



A green initiative from PGIM Real Estate

GetGreen

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MONTCLAIR STATE UNIVERSITY
PSEG INSTITUTE FOR
SUSTAINABILITY STUDIES

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GETGREEN CHECKLIST

Similar to the Sustainable Standard Operating Guidelines, the table below shows checklist items that a property manager can opt-in for reducing waste in five areas of an office: janitorial, kitchen/breakroom, copy room, office compost, and electronic waste. Each checklist item ranges from no cost to high cost.

COLOR CODES

No cost to low cost

Low cost to moderate cost

Moderate cost to high cost

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GETTING STARTED

Waste management can be up to 4% of an organizations total costs. Reducing waste can help both the organization and the environment. By decreasing the amount of waste produced by the organization, it limits the use of landfills which are harmful to the environment. Additionally, it helps the organizations because costs are reduced, therefore increasing the bottom line. So let's **getgreen.**

GETTING STARTED CHECKLIST

CHECK FOR AVAILABLE LOCAL RESOURCES AND INCENTIVES

- Verify if your local government has tax incentives in place to implement a waste reduction/recycling program. Tax incentives can significantly lower the cost of your recycling program.
- Verify if your waste hauler will perform a complimentary waste audit.

CHECK THE CURRENT LOCAL AND STATE LAWS AND REGULATIONS FOR WASTE

- Update yourself with the current laws and regulations with regard to waste. Legislations are increasingly being adopted that make practices like composting and e-waste management mandatory.

CONDUCT A BASELINE ASSESSMENT

- Conduct a baseline assessment to identify how much your organization is actually paying for waste, recycling, and associated activities. Identify the frequency of waste and recycling pick-ups.
- Perform a walk-through of your building to identify high traffic areas and high waste generation areas and plan to tackle the same.

PERFORM A WASTE AUDIT

- Perform a waste audit to identify the content of your waste. It can identify what types of recyclable materials and waste your facility generates and how much of each category is recovered for recycling or discarded. Using the data collected, your organization can identify focus areas to intensify recycling efforts as well as identify potential cost savings.

SET GOALS FOR YOUR WASTE MANAGEMENT PROGRAM

- Set goals for waste reduction and diversion from landfills, these could be a combination of short term and long term goals. For example, 'Reduce the volume of paper waste by 20%' and 'Increase waste diversion to landfills to 60%'.

MONITOR AND COURSE CORRECT STRATEGY IF REQUIRED

Track the effectiveness of your recycling initiatives and correct your plan of action if necessary. For example, if problems such as contamination arise course correct by using restrictive lids on recycling bins, changing the number or placement of recycling bins and communicating better practices to occupiers.

- At least once a year, review your recycling strategy and goals. ¹

EDUCATE AND ENGAGE WITH THE OCCUPANTS OF YOUR BUILDING

- Promote your recycling initiatives. Creating excitement will raise awareness and increase participation in the programs. Use events, wall posters, ceiling hangers, email blasts etc. to create interest. Make sure to tell people how your recycling program is having a positive impact on the environment it will help to increase their involvement. Inform people of the goals of the recycling program and what is required of them to reach those goals. For example, letting people know where the new recycling bins are situated would increase the likelihood of them being used.

IMPLEMENT A COMPREHENSIVE STRATEGY TO TACKLE WASTE MANAGEMENT

- Engage with your waste hauler to determine the ideal waste collection strategy that will increase diversion rates and minimize waste sent to landfills. For example, whether to use single stream or multi stream recycling.
- Place appropriate recycling receptacles in all the identified high traffic areas and high waste generation areas.
- Clearly communicate your goals and strategies with janitorial staff, the waste hauler and occupiers.

RESOURCES

RESOURCE	LINK	AREA
earth911	http://earth911.com/	Nationwide Recycling Directory
EPA	https://www.epa.gov/smm/wastewise-resource-management-innovative-solid-waste-contracting-methods	Wastewise Program
Calrecycle	http://www.calrecycle.ca.gov/ReduceWaste/Office/default.htm	Waste management resources
WWF Canada	http://atwork.wwf.ca/EN/resources/	Waste management resources

GETTING STARTED

¹<https://www.epa.gov/smm/wastewise>

CONDUCTING A WASTE AUDIT

A waste audit is an analysis of a building's waste production that is used to create a better system of waste removal. While the Sustainable Standards Operating Guidelines focus on saving energy and taking steps toward more sustainable operations, a waste audit can help to address waste concerns and to reduce waste. Waste audits can also alleviate costs and find more efficient ways to remove waste. In some areas, municipalities provide free waste audits.

This can be a useful service to cut back on waste and to find other ways to devote more efforts to sustainability. A waste audit will help to determine which guidelines could apply to your building. As the property management team, it would be helpful to either have a third party conduct a waste audit or to conduct one internally. After a waste audit is assessed it can be used to determine what recycling programs can best be utilized in your building.

