

TENANT GUIDE



**SUSTAINABLE
OPERATIONS
FOR
THE MODERN
OFFICE**

**SUSTAINABLE
OPERATIONS
FOR THE
MODERN OFFICE:**
Tenant Guide



DC
SUSTAINABLE ENERGY
UTILITY



IMT
INSTITUTE
FOR MARKET
TRANSFORMATION

MANY OF TODAY'S BUSINESSES HAVE REALIZED THE VALUE OF PROMOTING SUSTAINABLE OPERATIONAL PRACTICES.

They know that exercising good environmental stewardship also makes long-term economic sense. In fact, Accenture survey of 1,000 CEOs found that 93 percent see sustainability as important to the future success of their businesses.¹ The top reasons to go green were related to cost savings, risk mitigation, employee retention, and brand reputation.²

The following tips and strategies will help your company save energy, conserve water, and other natural resources; as well as increase employee health, retention, and productivity in your leased space's ongoing operations.

This guide borrows strategies from the following sustainability rating systems:

- Leadership in Energy and Environmental Design (LEED) for Commercial Interiors Version 4
- LEED for Existing Buildings: Operations and Maintenance Version 4
- WELL Building Standard Version 1.0

1 Accenture. *United Nations Global Compact: Accenture CEO Study on Sustainability 2013*.
<http://www.accenture.com/Microsites/ungc-ceo-study/Documents/pdf/ungc-infographic-vector-rgb.pdf>

2 Spector, Dina. "10 More Reasons Companies Should Care About Sustainability". *Business Insider*. Mar 1st, 2012.
<http://www.businessinsider.com/the-top-10-benefits-of-convincing-your-company-to-care-about-sustainability-2012-3>

IMPLEMENTATION SCALE

The list below breaks out operational techniques into low-, moderate- and high-implementation measures. The dollar signs throughout this guide correspond to low-, moderate- and high-cost implementation categories.

LOW IMPLEMENTATION MEASURES (\$)

These are sustainability strategies designed to be executed immediately and are low or no cost (<200 dollars). These strategies need little to no coordination from your landlord or property manager, vendors, and/or your company's managers.

- Bike-to-Work Week
- Carpool Message Board
- Kitchen Sink Efficiency
- Water Leak Inspections
- Water Filter Maintenance
- Space Heater Ban
- Unplug Inactive Devices
- Disable Screensavers
- Reduce Management calls for Additional Heating and Cooling
- Eliminate Paper Tableware
- Employee Recycling Bins
- Sustainable Office Purchasing
- Recycling & Purchasing Plan
- Healthy Snacks
- Public Hand Sanitizers

MODERATE IMPLEMENTATION MEASURES (\$\$)

These strategies may require advanced planning and budgeting. The involved techniques are typically under 400 dollars and require moderate coordination with your landlord or property manager, vendors, employees, and/or managers.

- Advanced Powerstrips
- Common Recycling Area
- Stand-alone Air Purifier

HIGH IMPLEMENTATION MEASURES (\$\$\$)

These strategies may require your accounting team to readjust your office's operational budget. These techniques may exceed 400 dollars and may require buy-in from your landlord or property manager, employees, and managers.

- Alternative Transportation Incentives
- Water Filtration System
- Occupancy Sensors
- Programmable Thermostat
- New ENERGY STAR Refrigerators and Dishwashers
- Composting
- Gym Membership Incentives
- Standing/Treadmill/Bike Desks
- Landlord's Green Cleaning Program
- Employee Comfort Survey

ALTERNATIVE TRANSPORTATION

Lower your company's carbon footprint by encouraging employees to use alternative transportation methods.

ALTERNATIVE TRANSPORTATION STRATEGIES

BEHAVIOR

- \$** Encourage employees to bike to work regularly. Kick off this initiative by holding a bike-to-work week event.
- \$** Create a carpool message board to encourage employees to find other employees who are interested in carpooling.
- \$\$\$** If you have interests in other alternative transportation options like bike racks, electric car charging station, or changing rooms, etc., **discuss these opportunities with your landlord.**
- \$\$\$** Provide employees incentives to use alternative transportation with commuter benefits for mass transit, bike shares, and car share memberships.

