
- **We Are Accountable For Our Results**
- **We Love What We Do**

Our Code of Business Conduct and Ethics sets out basic principles to guide the actions and decisions of all employees, officers and directors of Taubman Centers, Inc. and its affiliates.



## To Our Employees, Investors, Tenants and Communities:



We are pleased to present this, our first report on our company's commitment to sustainable business practices. While we focus here on our recent programs and progress, throughout our history Taubman properties have been developed and managed with a long view. We have always operated with a deep respect for people, the environment and the future needs of generations to come.

I would like to recognize the work of the Taubman associates throughout our company who contribute every day to the health of the environment and strength of the communities we serve. Many of their stories are featured in this report. Thanks to their efforts, we have reduced greenhouse gas emissions, increased the percentage of waste diversion,

increased the use of renewable energy sources and reduced overall energy use. In fact, between 2008 and 2015, we reduced our controllable electrical consumption by 30 percent.

### Taubman has Reduced Controllable Electrical Consumption by 30 Percent since 2008

From 2008 to 2015, reduced consumption by:

2015

30%

We are particularly proud that through these efforts we achieved a Green Star ranking and a Four Out of Five Star designation in the 2016 Global Real Estate Sustainability Benchmark (GRESB)<sup>(1)</sup>, the most respected measure of sustainability performance for real estate portfolios world-wide. Scoring in the top quadrant validates our sustainability efforts, and further strengthens our commitment to continuing improvement.

Thank you for your interest in Taubman.

A handwritten signature in black ink that reads "Robert S. Taubman".

**Robert S. Taubman**  
Chairman, President & CEO

<sup>(1)</sup> The 2016 GRESB uses 2015 data.



# Sustainability Mission Statement

Consistent with our history and core values, we are committed to sustainable business practices that respect people, lessen our environmental impact, and benefit the communities we serve.

## Sustainability Task Force

A Sustainability Task Force representing all the functions of the company guides our sustainability efforts and helps set our improvement goals. Thanks in large part to the Sustainability Task Force, Taubman employees working at headquarters and in our properties are enthusiastically engaged in our sustainability programs and initiatives.

## About This Report

This sustainability report, our first, focuses primarily on our programs and progress through the end of 2015. It is presented in four sections: Overview, People, Properties and Planet. In the People and Properties sections, we highlight many of the sustainability efforts of Taubman associates and the initiatives at our properties contributing to the vitality of the communities we serve. In the Planet section, we discuss the material impacts our shopping centers have on the environment, which fall into four primary categories: Energy use, water consumption, greenhouse gas emissions and waste handling. We have set goals to reduce our use of energy and water, reduce greenhouse gas emissions, and increase our recycling efforts. Our progress against these goals through 2015 is reported in the Planet section.

## Our Affiliations

We are active participants in sustainability programs in our industry and our communities.



# People

## Our Corporate Family

Taubman is a great place to work. Everyone's talents and contributions are respected. Our employee programs and benefits support our associates' physical, emotional, financial and social well-being. Our excellent healthcare plans and wellness programs are just two of the reasons Taubman has received the following distinctions in 2015: Detroit Free Press' Top 100 Workplaces, Metropolitan Detroit's and the Nation's 101 Best and Brightest Companies to work.



## Community Engagement

Taubman people contribute to the health and success of the communities they serve. Community outreach programs in our hometown Detroit and in the markets where Taubman centers operate help charities, schools and civic organizations fulfill their important missions. We understand the importance of healthy communities to the ongoing success of our properties, which serve as vibrant employment centers and drivers of much-needed municipal revenue. The activity and commerce at Taubman centers help fund schools, police forces, fire departments and public works across the nation.

Taubman strives to make a positive difference by supporting vital nonprofits that transform our communities, respect our planet, develop tomorrow's leaders and strengthen our industry.

For example, in 2015 nearly 200 Taubman employees teamed up to clean eight blocks in the Detroit Osborn High School community – boarding up at least a dozen vacant homes and clearing tons of trash and over-grown brush to create safer pathways for the students. Additionally, Taubman presented Osborn with a donation of \$50,000 to cover all the technology and audio visual equipment for their renovated library.

Following are two more examples of Taubman's community commitment at work.