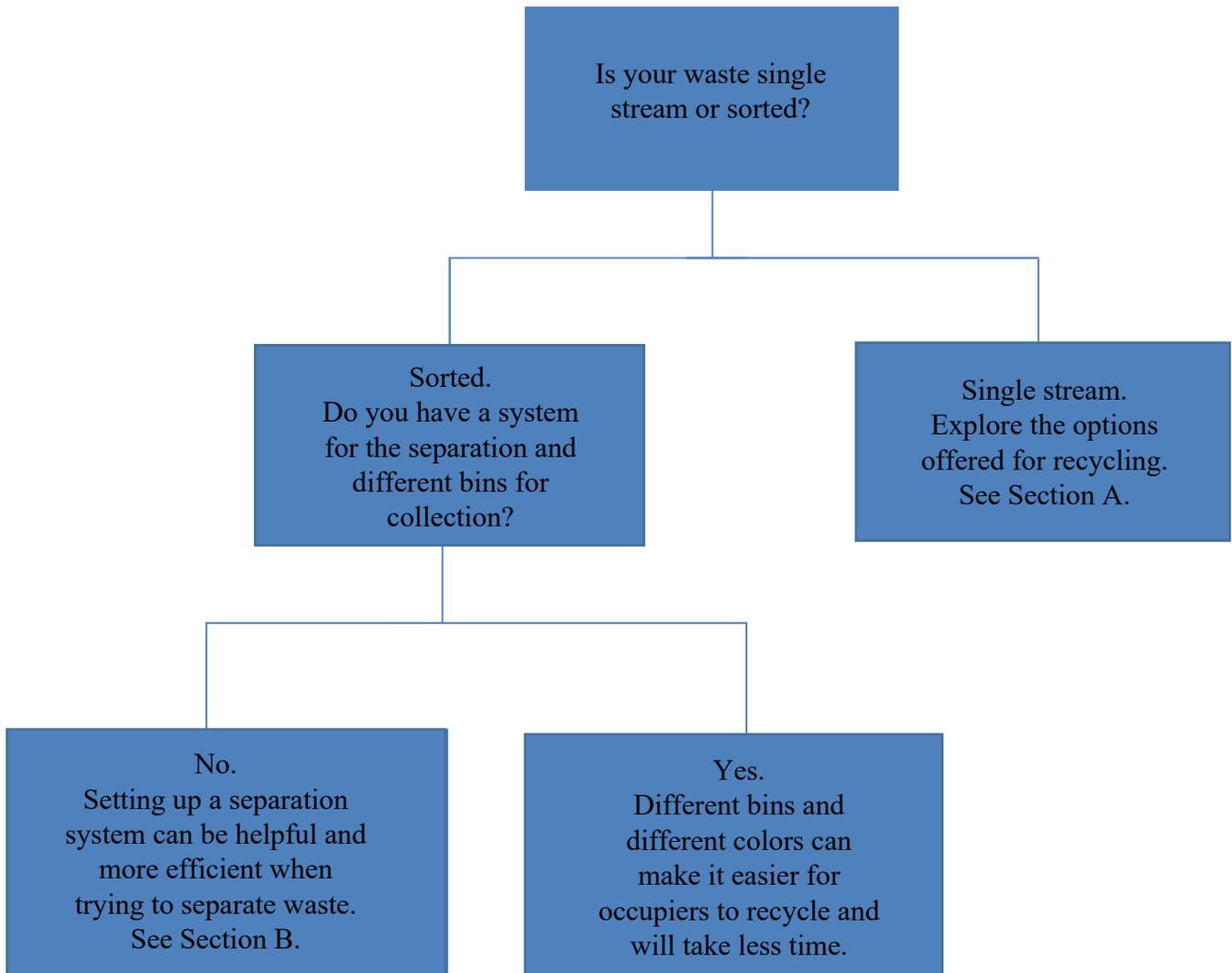
RESOURCES

Some organizations provide a free waste audit. Look at the following resources, which provide free waste audits.

- KLT Industries: phone 888-949-1122, website: www.kltindustries.com
- Sunshine Disposal & Recycling: phone 509-924-5678, website: www.sunshinedisposal.com
- Federal International :website: www.federalinternational.com
- Progressive Waste Solutions: website: www.progressivewastesolutions.com

These resources are a start to finding the best free waste audit option for your building, but there may be others out there!

RECYCLING BINS



RECYCLING BINS EXPLANATION

- A.** Single stream recycling is a convenient method of recycling because it involves less sorting and less work for the occupiers as well as the property management team. It is not, however, most beneficial when it comes to the efficiency of recycling. Single stream recycling often involves cross contamination in which materials become ruined from being thrown in all together. This can hurt the entire process and can lead to the loss of recyclables along the way. The best way to combat this contamination is to make sure that occupiers are aware of the limits of the single stream. This can be done by simply telling occupiers to empty water bottles or cups of liquids process. These simple steps can go forward to make the recycling process easier and more efficient.
- B.** If your building's waste is sorted, different bins with restrictive lids can make sorting the waste more efficient and less time consuming for all. Having a consistent and thorough sorting system throughout the building can make a huge difference in the amount of waste saved from the landfills. For example, if your building has bins for recycling and waste, it would be a good idea to think about the different sorts of recycling and set up corresponding bins. This will prevent contamination and will help the recycling system. The placement of recycling bins makes a difference on the success of a recycling system. Research has shown that placing recycling bins in high traffic areas and next to regular trash bins encourages recycling behavior. In offices, it has been proven that having a smaller trash bin and a slightly larger recycling bin at each desk will increase recycling behavior. Clear labeling and understanding of what goes in each bin goes in hand with maintaining a successful system. Having a bin separate for paper, another one for organic waste, and perhaps another for cans and/or bottles can make a huge difference in efficiency and reduce the amount of waste headed for the landfill.²

² <https://www.kab.org/resources/improve-recycling>



GREEN HOUSEKEEPING

Adapting to green cleaning practices is an important part of keeping the workplace and environment safe and healthy. Green housekeeping consists of practices that reduce water and energy usage, and limit the amount of waste going to landfills. Another important factor of green housekeeping is using cleaning products that are free of hazardous chemicals and toxins. Simple actions such as careful monitoring and daily inspections can lead to a more environmentally friendly and healthy workplace.

CHECKLIST EXPLANATIONS

ENGAGE WITH JANITORIAL COMPANY ON ENVIRONMENTAL POLICIES

Being informed and educated on a janitorial company's cleaning policies can help to determine which company is best for your building. It can be beneficial to learn about what types of cleaning products they use, and what their cleaning procedures are. Question the company on the initiatives they are taking to make cleaning more sustainable and environmentally friendly.

INFORM JANITORIAL STAFF ON GREEN CLEANING

Green cleaning sessions and meetings can help gauge the interest of the janitorial staff and help them become more informed on green cleaning solutions. Informative sessions can include topics such as toxins in cleaning products and cross contamination issues. Webinars can also be a helpful tool in informing the janitorial staff on certain issues and solutions for green cleaning within the office buildings. All of these training sessions would be a great way for the janitorial staff to understand the benefits of green cleaning protocols and how they can be implemented throughout the office buildings.

DOORMAT ENTRY SYSTEM

Setting up doormats at all entryways is a sustainable practice that can be easily implemented. They are also required for the LEED-EB certification.³ Doormats prevent outside contaminants from entering the building, creating a safer and healthier working environment. They also trap dirt and mud, creating a cleaner atmosphere. All mats must be vacuumed once a day.⁴

FLAME-RETARDANT FREE FURNITURE

Flame retardants pose a threat to the environment and humans alike. Furniture with flame retardant contains toxic chemicals that are linked to health concerns, such as cancer, and

GREEN HOUSEKEEPING

³ <http://www.webmd.com/allergies/hepa-filters-for-allergies>

⁴ http://www.lasalle.com/documents/green_guide.pdf

lower IQ levels.⁵ When the fumes from the flame retardants come in contact with humans, the air is contaminated with dangerous toxins. Water contamination is also caused from the manufacturing and disposal of furniture with flame retardants. Many states have prohibited the use of flame retardants in furniture, so it can be useful to make sure that all furniture within the office buildings are flame retardant free.⁶