ALTERNATIVE TRANSPORTATION FACTS

- The average passenger vehicle generates 529 gallons of gasoline,³ which equals 4.7 tons of greenhouse gas emissions a year.⁴
- Approximately two-thirds of District of Columbia's residents use alternative transportation methods.⁵
- D.C. has 56 miles of bike lanes and 55 miles of trails.⁶

³ U.S. EPA. *Greenhouse Gas Equivalencies Calculator*. <http://www.epa.gov/cleanenergy/energy-resources/calculator.html>.

⁴ U.S. EPA. *Greenhouse Gas Emissions from a Typical Passenger Vehicle*. <http://www.epa.gov/otaq/climate/documents/420f14040a.pdf>

⁵ Sustainable DC Plan.

⁶ Sustainable DC Plan.



WATER QUANTITY AND QUALITY

Water management strategies not only save water and improve quality, but also save energy. Take advantage of these complementary benefits in your space by prioritizing water management in your space.

WATER QUANTITY AND QUALITY STRATEGIES

BEHAVIOR

- \$ **Lower water use** by running the dishwasher only when it is full.
- \$ When hand washing dishes, **limit water flow**. Only run the faucet when rinsing dishes off.
- \$ **Inspect pantries and private bathrooms for leaks**. Alert your property manager to any leaks in common area bathrooms.
- \$ **Regularly sanitize and change filters** for water supplied from water coolers and ice makers in refrigerators.

TECHNOLOGY

- \$\$\$ **Encourage employees to drink filtered water** by installing a well-maintained water filtration system. Provide employees with durable water bottles or glasses to conserve resources.

WATER QUANTITY AND QUALITY FACTS

- The average two-rack dishwasher uses 4,950 gallons and 265 kilowatt hours of electricity per year.⁷
- A leaky faucet can waste more than 1,000 gallons of water per year.⁸
- 1.5 gallons of water are used to create one plastic bottle.⁹
- WaterSense-labeled plumbing fixtures save 20 percent more water than typical plumbing fixtures.

7 U.S. Green Buildings Council. "2009 Water Use Reduction Calculator: ID:v06". 14 Jul 2014. <http://www.usgbc.org/resources/2009-water-use-reduction-calculator>

8 Home Water Works. "Leaks". <http://www.home-water-works.org/indoor-use/leaks>

9 Grace Communications Foundation. "Water Saving Tips: In the Kitchen". <http://www.gracelinks.org/436/water-saving-tips-in-the-kitchen>

ENERGY MANAGEMENT

Energy management strategies should be incorporated to lower your business's energy usage and can improve occupant comfort. Consider the following:

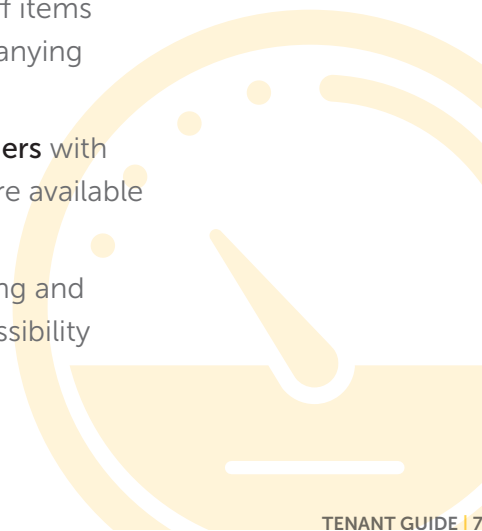
ENERGY MANAGEMENT STRATEGIES

BEHAVIOR

- \$** **Prohibit and remove space heaters from your suite.** Space heaters are fire hazards and huge energy consumers.
- \$** **During the hottest times of year, close window blinds,** thereby, reducing cooling needs. **In the winter months, open blinds** during the day to let sunlight heat the space.
- \$** **Train staff to turn off or unplug lights,** electronics, and appliances when not in use.
- \$** **Utilize the power-saving settings** on your electronics devices and disable monitor screensavers.
- \$** **Monitor supplemental air-conditioning units** and refrigerators for leaks.
- \$\$\$** **Consider installing occupancy sensors and/or timers** in all non-regularly occupied spaces, including file rooms, pantries, corridors, and bathrooms. Work with the DCSEU to reduce the cost of lighting sensor upgrades.