## William Taubman Leads Community Efforts with New Detroit

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William Taubman  
*Chief Operating Officer*

In the aftermath of violent racial unrest in 1967, Detroit's business, civic and religious leaders came together to form an organization called New Detroit. That trailblazing coalition, which will celebrate its 50th anniversary in 2017, has since 2010 been chaired by Taubman Chief Operating Officer William Taubman.

"Sustainable communities must be built on trust and understanding," said Taubman. "New Detroit plays a critical role in fostering honest communications across social, economic and political divides. Throughout its history, New Detroit has provided a much-needed forum for people who might not otherwise have much contact with one another to come together to address our region's most sensitive issues and daunting challenges."

New Detroit's mission is to "serve as the metropolitan Detroit leadership organization working to identify and eliminate racial disparities in the region by building economic equality, social justice and racial understanding." Programs focusing on such areas as minority small business education, youth entrepreneurship and multicultural leadership help strengthen Detroit's social fabric.

*"Our company  
and our proper-  
ties thrive when  
our communi-  
ties thrive."*

– William Taubman



"Detroit's been our hometown since we were founded in 1950," said Taubman. "Our company and our properties thrive when our communities thrive. The unique role played by New Detroit has never been more important to Detroit's future than it is right now. It's an honor for me and for Taubman to be a part of the organization's continuing success."

## Healthy Communities Are Sustainable Communities



Janet Cesario  
*Marketing &  
Sponsorship Director  
The Mall at Short Hills*

Ask shoppers at The Mall at Short Hills how the center contributes to public health and they may tell you to go take a walk.

That's exactly what members of the mall's Very Important Pacers program have been doing for the last 25 years. On an average day about 75 VIPs (there are about 1,000 people enrolled in the program) visit The Mall at Short Hills wearing their walking shoes. The shopping center doors open for the walkers at 7:30 am weekdays and Saturday, and on Sunday they open at 9 am. It's a great opportunity to exercise and socialize in a safe, climate controlled environment.

"The majority of our mall walkers are seniors wanting to stay in shape," said Short Hills Marketing & Sponsorship Director, Janet Cesario, "but we also get mothers with children in strollers and people recuperating from illness or injury." VIP members register and wear identification badges. Participation in the program is free.

One loop around the first level of the center (strolling by such world-class merchants as Neiman Marcus, Tiffany & Co., Bulgari, Fendi, Bloomingdale's, Tesla Motors, Nordstrom, Apple, and Macy's) equals about three quarters of a mile. A few eateries open early to provide refreshments for the VIPers and store personnel getting their shops ready for the day.

*"We're delighted to be able to provide our customers with an amenity that helps them stay healthy."*

– Janet Cesario

# V.I.P.

VERY IMPORTANT PACER

*The Mall at* SHORT HILLS

"We're delighted to be able to provide our customers with an amenity that helps them stay healthy," said Cesario. "It's all part of being a good neighbor and contributing to the health and wellness of our community."

# Properties

# Properties Built with a Long View

Since our founding in 1950, Taubman properties have been developed to thrive in their markets for generations and create long-term value for investors. This long view requires a commitment to responsible stewardship of the environment and the communities we serve. Our goal has always been to build with the best materials, operate with responsible business practices and conduct ourselves as good neighbors. This approach has contributed to our portfolio's long-standing position as the most productive in the publicly held U.S. regional mall industry.

## Energy Efficient Technologies

Over the last several years we have intensified our use of technology to improve the energy efficiency of our properties. Our Taubman Smart Buildings initiative has given us the ability to reduce consumption and cost, while improving the shopper experience. We've installed state-of-the-art fiber-optic infrastructures in all our centers, facilitating the efficient monitoring and operation of energy, life-safety, lighting and HVAC systems. We are also continuing to install energy-efficient LED lights in the common areas of all our centers. And our shoppers are responding enthusiastically to such technology-enabled offerings as free Wi-Fi, interactive touchscreen directories, a feature-filled mobile app for their smart phones, and free electric car charging stations at six of our centers.

## Recycling, Solar Power and Smart Irrigation

Our shopping centers efficiently recycle everything from soda cans to cardboard boxes. In 2015 we recycled 10,918 tons of materials, equivalent to taking more than 4,800 cars off of the road for a year. We are on track to well surpass that in 2016.

