

COMMITMENT TO
SUSTAINABILITY
PROMOTING ENERGY-
CONSCIOUS AND
ENVIRONMENTALLY
FOCUSED EFFORTS
ACROSS OUR
PROPERTIES



SUSTAINABILITY
TENANT HANDBOOK
2015





MACERICH IS COMMITTED TO REDUCING
ENERGY USE THROUGHOUT ITS
FACILITIES AND NEEDS YOUR
SUPPORT TO MAXIMIZE SUCCESS



The Macerich Company invites you to join us in our commitment to sustainability by promoting energy-conscious and environmentally focused efforts across our properties.

Macerich's comprehensive commitment to sustainability is both a natural and essential value of our company. Our sustainability objectives are incorporated into every long-term business strategy. We focus on acquiring and developing quality shopping centers in a manner consistent with our efforts to create the best environments for our tenants and shoppers. We pay special attention to ensure compliance with environmental and sustainability-related issues in development and need your support in translating the same philosophy during operations.

Macerich has a Vice President of Sustainability dedicated to overseeing our efforts in this area. We strongly believe that integrating sustainability in our properties' day-to-day operations not only delivers valuable benefits to the environment, but also can result in enhanced long-term financial returns and market position for our company as well as for our tenants.

The primary objective of this handbook is to provide guidance for our valued tenants in reducing energy consumption and meeting meaningful sustainability goals. Creating sustainable environments, reducing energy usage and operating healthy buildings are important steps to meeting sustainability goals. Macerich is committed to reducing energy use throughout its facilities and asks for your support and partnership in these important endeavors.

**We invite you to embrace the concepts outlined in this handbook
and make a difference!**

*On behalf of the entire Macerich Team,
Eric V. Salo, Executive Vice President,
Asset Management, Property Management, Business Development and Marketing, The Macerich Company*



WHY SHOULD OUR TENANTS FOCUS ON ENERGY AND SUSTAINABILITY?

INTRODUCTION

PEOPLE

Creating a healthy and welcoming environment for customers and employees is important.

PLANET

You can make a world of difference by reducing environmental impacts.

PROFIT

Sustainable practices reduce operating expenses and improve profitability for enterprises.

Both in terms of its demand for resources and the level of energy used, the built environment is an increasingly relevant topic of discussion.

It is estimated that North Americans spend over 90% of their time in buildings, and much of that time is spent at work. Buildings are responsible for 60% of total electricity consumption and over 30% of total energy used annually. Buildings also account for significant portions of fresh water consumption during both construction and occupancy. Additionally, material waste during construction accounts for 12–53% of landfill.

Regulatory, capital and occupant/customer related drivers are helping the retail industry to refocus on sustainability as the demand for environmental accountability rises. As Macerich addresses the challenges of sustainability and climate change, we have assumed a leadership role in working with our tenants to incorporate principles of sustainability across our portfolio. However, we realize that in order to make any sustainability strategy effective, our retail tenants, who occupy the majority of floor area, are essential partners in making our goals achievable.

Incorporating sustainable design, construction and operating principles is a solid step in the right direction.

TENANT ACTIVITIES CAN SIGNIFICANTLY IMPACT OPERATING COSTS AND THE ENVIRONMENT. BY INCORPORATING SUSTAINABILITY INTO DESIGN, CONSTRUCTION AND BUSINESS OPERATIONS, TENANTS CAN REALIZE FINANCIAL BENEFITS WHILE MAKING A POSITIVE IMPACT ON THE ENVIRONMENT.



- Reduced energy consumption
- Reduced water consumption
- Reduced waste from construction and operations
- Protection of occupant health
- Improved employee productivity

THE PURPOSE OF THIS HANDBOOK IS TO PROVIDE OUR TENANTS WITH GUIDANCE ON HOW TO ACHIEVE THESE BENEFITS.

Tenant Improvements include the design and construction of the tenant's space to meet the tenant's needs. This includes the architectural elements, fixtures and furniture, as well as the mechanical systems (e.g., heating, ventilation & air conditioning, escalators and elevators), electrical systems (e.g., lighting and office equipment) and plumbing systems that combine to create the completed, operational tenant space. Tenant Improvements may be undertaken from time to time by the tenant as part of the initial fit-out of the space or as part of major or minor renovation projects. Tenant Improvements may also include projects to retrofit or replace inefficient lighting or plumbing fixtures and/or install lighting and plumbing controls to minimize waste and reduce utility costs.