TECHNOLOGY

- \$\$** **Use advanced power strips,** which have a series of primary and secondary outlets. For example, if a computer is plugged into a primary outlet when it is turned off it will automatically turn off items that are plugged into a secondary outlet, such as the accompanying display monitor.
- \$\$** **Consider replacing old, inefficient refrigerators and dishwashers** with newer ENERGY STAR®-certified appliances. DCSEU rebates are available for some appliance upgrades.
- \$\$\$** **Consider installing a programmable thermostat** to limit cooling and heating needs and to save energy and money. Explore this possibility with your landlord.



ENERGY MANAGEMENT FACTS

- The typical office space's energy end uses are lighting, cooling, and refrigeration.¹⁰
- One space heater costs \$1.41 a day to run.¹¹
- Think twice before calling for increased heating or cooling in your space. One degree change in temperature can cost three percent more in energy usage.¹² Refrigerants are major contributors to ozone depletion.
- 56 percent of the District of Columbia's greenhouse gas emissions come from commercial buildings.¹³
- Laptops consume up to 80 percent less electricity than desktop computers.¹⁴

MATERIALS CONSERVATION

Limit waste and conserve resources by enhancing your business's recycling and procurement tactics.

MATERIALS CONSERVATION STRATEGIES

BEHAVIOR

- 💰 **Limit paper use** by reminding employees not to print unless necessary. When printing documents, ensure to print on both sides.
- 💰 **Eliminate disposable plates, cups, and utensils** for more traditional durable metal, ceramic, and glass kitchen supplies.
- 💰 **Remind employees of the District of Columbia's recycling requirements.** Glass, metal, paper, corrugated cardboard and narrow-necked plastic bottles must be separated from non-recyclable waste.

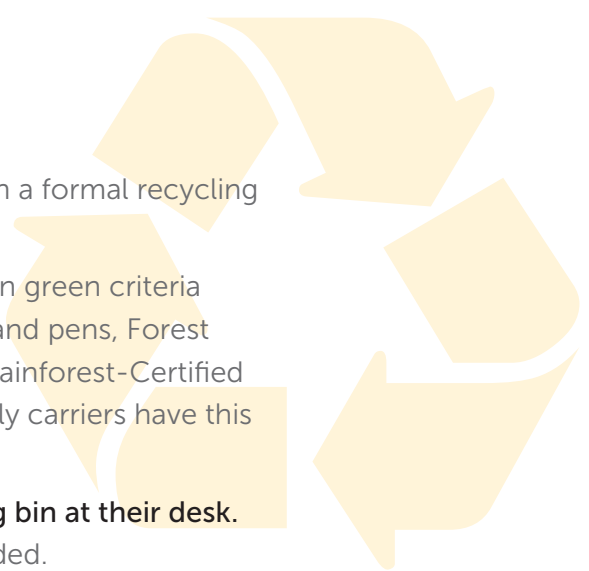
10 Madison Gas and Electric "Managing Energy Costs in Small and Midsize Offices". http://www.mge.com/saving-energy/business/bea/article_detail.htm?nid=1935

11 Consumer Reports. "Can You Save Money By Using a Space Heater". <http://www.consumerreports.org/cro/news/2011/11/can-you-cut-heating-costs-by-using-a-space-heater/index.htm>

12 American Council for an Energy Efficiency Economy. "Destined to Disappoint: Programmable Thermostat Savings are Only as Good as the Assumptions about Their Operating Characteristics". <http://aceee.org/files/proceedings/2012/data/papers/0193-000237.pdf>

13 Sustainability DC. http://sustainable.dc.gov/sites/default/files/dc/sites/sustainable/page_content/attachments/DCS-008%20Report%20508.3j.pdf

14 Stone, Dan. "Laptop Vs. PC Power Consumption". Chron. <http://smallbusiness.chron.com/laptop-vs-pc-power-consumption-79347.html>

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- **\$** **Communicate material conservation commitment** in a formal recycling and purchasing plan.
 - **\$** **Purchase sustainable office supplies** that have certain green criteria such as high-recycled and regional content pencils and pens, Forest Stewardship and Council-certified paper products, Rainforest-Certified coffee, and rechargeable batteries. Many office supply carriers have this information readily available on their websites.
 - **\$** **Make certain all employees have their own recycling bin at their desk.** Ask your property manager for additional bins if needed.
 - **\$\$** **Provide a recycling receptacle for paper, metal, plastic, cardboard, and discarded electronics** in a common area such as the break room and ensure that employees understand the recycling policy for the building.