SMART RESTROOM SYSTEM

Restrooms can cause a high wastage of water and paper if proper appliances and procedures are not used. Having a smart restroom system will allow both water and waste consumption to decrease. Installing hand dryers in restrooms is a great way to avoid cross contamination as well as reduce paper towel consumption. Making the sink faucets motion censored eliminates water wastage and reduces the chances of water leaking over long periods of time.⁷

LIMIT THE USE OF VOLATILE ORGANIC COMPOUNDS

Inhaling high levels of VOCs (Volatile Organic Compounds) can pose huge risks to humans and the environment. It can be difficult to avoid complete contact with VOC's since they are incorporated into an individual's daily life through the products that they use and their common behaviors. VOC's can be present in tasks that include cleaning, cooking, and even hobbies. VOC's can have short-term and long-term side effects on humans that can lead to multiple health problems.⁸ By simply being more aware of the ingredients and chemicals included in a certain product, an individual can reduce their exposure risks to dangerous toxins and gases. Some forms of VOCs to look out for are Formaldehyde, Decane, Butoxyethanol, Isopentane, Limonene, Styrene, Xylenes, Perchloroethylene, Methylene, Chloride, Toluene, Vinyl Chloride.⁹

JANITORIAL WASTE SEMINARS

Janitorial waste seminars are a great way to inform the staff on how waste is categorized. If the office has different trash bins for different types of waste, the staff will need to be informed on how to dispose of the different types. These seminars can inform the staff on how plastic, glass, paper, aluminum, and other types of wastes are disposed, and what the

⁵ <http://theheartysoul.com/flame-retardant-chemical-dangers/>

⁶ https://www.niehs.nih.gov/health/materials/flame_retardants_508.pdf

⁷ <http://inhabitat.com/7-eco-friendly-tips-to-green-your-bathroom/>

⁸ <http://www.health.state.mn.us/divs/eh/indoorair/voc/>

⁹ http://greenguard.org/en/indoorAirQuality/iaq_chemicals.aspx

different bins are for. The seminars can educate the staff on the different procedures and directions for disposal of the different types of waste.¹⁰

PURCHASING GUIDELINES

GREEN CLEANING PRODUCTS

-Purchase products that are certified by EcoLogo, National Science Foundation, Green Seal, EPA-Registered USDA Biopreferred, and Carpet & Rug Institute.

-Look for EnviroX products, which have 300 distributors in all 50 states and offer products for cleaning systems, disinfecting, sanitizing, multi-purpose cleaning, carpet and floor care, hard water stains, degreasing, food service, and offers dispensers and equipment.¹¹



Products	EPA-Registered	Green Seal GS-37	EcoLogo UL 2759	NSF	USDA Bio-Preferred	Carpet & Rug Institute (CRI)
H2Orange2 - Concentrate 117	✓			C1 Reg #126503	✓	✓
H2Orange2 One	✓					
Fresh Concentrate 118	✓			C1 Reg #141198		
Green Certified Multi-Purpose Cleaner		✓		A1 Reg #141751	✓	
Green Certified H2O2 Orange Cleaner			✓			
Green Certified Industrial Degreaser Concentrate			✓	A1 Reg #138092		
Green Certified Industrial Degreaser RTU			✓			
Green Certified Hard Water/Soap Scum Remover (Concentrate & RTU)			✓		✓	
Green Certified H2O2 Orange Tile and Grout Renovator			✓	A1 Reg #126504		
Green Certified Neutral Floor Cleaner		✓				
Envirox Dish San	✓			D2 Reg #140526		
Envirox Carpet Spot and Stain Remover						✓
Envirox Carpet Cleaner						✓

(Source: <http://www.enviroxclean.com/sustainability/certifications/>)

¹⁰ http://www.lasalle.com/documents/green_guide.pdf

¹¹ <http://www.enviroxclean.com>

CRI (CARPET & RUG INSTITUTE) CERTIFIED EQUIPMENT (GREEN LABEL APPROVED)

-The Carpet & Rug Institute helps to certify and categorize different cleaning equipment and accessories as environmentally friendly. Certified products help to improve indoor air quality for a cleaner and healthy environment by emitting low greenhouse gases and have low usage of harmful chemicals.¹²

-Helpful link: <http://www.carpet-rug.org/CRI-Testing-Programs/Seal-of-Approval-Service-Providers.aspx>

MICROFIBER CLEANING PRODUCTS

Microfiber cleaning mops and cloths are more absorbent and remove more dust and residue than other cleaning materials. Microfiber materials are made from recycled products and can be reused over long periods of time and recycled again. Another benefit of using microfiber cleaning materials is that they prevent cross contamination.¹³

HIGH EFFICIENCY PARTICULATE ARRESTANCE FILTERS

HEPA vacuum filters are very beneficial in improving indoor air quality. They are extremely effective for filtering dust mites and allergens. The use of HEPA filters is extremely beneficial to individuals who suffer from health problems such as asthma.¹⁴ In general, HEPA filters clean the air and benefit everyone within the building.

POWER MANAGEMENT

- If there are a large number of computers and electronics within your building, it can be a good idea to enroll in a power management program.¹⁵

-Aptean Surveyor is a program that automatically powers off all computers when they are no longer in use. It has reduced energy consumption by up to 60% and has helped customers save more than \$250 million according to their website.¹⁶

-Helpful link: <http://www.aptean.com/solutions/application/power-management>

¹² <https://www.carpet-rug.org>

¹³ <http://www.bu.edu/sustainability/a-cleaner-and-greener-bu/>

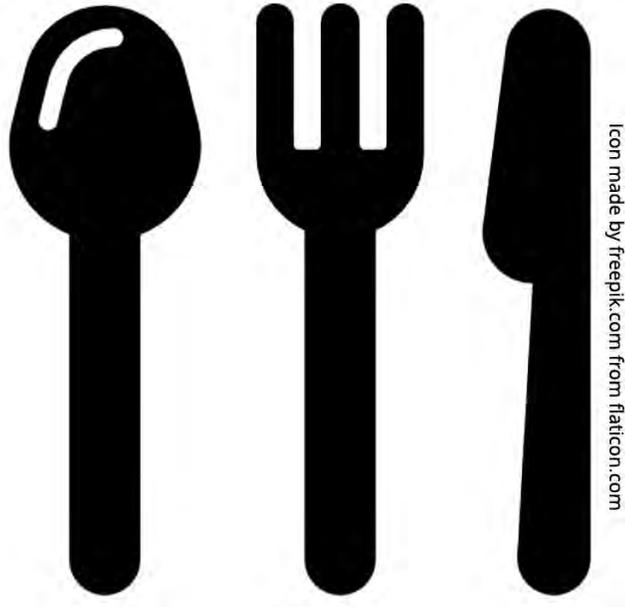
¹⁴ <http://www.webmd.com/allergies/hepa-filters-for-allergies>