SUSTAINABLE DESIGN & CONSTRUCTION

GENERAL DESIGN STRATEGIES

- Design interior components like demountable partitions, modular systems, display cases, etc., for potential future changes to save time and money.
- Plan interior layouts to enhance daylight and airflow while reducing noise and promote comfort that supports productivity, e.g., free perimeter spaces for open areas to allow daylight to penetrate deeper into the space.
- Review the possibility of purchasing “green power” directly or through the building owner (Macerich), where applicable. Electricity can be provided from renewable resources by engaging in a renewable energy contract with a certified Green-e accredited utility program or power marketer, or through use of Green-e Tradable Renewable Certificates.
- Hire a professional designer and/or engineers, preferably with experience in sustainable design, for your interior design and fit-out projects.

SMALL CHANGES CAN MAKE A BIG DIFFERENCE



ELECTRICITY/ LIGHTING

- Install energy efficient lighting, such as fluorescent (T5 or T8 with electronic ballast) or LED task lighting with least LPD (Lighting Power Density, i.e., watts/sq.ft.).
- In spaces with existing T12 fluorescent lighting systems, consider replacing or retrofitting the lighting fixtures with more energy efficient T5 or T8 lamps and electronic ballasts.
- Specify high efficiency rooftop HVAC units that exceed high efficiency requirements, such as California Title-24. These high efficiency units use a variable speed fan to provide conditioned air to the tenant space without wasting energy.
- Use light colors to enhance the effects of daylight.
- Shade external windows where possible to minimize effects of outdoor temperature during cooling periods.
- Incorporate lighting controls such as dual switches and dimmers to enhance comfort and productivity within spaces.
- Install occupancy sensors in areas with intermittent lighting use, such as corridors, offices, conference rooms, restrooms, breakrooms and storage areas.
- Use energy-saving versions of office equipment and appliances. The US Department of Energy has developed the “ENERGYSTAR” program which labels computer monitors, office equipment and appliances. More information is available at: www.energystar.gov.
- Design with low-energy density and reduced glare in mind.



WATER EFFICIENCY

- Install low-flow fixtures such as dual-flush toilets or no-flush urinals.
- Install automatic hands-free controls on faucets.
- Install aerators on faucets.

MATERIAL SPECIFICATIONS

- Choose materials (paints, floor coverings, wall coverings, adhesives and furniture) that have no or low volatile organic compounds (VOCs).
- Choose certified carpet and carpet pads that meet or exceed the Carpet and Rug Institute's (CRI) Green Label Plus requirements. Use low VOC adhesives when installing carpet systems.
- Choose locally produced materials that include locally sourced primary materials.
- Choose durable materials to save money and time for frequent replacement or cleaning (e.g., hard flooring made from ceramic, concrete, commercial rubber or linoleum have longer service life than vinyl or carpet, as well as fewer indoor air quality concerns).
- Choose materials with recycled content, preferably post-consumer and/or post-industrial.
- Choose materials that are safe to handle, (i.e., no hazardous metals, fibers or caustic chemicals) and use methods that minimize the release of volatile compounds or trapped dust.

CONSTRUCTION MANAGEMENT

- Require that your contractor develop and implement an Indoor Air Quality (IAQ) plan during construction to minimize the dispersal of dust and pollutants.
- Require that your contractor recycle and salvage at least 25% of construction waste, by weight or volume, during construction or remodeling. Ensure that your contractor includes recycling in the demolition pricing.
- Choose materials that can be salvaged and reused, or at least recycled, at the end of their service life.
- Choose composite wood and laminate adhesives that contain no added urea-formaldehyde resins.

TENANTS CAN HAVE A SIGNIFICANT
POSITIVE IMPACT ON THE ENVIRONMENT
AND REDUCE UTILITY CONSUMPTION
THROUGH EVERYDAY OPERATIONS

SUSTAINABLE OPERATIONS

SOME OF THE ITEMS LISTED ON THE FOLLOWING PAGES REQUIRE ONE-TIME SETUP OF EQUIPMENT OR INSTALLING INEXPENSIVE CONTROLS. OTHERS REQUIRE CHANGING POLICIES AND/OR BEHAVIOR. ALL ARE SIMPLE TO IMPLEMENT AND WILL HAVE AN IMMEDIATE IMPACT.