TECHNOLOGY

- **\$\$\$** Consider composting.

MATERIALS CONSERVATION FACTS

- The average office worker generates approximately two pounds of paper and paper board products every day.¹⁵
- 40 percent of the food we prepare is not eaten and ends up in landfills.¹⁶
- The District of Columbia generates 800,000 tons of waste per year.¹⁷
- Recycling services employ five times as many people as waste management, nationwide.¹⁸

¹⁵ U.S. EPA. "Wastes- Resource Conservation-Common Wastes & Materials –Paper Recycling: Schools and Offices". <http://www.epa.gov/osw/conservation/materials/paper/setting/schoolwork.htm>

¹⁶ Sustainable America. "How to Compost at Work". Mar. 24th, 2015. <http://www.sustainableamerica.org/blog/how-to-compost-at-work/>

¹⁷ Sustainable DC.

¹⁸ Sustainable DC.



WELLNESS

Investing in wellness initiatives drives employee productivity, company culture, and retention.

WELLNESS STRATEGIES

BEHAVIOR

- \$** **Encourage employees to get active.** Develop a message board to bring employees together who share common fitness goals and activity interests.
- \$** **Inspect supplemental air conditioning units** for the presence of mold and other harmful microbes.
- \$** Confirm with your property manager that **the cleaning vendor purchases cleaning supplies that are EcoLogo, Green Seal or EPA's Design for the Environment-certified.**
- \$** **Provide antibacterial hand sanitizers** in common gathering spaces.
- \$** **Promote and procure office snacks that are comprised of healthier ingredients.** Instead of the candy bowl, purchase office snacks that are U.S. Department of Agriculture (USDA)-certified organic and/or contain no artificial or added sugars.
- \$\$** If a gym is not available in your building, **consider subsidizing some or all of the costs of a gym membership** for your employees.
- \$\$\$** **Conduct an employee comfort survey.** Ask employees about their comfort levels on acoustics, lighting, amenities, temperature and cleanliness. Address concerns with the help of your property manager.

TECHNOLOGY

- \$\$** **Install a standalone air purifier with a carbon filter** in commonly used areas. These air purifiers can remove harmful chemicals, bacteria, viruses and mold spores in the air.
- \$\$\$** **Invest in standing, treadmill and biking desks** to encourage more active lifestyles.

WELLNESS FACTS

- According to numerous health studies, sitting for long periods of time can take years off your life.
- 28 percent of workers said they would feel more satisfied and loyal to their companies if their employer offered more health and lifestyle options.¹⁹
- Losses in productivity cost the U.S. economy \$225.8 billion annually.²⁰
- Investing in wellness can save your business an average of \$5.93 to \$1 savings-to-cost ratio.²¹

CASE STUDIES

CHILDREN'S HEALTHCARE OF ATLANTA

Atlanta, Georgia

Explore how this hospital provided a comprehensive transportation program to encourage employees to utilize rideshares, vanpools, and flextime shuttle services.

CUSHMAN & WAKEFIELD HEADQUARTERS: LIGHTING RETROFIT

Houston, Texas

See how changing lighting fixtures to more energy-efficient lighting can lead to substantial savings.

THE CENTER FOR ECOTECHNOLOGY

Northampton, Massachusetts

Learn how your office can improve its recycling and composting techniques with this case study's replicable strategies.

CBRE HEADQUARTERS: WELL CERTIFICATION

Los Angeles, California

See how this office space took advantage of WELL operational techniques and apply them to your space.