¹⁵ <https://www.americanexpress.com/us/small-business/openforum/articles/30-easy-ways-to-go-green-in-the-office-1/>

¹⁶ <http://www.aptean.com/solutions/application/power-management>

RESOURCES

RESOURCE	FILE NAME
Janitorial Checklist	JANITORIAL CHECKLIST- 2.pdf



OFFICE KITCHEN RECYCLING

Recycling is a decision to protect the world and its natural resources from ongoing harmful practices. This is often achieved through reducing waste and reusing materials. Recycling can be practiced in all areas of life—personal or professional, individually or as a community. Recycling is most effective when treated as a group endeavor. Please take a look at the following guidelines on how you can enact a recycling program in your office’s kitchen and/or breakroom.

START AN OFFICE KITCHEN RECYCLING PROGRAM

PLACING AND LABELING RECYCLING BINS

- Place recycling bins in the office's kitchen/cafeteria¹⁷
- Bins should be clearly labeled and should instruct employees on the appropriate waste contents of each bin¹⁸
- The contents of each bin can be separated into the following categories: Paper, Hard plastic, Metal, Soft plastic, Compost, Cardboard, Aluminum, Glass, and General garbage¹⁹

CLEAN MATERIALS BEFORE RECYCLING THEM

- Certain items should be cleaned/emptied prior to placing them in their respective recycling bins
- Such items include: Paper, Cereal boxes (remove inner plastic bag), Paper bags, Corrugated cardboard, Milk and juice cartons (rinse out), Clear and colored glass containers, and Aluminum products such as beverage cans, foil, trays, and pans²⁰

KNOW WHAT CANNOT BE RECYCLED

- Certain items cannot be recycled²¹
- Such items include: Wax paper, Food-contaminated paper (i.e.: pizza boxes), Styrofoam containers, Napkins, Paper towels, Any paper product contaminated with bodily fluids, Cardboard lined with plastic, Plastic bags, Plastic tableware, Ceramics,

OFFICE KITCHEN

¹⁷ <http://www.foodservicewarehouse.com/blog/benefits-recycling-commercial-kitchen/>

¹⁸ <http://www.redbirdonline.com/blog/10-simple-sustainability-actions-every-office-can-take>

¹⁹ <http://www.buffalo.edu/recycling/recyclable.html>

²⁰ <https://www.wm.com/customer-service/sb-recycling-faq.jsp>

²¹ <http://ecosalon.com/10-surprising-things-you-cant-recycle/>

Wet paper, Plastic bottle caps, Juice boxes, Heavily dyed paper, Shredded paper, and Broken glass²²

INVEST IN REUSABLE KITCHEN UTENSILS

- Replace disposable kitchen utensils with reusable kitchen utensils²³
- Items that can be replaced include: Plates, Cutlery, Coffee mugs, and Water bottles

PROLONG ITEM USAGE PRIOR TO RECYCLING

- If your office uses plastic utensils, make sure the utensils are recyclable and try to use them multiple times before disposing of them²⁴

INVEST IN A WATER FILTRATION SYSTEM

- Replace water bottle services with water filtration systems or stations where employees can refill their reusable water bottle²⁵

INVEST IN GREEN CLEANING PRODUCTS

- Try to purchase dishwashing soap from companies that produce biodegradable, non-toxic, and petroleum free products²⁶
 - o Such brands include Green Works and Seventh Generation (see Janitorial Guidelines for more on green cleaning products)²⁷

USE FABRIC TOWELS AND FABRIC NAPKINS

- Encourage employees to use fabric towels and fabric napkins rather than paper towels and paper napkins²⁸
- If you use paper towels and napkins, make sure they have high recycled content (60% is a good benchmark), are unbleached, and have low chlorine content

²² <http://earth911.com/home-garden/what-not-to-put-in-the-bin/>

²³ <http://environment.utk.edu/2014/07/23/green-your-kitchen/>

²⁴ <http://environment.utk.edu/2014/07/23/green-your-kitchen/>

²⁵ <https://www.banthebottle.net/articles/9-ways-to-reduce-plastic-bottle-waste-at-your-workplace/>

²⁶ <https://www.americanexpress.com/us/small-business/openforum/articles/18-ways-to-save-and-go-green-in-the-office-1/>

²⁷ <https://green.harvard.edu/tools-resources/green-tip/green-your-office-kitchen>

²⁸ <http://environment.utk.edu/2014/07/23/green-your-kitchen/>

REGULARLY VACUUM THE COILS BEHIND THE FRIDGE

- When the coils are covered in dust the fridge cannot perform its cooling process properly. Thus, more energy is needed to meet the necessary cooling standard.²⁹

MAINTAIN ENERGY EFFICIENT APPLIANCES

- Invest in energy-efficient appliances³⁰
- Unplug kitchen appliances when they are not in use³¹
- Invest in a fixtures that maximize water usage³²
- Run the dishwasher only when it is full. Run the dishwasher at night using low-water and low-heat settings. Allow the dishes to air dry rather than heat dry.³³
- Turn off the kitchen lights when the space is not in use³⁴
- Switch to compact fluorescent lightbulbs. They use less energy, last longer, and will help save money on the energy bills³⁵

STOCK THE CUPBOARD WITH SUSTAINABLE OPTIONS

- Stock the kitchen cupboard with Fair Trade Certified and organic tea and coffee³⁶
- Use reusable coffee filters. Add the used coffee grounds to the plants—this acts as a fertilizer and reduces waste

START AN OFFICE COMPOST

- See composting guidelines

²⁹ <http://www.greenlifestylechanges.com/cleaning-refrigerator-coils-to-save-energy/>

³⁰ <http://www.greenamerica.org/livinggreen/appliances.cfm>

³¹ <http://www.aol.com/article/2011/06/20/12-household-appliances-you-should-unplug-to-save-money/19971554/>

³² <http://challengeforsustainability.org/toolkit/water-efficiency/office-fixtures/>

³³ <http://homeguides.sfgate.com/cheapest-time-day-run-dishwasher-68913.html>

³⁴ <http://sustainability.temple.edu/get-involved/staff-get-involved-page/follow-these-steps-green-your-office>

³⁵ <http://sustainability.temple.edu/get-involved/staff-get-involved-page/follow-these-steps-green-your-office>

³⁶ <http://www.redbirdonline.com/blog/10-simple-sustainability-actions-every-office-can-take>

RESOURCES

RESOURCE	FILE NAME
Kitchen Recycle	Kitchen_Poster_20x24.jpg
Why Recycle	WhyRecycle_Poster_20x24.jpg



LET'S TALK PAPER

The EPA estimates that **27%** of municipal waste in 2013 consisted of paper and paper based products. The average office worker uses almost **10,000** sheets of paper in a year. A staggering **45%** of the printouts in an office are tossed in the trash by the end of the day. The small changes we make can make a big difference, so let's **getgreen.**

COPYROOM CHECKLIST

PAUSE BEFORE YOU PRINT

Scan and share documents, distribute interoffice memos electronically. Print only if you must.

