

Sustainable Space Kit: Data, Tips and Resources

By Circuit Media, a certified 8(a), DBE and WOSB business

EXECUTIVE SUMMARY

Going green has a number of perks - the first of which can be a significant cost savings. With the reduction of energy usage, the recycling of materials and the reduction of water usage, many spaces report lower monthly bills and a significant decrease in overall impact costs such as reordering paper, lightbulbs and other miscellaneous items. Double-sided printing alone could present significant cost savings for your business or school. It's regularly reported that, in some industries, the reduction of energy consumption and waste production could save tens of billions in costs over a decade of daily operations.

A [2012 study](#) by the UCLA and the University of Paris-Dauphine found that "employees at eco-friendly companies are 16 percent more productive than average." The reduction of stress related to recycling and green programs is often reported on. People tend to lead happier and healthier lives both inside and outside of their offices, schools and homes when their spaces implement green practices. Additionally, depending on your current carbon footprint, the decrease in waste production could also lead to marked physical health improvements within your workforce, students or family - decreasing health-related issues over time.

Perhaps the simplest perk is helping decrease your carbon footprint. Many reports are currently being released about the trajectory of global warming within the next 10-15 years. These findings have urged many to take action on behalf of their students, loved ones and employees/employers alike.

Circuit Media has compiled this guide to accompany our Sustainable Space Kit. Within this guide you will see hard numbers and statistics that show where operations can be improved upon. In each section of Energy, Recycling, Water and Miscellaneous, you will find our waste reduction tips and a list of resources to optimize your space's efficiency and reduce your waste and carbon footprint.

ENERGY

It's estimated that businesses and commercial buildings alone waste 20% of the total energy allocated for that building. Additionally, 66% of that energy is wasted on lighting and electricity.

Cooling and heating is a major cause of wasted energy for spaces. More than 47% of energy use for a space is from a heating and cooling system that is cranked up too high or is set too low. Wasted energy can also stem from idle machines like copiers, printers, faxes and

computers. At home, idle appliances, chargers and unused entertainment systems are typical culprits for wasted energy.

How you can help:

- Heat your space to a maximum of 70°F/21°C when occupied, 61°F/16°C when unoccupied. Heating and cooling set points should be set a few degrees apart so that the air conditioner does not cycle (turn on and off) frequently. In summer, keep thermostat a little warmer than usual (don't blast AC), in winter a little colder than normal (don't blast heat)
- Take advantage of [CO business energy loans](#)
- Apply for a [federal energy loan](#)
- Use public transportation whenever possible
- Choose a green energy plan - use suppliers who use green power sources
- Unplug optional machines when not in use (printers, copiers, computers, water heaters, space heaters, etc.)
- Use [energy saving power cords](#)
- Unplug machines before leaving the office, school or home
- Standby mode when not in use, instead of using screensavers
- Turn off lights when you leave a room or install [motion sensors](#)
- Light paint colors and natural light eliminates the need for extensive artificial lighting
- Replace incandescent bulbs with LED
- Unplug appliances, chargers and any other electronics not currently in use
- Wash your hands in tepid or cool water to avoid activating a water heater each time you wash your hands

Additional resources:

- US Department of Energy [Energy Saver](#)
- US Department of Energy on [Energy Efficiency](#)
- [Energy in Colorado](#)
- Do-it-yourself [Energy Audit](#): How To

RECYCLING

It's estimated that 75% of America's waste is recyclable but only 30% of it is actually recycled. Much of our waste will end up in a landfill, which will ultimately contribute to 80% of the total soil pollution.

Earth's oceans take up roughly 71% of the planet's surface and encompass 99% of the living space. Our oceans hold 97% of the total water supply. Currently, 269,000 tons of plastic debris is floating on the surface of the ocean.

Recently, Spanish scientists have identified a dead space along coastal areas approximately the size of the State of Oregon. This area has such low oxygen levels that no life can be sustained. According to recent studies, the United States alone throws away 2.5 million plastic bottles every hour and most statistics point to those bottles ending up in our oceans.

Our guide for recycling:

	DO Recycle:	DON'T Recycle:
Aluminum and Foil	Aluminum Cans, Foil, and Trays	Foil bags or lids (ex. Chip bags or yogurt lids)
Cardboard	Cardboard, including pizza boxes	Wax-coated cardboard
Cartons	Food and beverage cartons with caps and straws removed	Juice pouches, flattened cartons
Glass	Food and beverage glass jars, lids removed	Window glass, glass vases, drinking glasses
Newspapers and Magazines	All types, with plastic wrapping removed	
Office Paper	Paper, envelopes, sticky notes,	Plastic wrappers, tissue paper, bubble envelopes
Paper Bags	Bags with food removed	Popcorn or plastic bags
Paper Cups	Only the cup itself	Sleeves, lids straws, and stirring sticks
Plastic containers	Rigid plastic bottles, jugs, jars, tubs, cups and containers marked with the #1 through #7 in the recycling symbols.	Plastic bags, lids or caps. Styrofoam, plastic toys, toothpaste tubes, K-Cups, PLA plastics, or containers larger than 3 gallons
Aerosol	Empty containers with plastic cap removed	Fuel canisters, partially-full aerosol cans, punctured cans

How you can help:

- Bring reusable bottles, mugs and glass cups for water, tea and coffee
- Use environmentally friendly coffee filters
- [Go paperless](#) if possible
- Use [post-consumer recycled paper](#)
- When printing, print double-sided
- Limit magazine and print subscriptions
- If you do not yet have a recycling service, inquire with your current utilities provider or use [this search tool](#)
- Opt for refillable pens
- Limit supplies that are non-recyclable like rubber bands
- When electronics, lightbulbs or batteries are dead or need to be replaced, recycle them at [places that dispose of the parts properly](#)

- Use a reusable bag when shopping
- Avoid purchasing items with excessive packaging

WATER

It's estimated that installing water-efficient fixtures and appliances could reduce water waste by 20% and 2,600 gallons of water are wasted each year due to slow leaks in offices, schools and in the home.

How you can help:

- Use low-flush toilets/put a brick in the toilet tank
- Turn off taps when not in use
- Look for and manage leaks
- Use a hot water heater and instant coffee packs instead of brewing many pots of coffee that may be wasted when they go cold or have been sitting out too long
- Use [non-potable water](#) whenever possible
- Install rainwater tanks if possible (check if your state allows rainwater collection [here](#))
- Tankless water heaters may reduce the overall waste of stored water - especially in warmer months when hot water may not be used as frequently

Additional resources:

- EPA on [water efficiency](#)
- Audit your water usage with the [Environmental Defense Fund's Water Efficiency Toolkit](#)
- EPA's [WaterSense](#)
- US Green Building Council on [Green Building Resources](#)

MISCELLANEOUS

Depending on the size of your business, school facility or home, going green could save you thousands, hundreds of thousands or potentially millions of dollars each year. The US Federal Government offers tax breaks and write-offs for sustainable choices and many other countries have similar programs.

A recent Harvard study found that green-certified office workers demonstrate a 26% boost in cognition and had 30% fewer sickness-related absences. Over the years, many other esteemed universities have conducted research on this topic and suggest that green spaces have happier, healthier and more-productive inhabitants.

Additional tips for a green space:

- Compost if possible
- Reuse coffee grounds as a pet-safe fertilizer
- Plant low maintenance, air purifying plants in your garden, on the roof or in a community planter

- Choose a non-toxic cleaner. Mrs. Meyers, Simple Green and The Honest Company make various non-toxic cleaning products.