

TENANT GUIDE

A photograph of a modern office building with a floor-to-ceiling glass facade. The building's surface reflects the surrounding urban environment and the warm colors of a setting or rising sun. The sky is a gradient of orange, yellow, and blue. The building's architecture features a grid of windows and structural columns.

# SUSTAINABLE OPERATIONS FOR THE MODERN OFFICE

# SUSTAINABLE OPERATIONS FOR THE MODERN OFFICE: Tenant Guide



# 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.<sup>1</sup> The top reasons to go green were related to cost savings, risk mitigation, employee retention, and brand reputation.<sup>2</sup>

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

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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

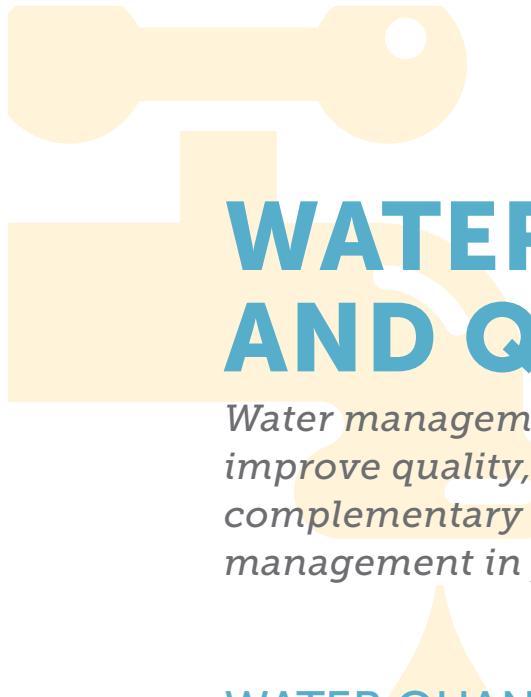
- The average passenger vehicle generates 529 gallons of gasoline,<sup>3</sup> which equals 4.7 tons of greenhouse gas emissions a year.<sup>4</sup>
- Approximately two-thirds of District of Columbia's residents use alternative transportation methods.<sup>5</sup>
- D.C. has 56 miles of bike lanes and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

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

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

<sup>5</sup> Sustainable DC Plan.

<sup>6</sup> 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.<sup>7</sup>
- A leaky faucet can waste more than 1,000 gallons of water per year.<sup>8</sup>
- 1.5 gallons of water are used to create one plastic bottle.<sup>9</sup>
- WaterSense-labeled plumbing fixtures save 20 percent more water than typical plumbing fixtures.

<sup>7</sup> 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>

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

<sup>9</sup> 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:*

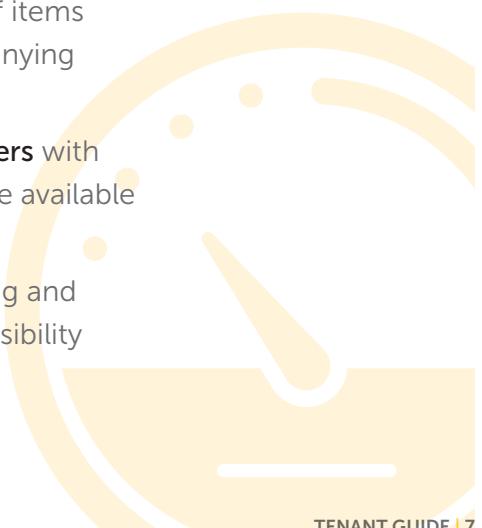
## ENERGY MANAGEMENT STRATEGIES

### 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.<sup>10</sup>
- One space heater costs \$1.41 a day to run.<sup>11</sup>
- 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.<sup>12</sup> Refrigerants are major contributors to ozone depletion.
- 56 percent of the District of Columbia's greenhouse gas emissions come from commercial buildings.<sup>13</sup>
- Laptops consume up to 80 percent less electricity than desktop computers.<sup>14</sup>

## 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.

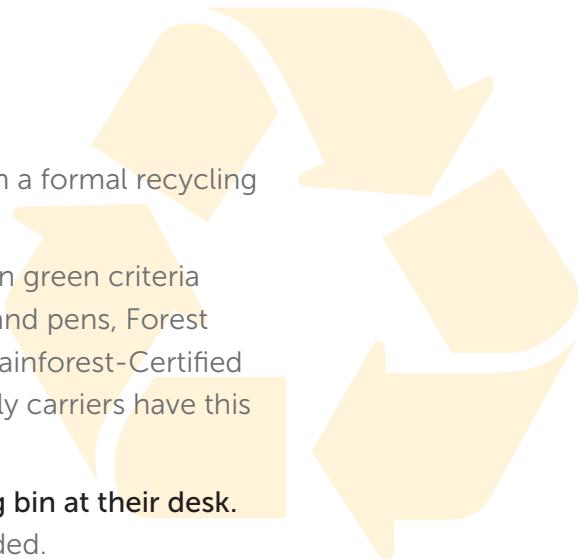
10 Madison Gas and Electric "Managing Energy Costs in Small and Midsize Offices". [http://www.mge.com/saving-energy/business/bea/article\\_detail.htm?nid=1935](http://www.mge.com/saving-energy/business/bea/article_detail.htm?nid=1935)

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](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>



- \$ 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.<sup>15</sup>
- 40 percent of the food we prepare is not eaten and ends up in landfills.<sup>16</sup>
- The District of Columbia generates 800,000 tons of waste per year.<sup>17</sup>
- Recycling services employ five times as many people as waste management, nationwide.<sup>18</sup>

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

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

<sup>17</sup> Sustainable DC.

<sup>18</sup> 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.<sup>19</sup>
- Losses in productivity cost the U.S. economy \$225.8 billion annually.<sup>20</sup>
- Investing in wellness can save your business an average of \$5.93 to \$1 savings-to-cost ratio.<sup>21</sup>

## 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%20%99s-workf\\_h2jeogra.html](http://www.theihcc.com/en/media-center/editors_picks/the-impact-of-wellness-programs-on-america%20%99s-workf_h2jeogra.html)

20 Tilman, Audrey

21 Tilman, Audrey.



# RESOURCES

## THE DISTRICT OF COLUMBIA SUSTAINABLE ENERGY UTILITY (DCSEU)

[www.dcseu.com](http://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](http://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/](http://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](http://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](http://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](http://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](http://www.epa.gov)

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

## GREEN SEAL

[www.greenseal.gov](http://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.