GO PAPERLESS

Encourage paperless meetings and presentations. Sign-up for paperless billing.

REDUCE PAPER USE

Make duplex (double sided) printing the default setting in your printers. Reuse one side printed paper as scrap or to print notes. Reuse File folders, envelopes.

SAVE INK

Use the Fast Draft setting on your printer. Avoid printing in color as much as possible.

SOURCE RESPONSIBLY

Buy chlorine-free paper. Buy paper with at least 30% recycled content. These options are competitively priced and environmentally friendly.

RECYCLE

Recycle old print cartridges, buy recycled cartridges or buy non-petroleum based inks such as soy or vegetable inks.

SHARE

Consolidate multiple standalone copiers, printers and faxes with a single multifunction machine. Work with as few machines as possible. The more people networked to a machine, the more energy efficient and cost effective it will be.

SAVE ENERGY

Ensure that the copier has been switched-off at the end of the day. Software is available that can automatically turn-off and turn on copiers.

JUNK THE JUNK

Contact senders of junk mail to remove your name from their mailing lists. Clean your mailing list to remove outdated contacts and duplicates.

RETHINK RECYCLE BINS

Place recycle bins next to or as close as possible to regular trash bins. Use restrictive lids on your recycling bins to avoid contamination. Place a clearly labeled box besides the copier/fax to collect one side only printed paper. In offices, consider placing paper recycling bins at each desk.

PURCHASING GUIDELINES

PAPER

- Choose paper manufactured from post-consumer waste (PCW) recycled content. A good benchmark is at least 30% for copy paper and at least 60% for toilet paper and paper towels.
- Try to avoid purchasing paper that contains chlorine. Chlorine is a pollutant that also makes it more difficult to recycle paper.
- The following organizations accredit environmentally friendly paper products, look for their seals before making a purchase:
 - Forest Stewardship Council <https://us.fsc.org/en-us/market/paper-printing>
 - Chlorine Free Products Association <http://www.chlorinefreeproducts.org/home.html>
 - Sustainable Forestry Initiative <http://www.sfiprogram.org/buy-sfi/sfi-label/>

PRINTER/COPIER/FAX MACHINES

- Look for machines with duplex (double-sided) printing capability, it will add \$350 to \$500 to the base price of your printer. An office with 10 to 20 workers could recoup that extra cost in one year or less and you could cut your paper costs by up to 50%.
- Work with as few machines as possible. The more people networked to a machine, the more energy efficient and cost effective it will be.
- Try to purchase Energy Star rated machines, which will generally be more energy efficient than other similar machines on the market.
- Look for energy efficient features that are practical and user friendly, for example, it is more likely that the standby feature in copiers will be used if the warm-up time from the standby mode is quick.³⁷

PRINTING INK

- Look for inks that emit low amounts of volatile organic compounds (VOC's). Non-petroleum-based inks (soy or other plant-based inks) are usually lower in VOC's. They more easily bio-degrade, are easier to recycle, and come from renewable resources.
- Purchase remanufactured cartridges and recycle old cartridges

COPY ROOM

³⁷ <http://sustainability.wfu.edu/wp-content/uploads/2009/08/PrintingGuidelines.pdf>

FAQ'S

RECYCLED PAPER

WHAT IS POST-CONSUMER WASTE PAPER (PCW)?

PCW is paper that has been made with a certain percentage of recycled paper in its content. For instance, 30% PCW means, 30% of the content of the paper is PCW.

WILL RECYCLED COPY PAPER WORK AS WELL AS REGULAR PAPER?

30% PCW paper is now the paper of choice at many offices. No warranties are voided by using PCW paper. Issues such as jamming or curling are mostly related to the quality of the paper rather than the recycled content.

ARE THERE OTHER PAPER PRODUCTS THAT HAVE RECYCLED CONTENT?

Paper Towels and toilet paper can be made from PCW. Look for at least 60% recycled content in toilet paper and paper towels.

WILL RECYCLED PAPER COST MORE?

Currently, Office Depot sells 30% PCW for slightly less than virgin paper; 100% PCW is 20% more.³⁸

RECYCLING PAPER

WHAT PAPER AND PAPER PRODUCTS CAN BE RECYCLED?

Copy paper, Fax Paper, Post-its, Mailing Envelopes, Spiral bound notebooks, Memos, Files, Newspapers and Inserts, Magazines, Paperbacks, Clean, flattened Cardboard and Paper Boxes. All of the above must be **clean and uncontaminated** by food or oil.

CAN ENVELOPES WITH STICKERS AND/OR PLASTIC WINDOWS BE RECYCLED?

Stickers, staples, plastic windows and paper clips are removed from paper during the recycling process so it is not necessary to discard them before recycling. Spiral bound notebooks may also be recycled.

³⁸ <http://sustainability.wfu.edu/wp-content/uploads/2009/08/PrintingGuidelines.pdf>

CAN I RECYCLE FOOD AND OIL STAINED CARDBOARD AND PAPER?

Food and oil contaminated paper products cannot be recycled. Composting is a good solution that can use paper towels, tissues, food contaminated cardboard etc. and help reduce the waste sent to landfills.

HOW ELSE CAN I REDUCE WASTAGE OF PAPER?

Significantly reduce paper towel consumption in bathrooms by installing electric air dryers.

WHAT PAPER AND PAPER PRODUCTS CANNOT BE PLACED IN RECYCLE BINS?

Food and oil contaminated paper or Cardboard, Laminated paper, Wax paper, Wet Paper, Tissues, Napkins, Paper Towels, Photos, Paper Plates and Paper cups.