ENERGY EFFICIENCY PRACTICES

- Start tracking energy use (kWh/sq.ft.) in addition to other metrics to quantify store success (e.g., sales/sq.ft.) and incentivize employees for performance.
- Turn off lights in break rooms, storage areas and other non-essential spaces when not in use or when natural sunlight is sufficient.
- Unplug any items that are not regularly used, such as fans, chargers and appliances.
- Label light switches/controls in areas of intermittent use with a reminder to “Please turn off lights when not in use.”
- Set sleep modes for copiers, printers and other peripheral equipment to deactivate when not in use.
- If applicable, lower blinds in the summer during times of direct sunlight and raise them in the winter to save energy by utilizing natural sunlight and reducing the burden on the HVAC system.
- Move copiers, servers and other heat-generating equipment away from thermostats as this may cause the HVAC to run more than necessary.
- Make sure that areas in front of HVAC vents are clear of furniture, paper and other obstructions. As much as 25% more energy is required to distribute air if your vents are blocked.
- Review and update the programming of thermostats to ensure that temperature settings are correct and timing coincides with store operations.
- Confirm with your Property Management team that set points for heating and cooling are programmed to match usage requirements and are reset to normal settings after special events.
- Capture and share energy consumption information with employees to show them the impacts of their efforts.
- Turn off computers, printers, monitors and task lighting when leaving the office. Unplug power strips at the end of the day. Set computers to energy savings mode to reduce energy consumption when not in use.
- Schedule lights and HVAC units to only operate during posted store hours or only as needed.

EQUIPMENT & CONTROLS

- Install lighting controls such as dual switches and dimmers.
- Install occupancy light sensors in areas with intermittent use, such as corridors, offices, conference rooms, restrooms, breakrooms and storage areas.
- Install vending machine misers to reduce annual operating costs by as much as \$300 per year.
- Replace computer monitors with ENERGY STAR qualified liquid crystal display (LCD) flat screen monitors.
- Purchase ENERGY STAR qualified copiers, printers and appliances.
- Replace incandescent lighting with compact fluorescent lighting (CFL).
- In tenant spaces with individual HVAC systems, install digital programmable thermostats to adjust temperature settings for when the space is unoccupied (such as during nights and weekends).
- Reduce the time delay before your computer reverts to an energy savings mode. Disable screen savers.

PURCHASING

- Buy paper products made from recycled content and responsibly managed forests.
- Purchase rechargeable batteries.

REDUCE/REUSE/RECYCLE

- Establish a policy or encourage employees to print double-sided copies.
- Establish a policy or encourage employees to reuse folders, envelopes and single-sided copies to reduce waste and the cost of supplies.
- Provide recycle bins at individual work spaces, meeting rooms, copier rooms and breakrooms to encourage recycling.
- Eliminate disposable products from the office kitchen (such as paper plates, plastic utensils and single-use cups) and replace with reusable dishes, flatware and mugs.
- Provide water filters and reduce or eliminate the purchase of bottled water.
- Recycle batteries, used light bulbs and electronics responsibly.
- Donate scrubbed computers, monitors, printers and mobile phones to charitable organizations for reuse or hire an electronic waste vendor to recycle these items.



MAINTENANCE

- Replace standard cleaning products with environmentally friendly, or “green” cleaning products.
- Contract with vendors who use “green” pest control products.
- Regularly change or clean HVAC filters each month during peak heating and cooling seasons and replace filters per manufacturer’s recommendations. Replace filters with HEPA-rated filters for higher and indoor air quality.
- Perform preventative maintenance on tenant-owned mechanical equipment in a timely manner to ensure that equipment is operating efficiently.



INFORMATION RESOURCES

- United States Green Building Council www.usgbc.org
- American Society of Heating, Refrigerating and Air Conditioning Engineers www.ashrae.org
- DOE (Dept. of Energy) – lighting, daylighting, appliances and more www.eere.energy.gov
- Environmental Building News GreenSpec Directory & Green Building Advisor by Building Green, Inc. www.buildinggreen.com
- Green Seal, Inc. Choose Green Reports www.greenseal.org
- Green-e Program for electricity from renewable sources www.green-e.org
- Greener Buildings by GreenBiz.com and the USGBC www.greenerbuildings.com
- Green Tenant Guide by California Sustainability Alliance www.sustainca.org

For questions, comments or suggestions, please contact the Macerich Sustainability team at sustainability@macerich.com.



MACERICH (NYSE: MAC) AN S&P 500 COMPANY

ONE OF THE NATION'S LEADING OWNERS, OPERATORS & DEVELOPERS OF MAJOR RETAIL PROPERTIES IN ATTRACTIVE U.S. MARKETS, INCLUDING: GREATER NEW YORK, WASHINGTON D.C., CHICAGO, ARIZONA & CALIFORNIA