Currently, our El Paseo center in Palm Desert, California, is the only Taubman property with solar power. However, we are studying the feasibility of installing solar energy systems at several centers in the portfolio. And we are exploring the use of battery storage systems to purchase energy at lower costs at night to be used during peak hours.

Since 2013 we have introduced smart irrigation at nine centers, using native plants and drip irrigation for new irrigation systems to reduce the amount of water we use. These irrigation techniques will help us meet our goal of achieving a 20 percent reduction of water use in our centers over the next 10 years.

## Smart Buildings Contribute to Sustainability



Steve Moore  
Director, Energy  
Management

*“Thanks to the technology we’ve introduced in our centers as part of our Taubman Smart Buildings initiative, we’re able to more effectively monitor, measure and manage energy use across our portfolio in real time, 24/7.”*

– Steve Moore

As the saying goes, “knowledge is power.” And that’s especially true when it comes to managing the use of energy at Taubman properties.

“Thanks to the technology we’ve introduced in our centers as part of our Taubman Smart Buildings initiative, we’re able to more effectively monitor, measure and manage energy use across our portfolio in real time, 24/7,” said Steve Moore, director, energy management. “With all this good information, we’ve been able to eliminate inefficiencies, reduce consumption and lower costs.”

Operating a regional shopping center requires a significant amount of electricity, primarily to power HVAC systems and lighting in both the common areas and tenant spaces. The old analogue electric meters we all grew up with in our homes were one-dimensional, their spinning dials providing only limited look-back information. New digital smart meters and sensors, interconnected by the fiber optic infrastructures now running through Taubman malls, do a whole lot more.



“Today, with the use of sophisticated energy management software, we can analyze the input we’re receiving and adjust our systems in the centers on computers here in our control room in Bloomfield Hills,” said Moore. “For example, shortly after we installed our new technology at Great Lakes Crossing Outlets in Auburn Hills, we were alerted to a problem with one of the air conditioning units on the roof. It was running non-stop. Sure enough, we discovered and replaced a burnt-out circuit board that without our building control systems probably would have gone undetected until the unit failed and had wasted a substantial amount of energy. Even the most conscientious facilities director cannot be up on the roof day and night. Our software never sleeps.”

As part of its sustainability commitment, Taubman has set goals for reduction of energy use. “Using 2013 as our baseline, we’re working toward cutting energy use by 10 percent by 2018 and by 20 percent by 2025,” said Moore. “Technology has given us the ability to set these measurable energy management targets, and that keeps us on track toward meaningfully reducing our impact on the environment.”

## Energy-Saving LED Lighting Illuminates Dolphin Mall Parking Areas



Al Lara  
*Director, Facility Management*

More than 36 million people from all over the world visit Miami's Dolphin Mall each year to shop, dine and be entertained. And the center's facility director, Al Lara keeps them comfortable, day and night, inside and out.

"It takes a considerable amount of energy to maintain just the right environment for our visitors," said Lara. "People aren't aware of the fiber optic infrastructure flowing through our center or the sophisticated energy monitoring tools we use, but they do know that the temperature is perfect, they appreciate the download speeds on their smart phones, and they feel safe finding their cars at night in a well-lit parking area."

As part of Dolphin Mall's sustainability efforts, the metal halide bulbs on the lighting poles in the center's parking areas, which accommodate 7,000 vehicles, are being upgraded to energy-efficient LED lights. The new lights use 60 percent less energy and last up to 10 times as long as the bulbs they are replacing. Equally important, the new lighting will maintain a safe, welcoming environment in the parking areas.

*"People aren't aware of the fiber optic infrastructure flowing through our center or the sophisticated energy monitoring tools we use, but they do know that the temperature is perfect, they appreciate the download speeds on their smart phones, and they feel safe finding their cars at night in a well-lit parking area."*

– Al Lara



"We're not new to LED lighting, which we've installed in many interior areas of the property," said Lara. "But we tested five different LED options before selecting the one that would do the best job illuminating our lots. In addition to different levels of amperage, we tested for color tone, glare and light trespass. Saving energy is important, but the last thing we want to do is create a situation where a family searches in vain for their bright blue car that looks more like a washed-out gray under our lights. So before we made our choice, we upgraded five poles and employed photometrics and our own eyeballs to get things just right."