PRINTING

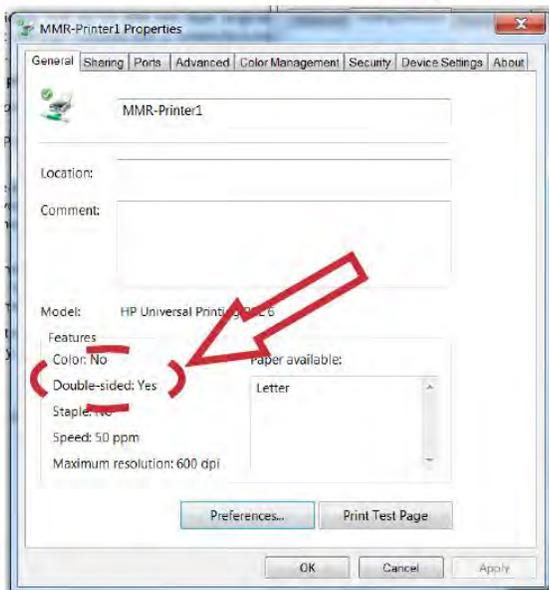
WHAT ARE THE BENEFITS OF BUYING REMANUFACTURED CARTRIDGES?

Remanufactured cartridges cost up to 30% less than original equipment cartridges. Each original equipment cartridge replaced with a remanufactured cartridge saves half a gallon of oil worth of plastic.

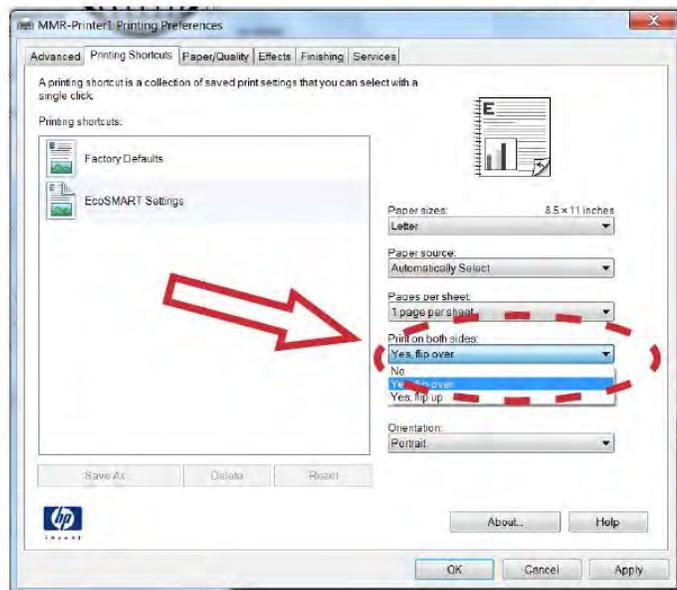
HOW CAN I MAKE DUPLEX (DOUBLE-SIDED) PRINTING THE DEFAULT SETTING FOR MY COMPUTER?

For computers with Windows 10 Operating Systems:

Step 2



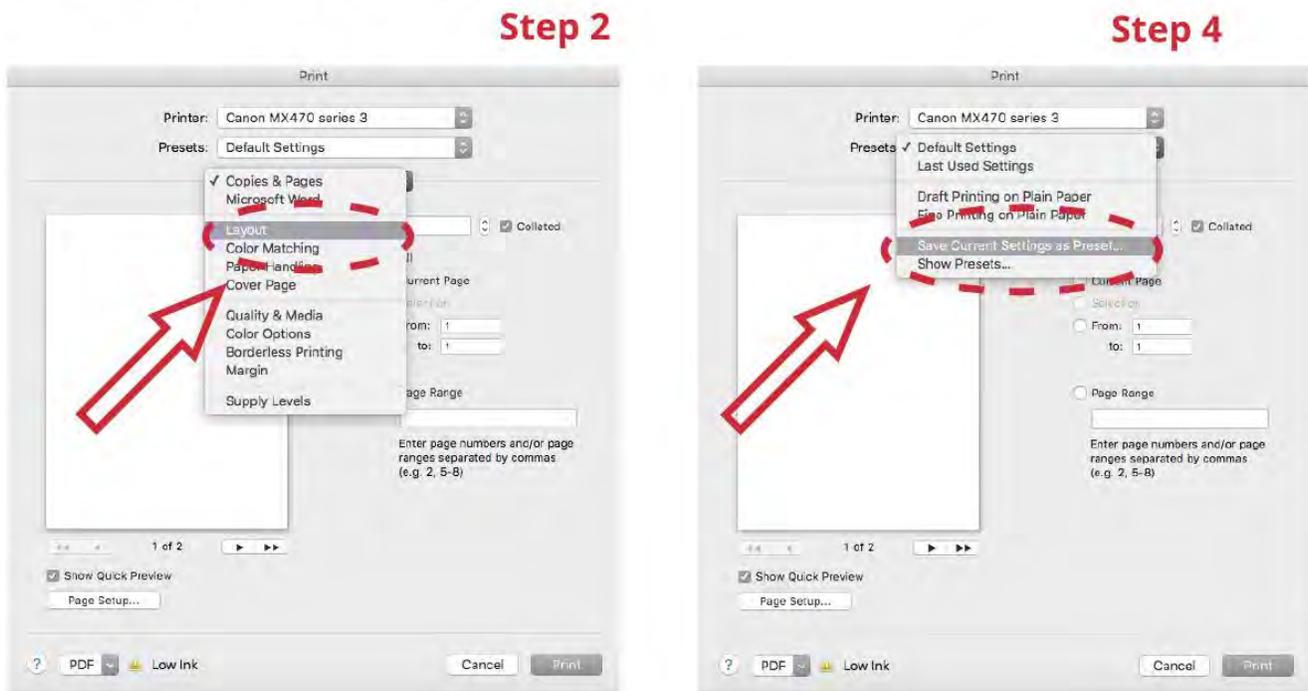
Step 4



- 1) Open the Control Panel and select 'Devices and Printers'
- 2) Verify that Double-sided Printing is possible on each of the printers you use. To verify, right click a printer and from the menu which appears left click on 'Printer properties'.
- 3) If Double-sided printing is possible, right click on the printer you wish to use and choose 'Printing preferences' from the menu.
- 4) In 'Printing Shortcuts', in the drop down list for 'Print on both sides' select 'Yes, flip over'. Finally, click on 'Apply' and then click on 'OK' to confirm.

PRINTING

For computers with MacOS:



- 1) Select 'File' on the tool bar and then select 'Print'
- 2) Click on the 'Copies & Pages' drop down menu and select 'Layout'
- 3) In the "Two-Sided" drop down menu, select 'Long-Edge' binding
- 4) Finally, in the "Presets" drop down menu, select 'Save Current Settings as Preset...'