HARVARD UNIVERSITY CENTER FOR WELLNESS

Cambridge, Massachusetts

Learn how this university center implemented meditation, stress-relieving sessions, and yoga sessions into everyday practice for its employees.

19 Tilman, Audrey. "The Impact of Wellness Programs on America's Workforce". The Institute for Healthcare Consumerism. http://www.theihcc.com/en/media_center/editors_picks/the-impact-of-wellness-programs-on-america%E2%80%99s-workf_h2jeegra.html

20 Tilman, Audrey

21 Tilman, Audrey.



RESOURCES

THE DISTRICT OF COLUMBIA SUSTAINABLE ENERGY UTILITY (DCSEU)

www.dcseu.com

This organization helps District residents and businesses save energy and more through energy efficiency and renewable energy programs and rebates.

ENERGY STAR

www.energystar.gov

This site provides tips and strategies on how to reduce energy usage. It also includes a comprehensive directory of ENERGY STAR-certified products.

WATERSENSE

www3.epa.gov/watersense/

Learn how you can save water in your workspace. It houses a comprehensive directory of WaterSense-labeled plumbing fixtures.

FOREST STEWARDSHIP COUNCIL (FSC)

www.fsc.org

This site promotes the responsible management of the world's forests. Find wood and paper-based products that are FSC-certified for your space.

THE CARPET AND RUG INSTITUTE

www.carpet-rug.org

This trade association site maintains the Green Label and Green Label Plus standard for carpets and carpet cushions.

SCIENTIFIC CERTIFICATION SYSTEMS (SCS) GLOBAL SERVICES

www.scsglobalservices.com/floorscore

FloorScore, the environmentally-friendly standard for hard-surface flooring is maintained by the Resilient Floor Covering Institute and the SCS. Find FloorScore compliant products for your new workspace.

THE U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA)

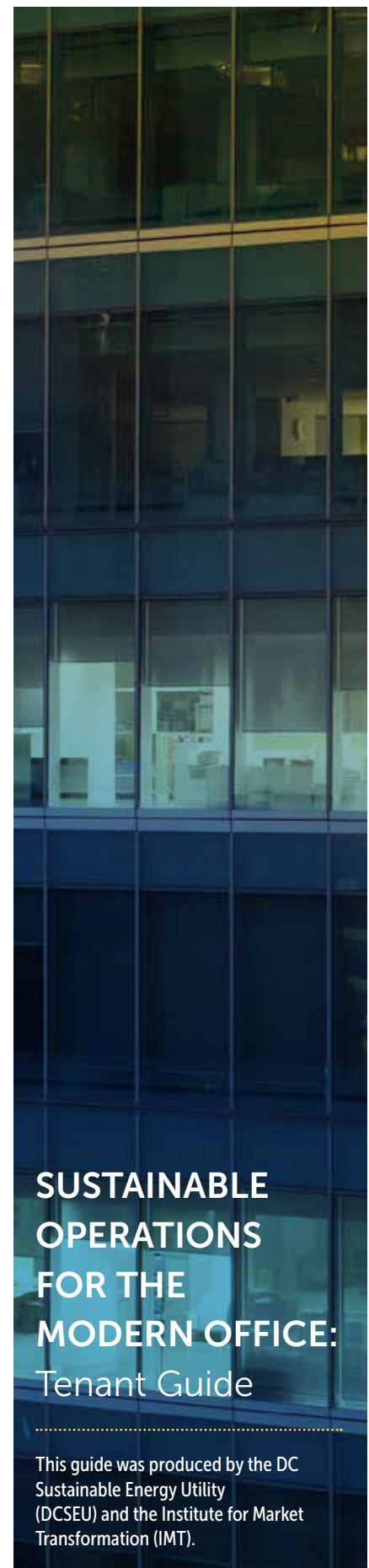
www.epa.gov

This agency's website features great resources on materials conversation and procurement strategies for office.

GREEN SEAL

www.greenseal.gov

Green Seal is a non-for-profit organization that develops life-cycle based sustainability standards for products. There criteria is especially useful in finding environmentally friendly cleaning products.



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This guide was produced by the DC Sustainable Energy Utility (DCSEU) and the Institute for Market Transformation (IMT).