All the new parking area lighting fixtures will be installed by the end of 2016. Once they're operating, Lara anticipates additional savings. "A lot of man hours used to be expended changing burnt-out bulbs and fixing transformers. That's a big job when you're talking about a 43-foot-high pole in an active parking area. We're going to have much less of that, which frees staff and financial resources to be directed to other areas of the center."

## Community Responds Enthusiastically to Westfarms Sustainability Initiatives



Judy Caturano  
Marketing & Sponsorship  
Specialist

At Westfarms in West Hartford, Connecticut, spring cleaning and sustainability go hand in hand. Working with local NBC television station WVIT, the center sponsored two successful weekend events in April to help people in the Hartford area responsibly dispose of paper and electronics.

Teaming up with Shred-it Connecticut on April 12, Westfarms shredded more than 47,000 pounds of paper (23.5 tons) for reuse. “We counted 1,000 cars participating in the event,” said Judy Caturano, Westfarms marketing and sponsorship specialist. “For perspective, it takes 12 trees to make one ton of non-recycled newsprint. So we and our customers helped save the equivalent of 282 trees.”

And on April 30, the center and Green Monster e-cycling collected 85,000 pounds of computers, televisions, printers and other electronic items. “About 80 percent of the materials in electronic devices can be reused or repurposed,” said Caturano. “By using Westfarms as the drop-off location, we made things very convenient for people wanting to unclutter their homes and contribute to the sustainability of our area. We processed the items delivered in about 500 cars — non-biodegradable waste that could have ended up in a landfill.”

*“People want to do the right thing...you just have to make things easy for them.”*

— Judy Caturano



1,000 cars drove in to the Shred-it Connecticut event at Westfarms (West Hartford) depositing more than 47,000 pounds (23.5 tons) of paper for re-use.

The Westfarms events were promoted on WVIT as part of its Comcast Cares community service program (Comcast is the parent company of NBC). “I don’t think shopping malls are typically thought of as the most environmentally friendly places,” said Westfarms General Manager Kevin Keenan. “Sustainability is important to our community, and this was a great opportunity to bring people to the center while demonstrating our commitment.”

The recycling events are part of a broader Westfarms sustainability initiative launched in 2008 by Caturano. “We knew it was important to lead by example,” said Caturano. “So we first adopted sustainable practices in the management office — things like dramatically cutting the use of paper and eliminating plastic plates and utensils. Today we’re doing more and more to involve our tenants and shoppers in our efforts to preserve the environment. As an example we continually share best practices with tenants and have provided waste recycling receptacles throughout the common areas.”

Looking ahead, Caturano believes Westfarms can play an increasingly important role in the Hartford area’s sustainability efforts. “People want to do the right thing,” she said. “You just have to make things easy for them.”

## Preserving the Banyan Tree at International Market Place



Ron Loch  
Vice President,  
Planning & Design

The center of attention at International Market Place (IMP) in Waikiki, Hawaii, is a majestic banyan tree planted approximately 160 years ago. When Taubman began the planning process for the open-air marketplace, which celebrated its grand opening in August 2016, the tree took center stage.

"We designed International Market Place around the banyan tree," explains Ron Loch, vice president, planning and design. "We understand its historic relevance and want it to be a major part of the visitor experience. Every architectural and engineering decision we made factored into the tree's preservation."

Helping assure the long-term health of IMP's horticultural wonder is arborist Steve Nimz. Born and raised in Michigan, Nimz moved to Hawaii in 1967 to escape the snow and has been involved with this special tree for 45 years. "I've been assisting with tree maintenance on this site since 1971," said Nimz. "Major construction activity around any tree creates challenges, but Taubman was willing to do what was necessary to limit the adverse effects on the banyan tree as well as the three existing monkey pod trees on the property."

*"We designed International Market Place around the banyan tree. We understand its historic relevance and want it to be a major part of the visitor experience. Every architectural and engineering decision we made factored into the tree's preservation."*

– Ron Loch



Beyond the important environmental benefits of carbon dioxide absorption and oxygen production, the mature trees at IMP, with their massive canopies, provide energy-saving shade and authentic Hawaiian character to the center. "This community has fond memories of the treehouse built into the banyan tree by Don the Beachcomber back in the 1950s," said Loch. The treehouse was home to a restaurant and the "Coconut Wireless" radio station, which broadcast music by such Hawaiian recording artists as Don Ho for many years.