HOW CAN I HELP THE ENVIRONMENT?

If we can reduce our use of virgin or non-recycled copy paper by 75%, we will spare 864 trees, save enough energy to power six average homes, and reduce greenhouse gas emissions by over 36 tons. (Source: Environmental Defense's Paper Calculator)

A photocopier left on overnight wastes enough energy to make 5,300 copies. For every extra hour the machine is switched off you will save 0.5 kg of carbon dioxide a week.

RESOURCES

RESOURCE	FILE NAME
Copy Room Poster	Copyroom_Poster_20x24.jpg



Icon made by Freepik from www.flaticon.com.

WASTE NOT

Around the world waste management is growing because it is a simple way to reduce the amount of waste sent to the landfills as well as the waste which pollutes the environment.

According to the World Bank, by 2100 the global urban population will contribute three times the amount of waste they are already producing. The following guidelines can be a helpful tool to reduce the amount of waste that is produced and headed for the landfill. This can also reduce costs and improve the building's environmental performance.³⁹

COMPOSTING

INTRODUCTION

In keeping with the Sustainable Standards Operating Guidelines a composting program for the building or occupier space can be an easy way to improve environmental performance while mitigating costs. Compost can provide a property with fertilizer for outdoor space or can be donated to local community initiatives. There are different businesses that also pickup organic waste if true composting is too much for a tenant's space. These guidelines should be a helpful way to engage occupiers and property managers about the benefits of composting and how to get started if they would like.

COMPOSTING GUIDELINES

Composting is the decomposition of organic materials. In a composting system microorganisms work to break down the materials into compost, which can be used for a number of purposes. In the future, composting may be required by cities and it would be a good idea to start now. It should be noted that some cities may have laws governing composting so it is prudent to check with local laws in regards to composting.⁴⁰ About 20-30% of all garbage is compostable, but is instead thrown into landfills.⁴¹ Creating a compost system can cut back on waste and waste removal costs.

The key to a successful composting system is the right ratio of carbon to nitrogen. While this may seem complicated, it can be reduced to simply having the right balance of green and brown materials. Examples of materials that can be composted are: bread, pasta, coffee and tea grounds, eggshells, fruits and vegetables, coffee filters, and paper cups and plates.

In order to make sure the composting program is a successful one, tenants and occupants will need proper notification and education on the items that can and cannot be composted. This can be done through a poster located above the compost bin and a

WASTE NOT

³⁹ <http://www.worldbank.org/en/news/feature/2013/10/30/global-waste-on-pace-to-triple>

⁴⁰ <http://www.triplepundit.com/2012/09/composting-a-the-office/>

⁴¹ <https://www.epa.gov/recycle/composting-home>

pamphlet to be distributed to the occupants, both of which are provided. Among the different composting systems, there are a multitude of options. Vermicomposting is an easy option for office composting needs. For this system, a closed bin with holes in the top is necessary with some red wiggler worms (a type of earthworm) that break down the organic materials. This system only needs minimal maintenance, which makes it a great system for office use. Another option for organic office waste is using a designated bin and working with a pick-up service. Some services require payment to pick-up organic waste making this an option that requires a budget, but is worth looking into.

VERMICOMPOSTING SYSTEM

SETTING UP A VERMICOMPOSTING SYSTEM

1. An office wishing to begin a composting program should have a designated bin for compost. The size of the bin is dependent on the size of the office and the amount of waste generated. To begin, a smaller container is best to gauge interest and/or participation in the program. The bin should not be placed in direct sunlight or extreme temperature changes. Typically, the best temperature is 55-75 degrees Fahrenheit.
2. After the bin is selected drill holes in the lid of the bin and around the perimeter near the top.
3. The next step would be to purchase or locate some red wigglers. The general rule for the amount needed is one pound of red wigglers to one cubic foot of space. A pound of worms is generally priced at \$25.
4. At the bottom of the bin, place the bedding (cardboard ripped into 1 inch strips). Then spritz the bedding with enough water to resemble a wrung out sponge.
5. Pull back the bedding and place some of the organic waste that has been collected.
6. Check back periodically in order to make sure that the worms have enough food and that the system is functioning properly. The system should not be too wet or the waste will rot, so if there is condensation in the bin, leave the lid off to let some of the water evaporate.⁴²

HARVESTING THE COMPOST

To harvest your compost, the least intensive method would be to move all of the compost to one side and place in fresh organic waste. The worms will migrate to the fresh compost and you are free to collect the finished compost.

⁴² Compost City by Rebecca Louie

UTILIZING THE COMPOST

There are different uses for the compost created. It can be used for plants located around the office or the property surroundings. It can also be donated to local community gardens.

COMPOSTING

FAQ'S

WHAT IS COMPOSTING?

Generally, composting is the decay or decomposition of organic materials. This can be anything from an apple core to coffee grounds to leaves. These materials breakdown and can be used as natural fertilizer, perfect for landscaping and gardening.

WHY SHOULD I OPT IN FOR A COMPOSTING PROGRAM?

Composting is a great way to reduce our waste that goes to the landfill, while also reducing costs of added waste pickup and landscaping. A compost pile, when complete, can be used on the building grounds instead of buying mulch or it can be donated to local community gardens in order to foster community relations. In some cases, local community gardens will be willing to help set up and/or guide the beginning of an office composting system.

ARE THERE OTHER OPTIONS BESIDES VERMICOMPOSTING?

There are many different kinds of composting systems, but other systems, such as outdoor composting systems or tumbler systems, require more time and effort. If you have interest in these systems information can be found online on how to set up and maintain the systems.⁴³

ARE WORMS REALLY NECESSARY?

While at first it may seem strange to bring earthworms into the office, however it is a low cost and low effort method of composting. The worms do all the work of breaking down the organic waste faster and quicker than if you did not have any worms.

IS COMPOSTING REALLY NECESSARY?