Extraordinary steps were taken during development of the new IMP to protect the site's natural assets. "We created and enforced a safe zone around the banyan during construction," said Nimz. "Every construction worker and subcontractor was required to complete a preservation tutorial before they could begin working on the site. To the greatest extent possible, the location of foundations and utilities were adjusted to accommodate existing and future root systems. And an underground irrigation system was installed to regulate moisture and nutrients in the soil."

Now that the center is open, Taubman's objective is to have the banyan thrive for at least another 160 years. "We're using sophisticated sensors to constantly monitor the soil and the health of the tree," said Nimz, "and I think the tree appreciates our efforts. You should have seen how glorious it looked when the center opened for business. I remember thinking to myself, our tree really wanted to look good on opening day."

## Sustainability a Priority at Taubman Headquarters



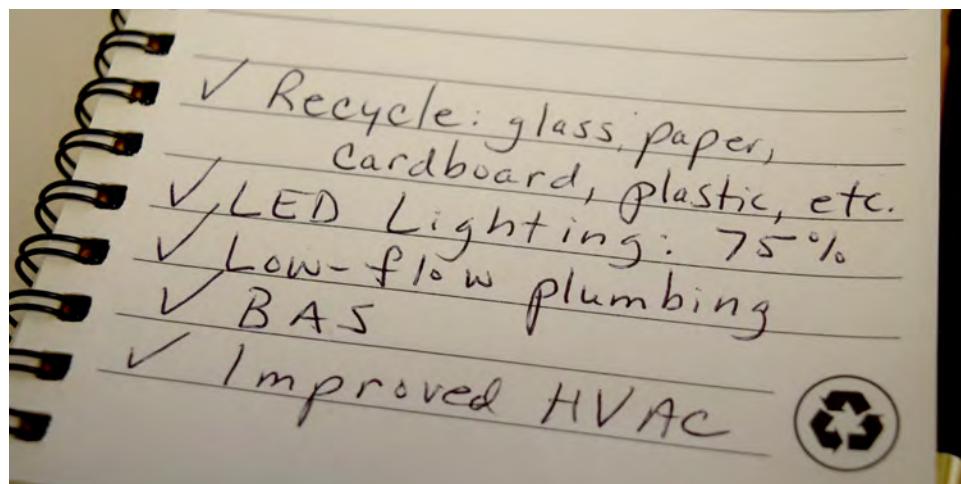
Ken Dixon  
Taubman Headquarters' Manager, Office Services

*"We've been incorporating sustainable waste management practices here at our Bloomfield Hills Office for many years... and the willingness of our employees to participate has been a big part of our success."*

– Ken Dixon

Manager of Office Services Ken Dixon likes to talk trash. After all, responsibly handling the disposal and recycling of the glass, paper, plastic, cardboard and general waste materials generated every day by the many people working in the Bloomfield Hills headquarters is an important part of his facilities management duties.

"We've been incorporating sustainable waste management practices here at BHO for many years," said Dixon, "and the willingness of our employees to participate has been a big part of our success." The larger blue disposal bins and clearer recycling signage in kitchen areas throughout the building are recent indications of what Dixon describes as the company's "continually improving" sustainability initiatives. "We stay on track by working with our service providers to measure our progress. Improvement is more tangible and satisfying when you can see it taking place in metric tons."



While Dixon proudly points to the replacement of 75 percent of the building's lighting to more efficient LED and the use of low-flow plumbing fixtures in restrooms as worthy accomplishments, he gets very excited about the opportunities presented by the upcoming office renovations. "We estimate the glass we'll be using to replace the windows installed when the building was new in 1984 will be 22 percent more energy efficient. We're working with the architects to find ways to improve the control of our HVAC systems and we upgraded the Building Automation System (BAS). Ultimately, we'd like to achieve the smart building capabilities we have in our centers."

Wearing many hats, Dixon also coordinates security, supplies, landscaping and parking lot maintenance, the scheduling of trades working in the building and department moves. "Our primary role is to look after the needs of employees."

# Planet

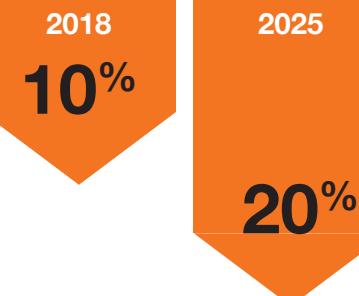
## Protecting the Planet

We are committed to reducing the impact our properties have on the planet in every way we can. The material impacts our shopping centers have on the environment fall in to four primary categories: Energy use, water consumption, greenhouse gas emissions and waste handling. Between 2008 and 2015 we reduced energy consumption across our portfolio by 30 percent. We continue that progress, and have set longer-term goals to reduce our use of energy and water, reduce greenhouse gas emissions and increase our recycling efforts.

## Our Goals

### Reduction in Energy Consumption Goals

From a 2013 baseline, reduce consumption by:



### Renewable Energy Goal

Achieve a level of use from renewable energy sources of:

10%  
2025

### Reduction in Water Consumption Goal

From a 2015 baseline, reduce consumption by:

2025  
10%

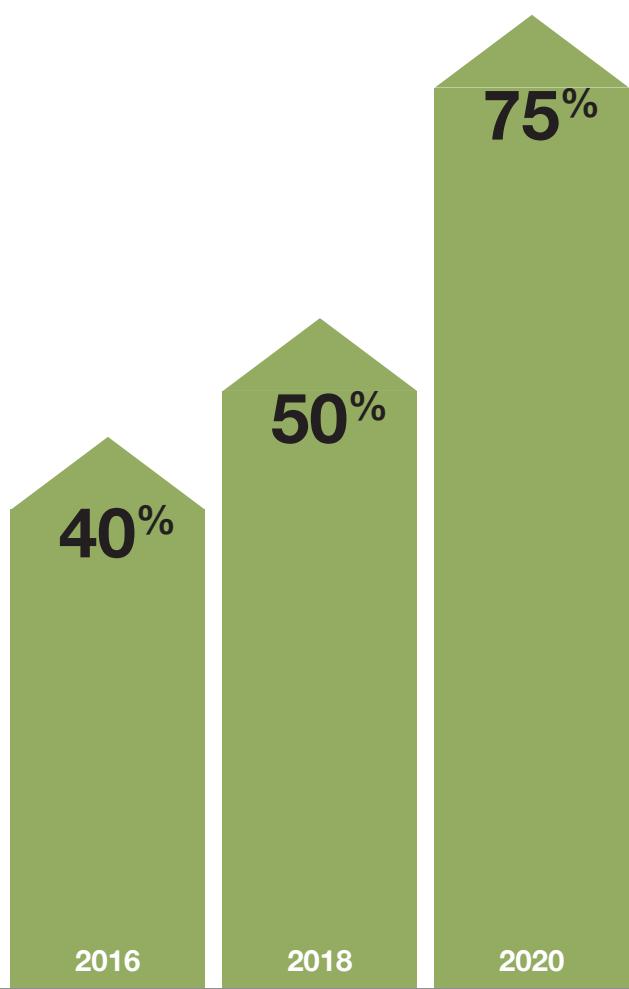
## Reduction in Greenhouse Gas Goals

From a 2014 baseline, reduce controllable Scope 1  
and Scope 2 greenhouse gas emissions by:



## Waste Diversion Goals

We have set diversion targets of:



# Our Progress

## Reduction in Energy Consumption

From a 2013 baseline, reduced consumption by:

2015

**12.6%**

## Renewable Energy

Achieved use from renewable energy sources of:

**7.7%**  
2015

## Reduction in Water Consumption

2016 will be the first reporting year for water.

## Reduction in Greenhouse Gas

From a 2014 base, achieved a reduction in controllable Scope 1 and Scope 2 greenhouse gas emissions of:

2015  
**7.8%**

## Waste Diversion

Reached diversion level of:

2015

**33%**

# Global Real Estate Sustainability Benchmark Performance

Taubman participated in the 2016 Global Real Estate Sustainability Benchmark (GRESB) and achieved a Green Star rating and Four Out of Five Star designation. GRESB is the most respected measure of sustainability performance for real estate portfolios world-wide. The comprehensive survey assesses a company's performance against environmental, social and governance benchmarks.





Taubman  
200 East Long Lake Road  
Suite 300  
Bloomfield Hills, Michigan  
48304-2324  
[www.taubman.com](http://www.taubman.com)