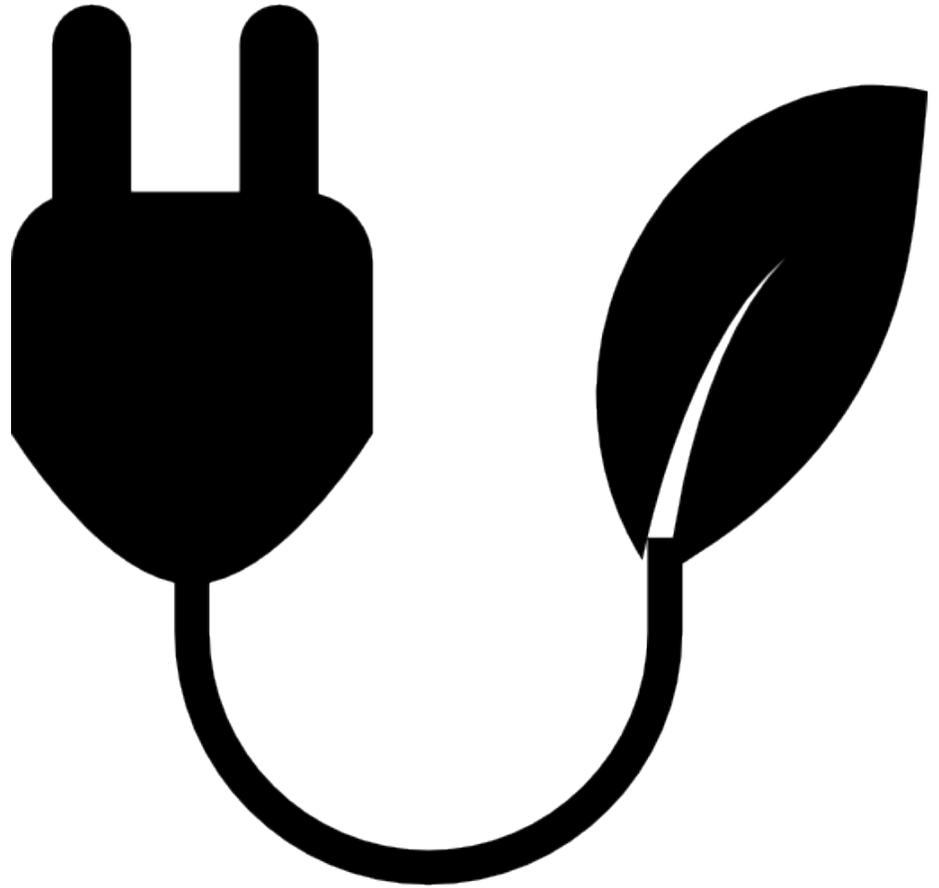
As time presses on and research comes out, the waste problem is getting out of control in many places all over the world. Boulder, Portland, Seattle, and San Francisco have already mandated that people compost their organic waste. In the future, it is likely that composting will have more widespread support and be mandated in more cities, so why not be ahead of the curve?⁴⁴

⁴³ <http://quickbooks.intuit.com/r/employees/composting-at-the-office/#sm.ooordgdet16pcez111vs24gd1t2di>

⁴⁴ <http://www.triplepundit.com/2012/09/composting-a-the-office/#>

RESOURCES

RESOURCE	FILE NAME
Composting Poster	Composting_Posters_20x24.jpg
Composting Brochure Side 1	Composting_Brochure1.jpg
Composting Brochure Side 2	Composting_Brochure2.jpg



E-WASTE

E-waste is any electronic product that is nearing the end of its life containing a cathode ray tube. Great care must be taken to properly dispose of electronic scraps. These often contain hazardous materials such as Lead, Cadmium, Mercury, Beryllium, and Brominated flame retardants. All of the above can be extremely harmful to humans and the environment around us. E-waste disposal can be made fairly accessible to tenants.

E-WASTE ITEMS

The following items are considered e-waste:

Cable Receivers, Computers (desktop, laptop, netbook, notebook, tablet), Digital Converter Boxes, Digital Video Disc Players, Digital Video Disc Recorders, Electronic Keyboards, Electronic Mice, Facsimile Machines, Monitors, Portable Digital Music Players, Printers, Satellite Receivers, Scanners, Small Scale Servers, Televisions, Videocassette Recorders, Video Game Consoles.

Many states have recognized the danger e-waste imposes on the environment and human health. Some state laws have made the process of recycling e-waste a lot easier for property managers. Some states have also made it illegal to dispose of e-waste with general garbage.^{45 46}

Please see a list of regulated states here:

<http://www.ncsl.org/research/environment-and-natural-resources/e-waste-recycling-legislation.aspx>

E-WASTE

⁴⁵ <http://www.electronicstakeback.com/how-to-recycle-electronics/manufacture-takeback-programs/>

⁴⁶ <https://www.dosomething.org/us/facts/11-facts-about-e-waste>

CHECKLIST EXPLANATIONS

PROVIDE TENANTS WITH INFORMATIVE MATERIAL

Provide tenants with informative materials including dangers of e-waste, placement of collection bins, as well as dates and times of collection.

ESTABLISH A SECURE STORAGE AREA

Establish a secure location for the collection of electronics. Electronics are often replaced because they are outdated, however important information might be left behind. For this reason, all collection bins must be locked at all times.

REVIEW STATE LAWS AND REGULATIONS

Some states already have e-waste recycling programs in place and all it takes to sign up is to register your building. Many of these programs are free and provide marketing materials, while others have small fees. Many states have drop off site locations.

LOOK FOR TAKE-BACK PROGRAMS

Manufacturers have take-back programs in place. Keep in mind that batteries, lightbulbs, and appliances are not classified as e-waste, however there are many e-waste recyclers that will collect all of the above. Always call the manufacturers and drop off sites before arrival to ensure that they are accepted. Sustainability should be a collective effort. Motivate your tenants by holding collection day events and provide small snacks and/or beverages.⁴⁷

For a list of collaborating manufacturers refer to:

⁴⁷ <http://www.electronicstakeback.com/how-to-recycle-electronics/manufacturer-takeback-programs/>

<http://www.electronicstakeback.com/how-to-recycle-electronics/manufacture-takeback-programs/>

RESOURCES

RESOURCE	FILE NAME
E-Waste Poster	E-Waste_Poster_20x24.jpg

PROMOTIONAL MATERIAL

Listed below are the posters, brochures, and checklists designed for each focus areas. Please refer to the 'RESOURCES' table at the end of each section to identify the appropriate promotional material(s).



Composting_Brochure1



Composting_Brochure2



Composting_Poster_20x24



Copyroom_Poster_20x24



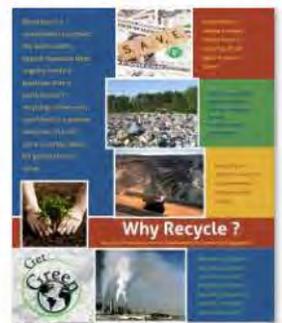
E-waste_Poster_20x24



JANITORIAL CHECKLIST-2



Kitchen_Poster_20x24



WhyRecycle_Poster_20x24